Collected Works of

Immanuel Kant

Series Seven

The Collected Works of
IMMANUEL KANT
(1724-1804)

Contents

The Books
UNIVERSAL NATURAL HISTORY AND THEORY OF HEAVEN
DREAMS OF A SPIRIT-SEER
DISSERTATION ON THE FORM AND PRINCIPLES OF THE SENSIBLE AND THE INTELLIGIBLE WORLD: INAUGURAL DISSERTATION 1770
CRITIQUE OF PURE REASON
PROLEGOMENA TO ANY FUTURE METAPHYSICS THAT WILL BE ABLE TO PRESENT ITSELF AS A SCIENCE
AN ANSWER TO THE QUESTION: "WHAT IS ENLIGHTENMENT?"
IDEA FOR A UNIVERSAL HISTORY WITH A COSMOPOLITAN PURPOSE
FUNDAMENTAL PRINCIPLES OF THE METAPHYSIC OF MORALS
METAPHYSICAL FOUNDATIONS OF NATURAL SCIENCE
CRITIQUE OF PRACTICAL REASON
CRITIQUE OF JUDGEMENT
RELIGION WITHIN THE BOUNDS OF BARE REASON
PERPETUAL PEACE
METAPHYSICS OF MORALS: THE PHILOSOPHY OF LAW
OF THE INJUSTICE OF COUNTERFEITING BOOKS
ON EDUCATION

The Criticism
A COMMENTARY TO KANT'S 'CRITIQUE OF PURE REASON' by Norman Kemp Smith
SCIENCE AND RELIGION — KANT, LAMBERT, LAPLACE, SIR WILLIAM HERSCHEL by Walter Libby
THE PHILOSOPHY OF IMMANUEL KANT by A. D. Lindsay
IMMANUEL KANT by Elbert Hubbard
THE LAST DAYS OF IMMANUEL KANT by Thomas De Quincey
AN OUTLINE OF THE HISTORY OF CHRISTIAN THOUGHT SINCE KANT by Edward Caldwell Moore

KANT’S THEORY OF KNOWLEDGE by H. A. Prichard
INTRODUCTION TO KANT by Ralph Barton Perry

The Biographies
MEMOIR OF KANT by Thomas Kingsmill Abbott
IMMANUEL KANT by Robert Adamson

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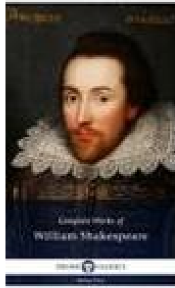

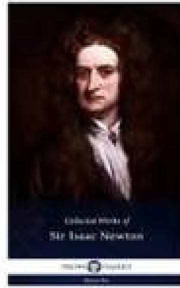

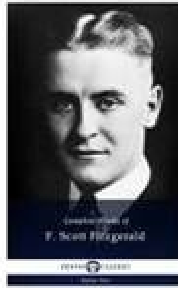

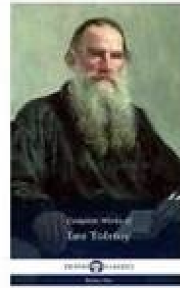

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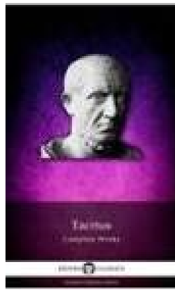

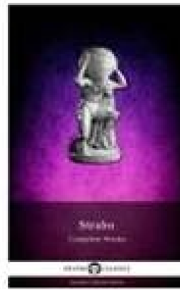

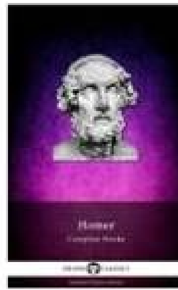

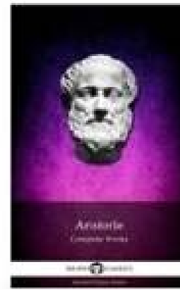

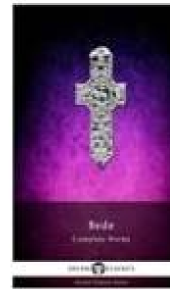

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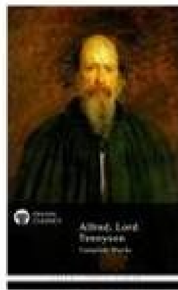

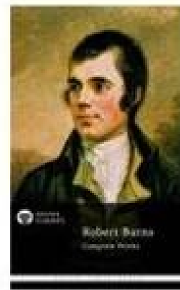

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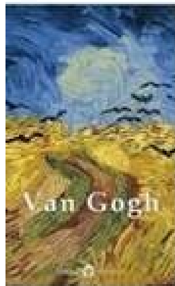

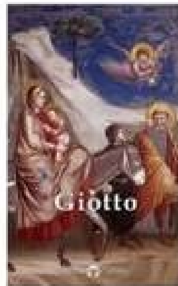

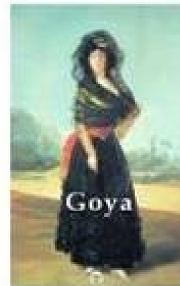

The Collected Works of

IMMANUEL KANT

By Delphi Classics, 2016

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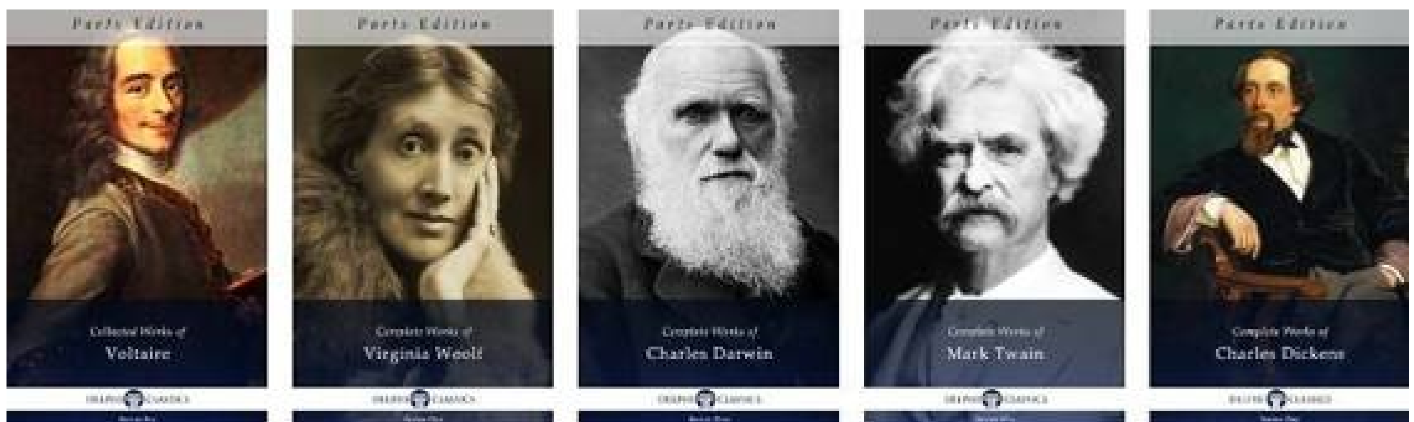

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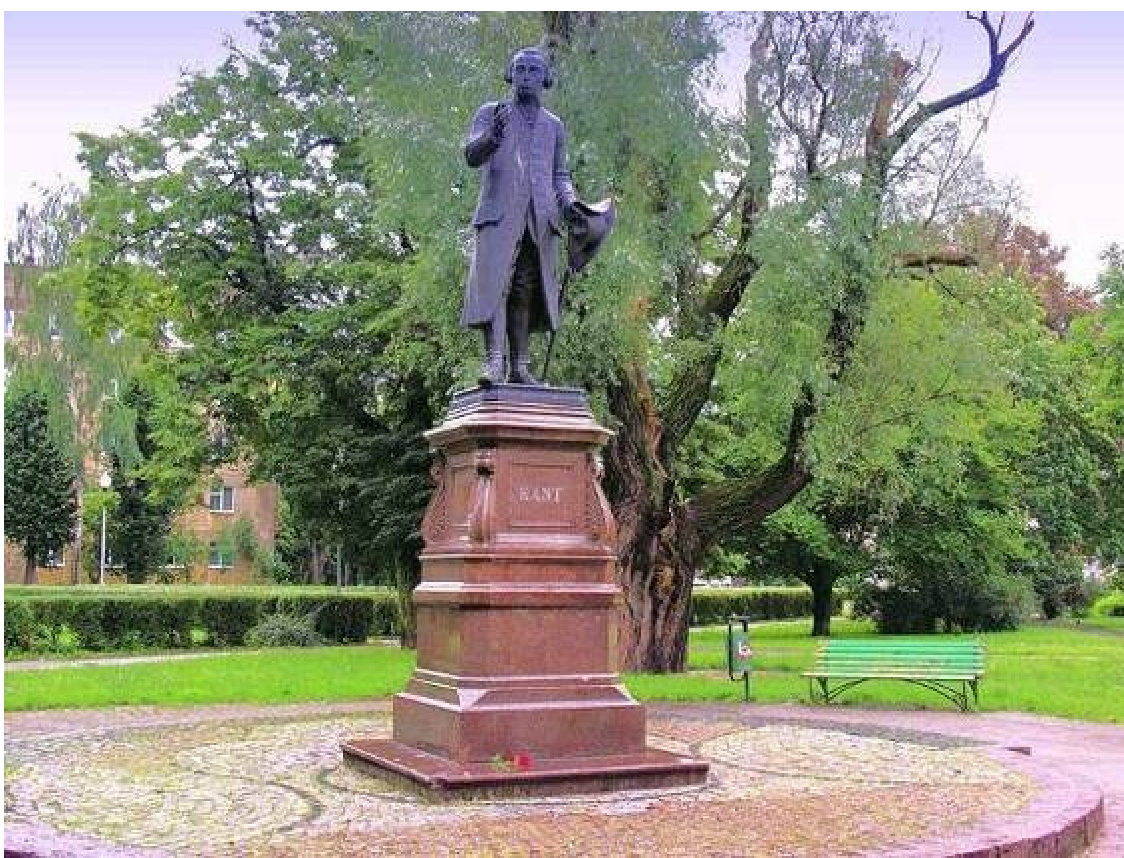
Königsberg (prior to World War One), a city in the monastic state of the Teutonic Knights, the Duchy of Prussia, the Kingdom of Prussia and Germany until 1946 — Kant's birthplace



Statue of Kant in his home city

UNIVERSAL NATURAL HISTORY AND THEORY OF HEAVEN

Translated by Ian Johnston, Vancouver Island University

This early treatise was written in 1755 and is based on a 1750 work by the English astronomer Thomas Wright, the first scientist to describe the shape of the Milky Way and speculate that faint nebulae were distant galaxies. *Universal Natural History and Theory of Heaven* proposes that the Solar System is merely a smaller version of the fixed star systems, such as the Milky Way and other galaxies. The cosmogony Kant proposes in this book is closer to today's accepted ideas than that of some of his contemporary thinkers. Kant's ideas are strongly influenced by atomist theory, in addition to the thoughts of the Roman Lucretius.

The book concludes with an almost mystical expression of appreciation for nature: "In the universal silence of nature and in the calm of the senses the immortal spirit's hidden faculty of knowledge speaks an ineffable language and gives undeveloped concepts, which are indeed felt, but do not let themselves be described." The first English translation of the work was by the Scottish theologian William Hastie in 1900. Ian Johnston of Vancouver Island University has kindly provided the translation appearing in this edition, written in 2008.

Allgemeine

Naturgeschichte

und

Theorie des Himmels,

oder

Versuch

von der Verfassung und dem mechanischen Ursprunge

des ganzen Weltgebäudes

nach

Newtonischen Grundsätzen

abgehandelt,

von Imm. Kant.

* * * * * * * * * * * * * * *

Königsberg und Leipzig,

bey Johann Friederich Petersen, 17:.

The first edition's title page

CONTENTS

TRANSLATOR’S NOTE
CONTENTS OF THE ENTIRE WORK
DEDICATION
PREFACE
PART ONE
PART TWO. SECTION ONE
PART TWO. SECTION TWO
PART TWO. SECTION THREE
PART TWO. SECTION FOUR
PART TWO. SECTION FIVE
PART TWO. SECTION SIX
PART TWO. SECTION SEVEN
PART TWO. SUPPLEMENT TO SECTION SEVEN
PART TWO. SECTION EIGHT
PART THREE
APPENDIX
CONCLUSION
ENDNOTES

Thomas Wright (1711-1786) was an English astronomer, mathematician, instrument maker, architect and garden designer.

TRANSLATOR’S NOTE

Immanuel Kant (1724-1804) published *The Universal Natural History and Theory of Heaven* in 1755. This English text is based on Georg Reimer’s edition of the complete works of Immanuel Kant (1905). The translation was first completed and posted on the web in 1998. It has been considerably revised for this September 2008 version, mainly to improve the accuracy and fluency of the translation.

In the translated text, the Table of Contents has been altered to include the Dedication and the Preface and moved to the front before these sections. The endnotes (indicated with a numerical superscript link) come from Kant’s original text except for those which are provided by the translator. The latter are prefaced in the endnote by the comment *[Translator’s note]*, and the former by the phrase *[Kant’s note]*. All endnotes without

In the English translation I have used the original lines from the works of Alexander Pope and Joseph Addison in those places where Kant quotes the often quite loose German versions of these English poets. The translations of the von Haller quotations are my own.

There are also occasional references to two earlier English versions of Kant’s text: those by Stanley L. Jaki (Scottish Academic Press, 1981) and by William Hastie (first published in 1900, reprinted by University of Michigan Press, 1969). The translator of the present text would like to acknowledge the great help he has received from these two earlier translations. Anyone seeking a detailed contextual examination of Kant’s scientific ideas in this essay should consult the Jaki edition, which is outstanding in this respect.

Ian Johnston
Liberal Studies Department
Vancouver Island University
September 2008

CONTENTS OF THE ENTIRE WORK

Dedication

Preface

PART ONE

Short outline of the most essential basic principles of Newtonian philosophy required for an understanding of the following theory.

Outline of a general systematic arrangement among the fixed stars, derived from the phenomenon of the Milky Way. Similarity of this system of fixed stars to the planetary system. Discovery of many such systems, showing up in the expanse of the heavens in the form of elliptical shapes. New idea about the systematic arrangement of the entire creation.

Conclusion. Probable assumption about more planets beyond Saturn, deduced from the law according to which planetary eccentricity increases with distance.

PART TWO
Section One

Grounds for the theory of a mechanical origin for the world. Counterarguments. The only possible idea which satisfies both. First condition of Nature. Scattering of the elements of all materials throughout the entire extent of space. First movement because of the power of attraction. Start of the development of a body at the point of the strongest attraction. General sinking down of elements towards this central body. Power of repulsion of the smallest particles in which the material stuff is diffused. Altered direction of the downward movement through the combination of this force with the first one. Uniform movement of all these motions in the same direction. Impulse of all particles to bring themselves to a common plane and to accumulate there. Slowing down of the velocity of their movement to an equilibrium with the gravity at the distance from the sun at their locations. Free movement of all particles around the central body in circular orbits. Development of the planets from these moving elements. Free movement of the planets put together from these elements in the same direction on a common plane, with almost circular orbits for planets near the central point and with increasing degrees of eccentricity for planets further away from this central point.

PART TWO
Section Two

Deals with the different densities of the planets and the relationship of their masses. Reason why the closer planets are of a denser type than the distant ones. Inadequacy of Newton's explanation. Why the central body is of a lighter sort than the closest spheres moving around it. Relationship of the planetary masses according to the ratio of their distances. Reason derived from their manner of development: why the central body has the largest mass. Calculation of the spread out solution in which all the elements of the cosmic matter were scattered. Probability and necessity of this thin distribution. Important proof for the manner of the development of the heavenly bodies derived from a remarkable analogy of M. de Buffon.

PART TWO
Section Three

Concerning the eccentricity of the planetary orbits and the origin of comets. The eccentricity increases in stages with the distances

from the sun. Cause of this law derived from cosmogony. Why the comets' orbits freely deviate from the plane of the ecliptic. Proof that the comets are made out of the lightest sort of material. Parenthetic observation on the Northern Lights.

PART TWO
Section Four

Concerning the origin of the moons and the movements of the planets around their axes. The material for the development of the moons was contained in the sphere out of which the planet assembled the parts for its own development. Cause of the movement of these moons with all their rules. Why only the large planets have moons. Concerning the axial rotation of the planets. Whether the moon previously had a faster rotation. Whether the velocity of the earth's axial rotation is decreasing. Concerning the position of the planetary axes in relation to the plane of their orbits. Displacement of their axes.

PART TWO
Section Five

Concerning the origin of Saturn's ring and the calculation of the planet's daily rotation from the relationships with this ring. First condition of Saturn compared to the composition of a comet. Development of a ring from the particles of the planet's atmosphere by means of impressed movements from the impulse of its rotation. Computation of the time of Saturn's axial rotation according to this hypothesis. Observation on the shape of Saturn. Concerning the flattening of the spheres of cosmic bodies in general. A closer determination of the composition of this ring. Probable assumption of new discoveries. Whether the earth had a ring before the Flood.

PART TWO
Section Six

Concerning the light of the zodiac.

PART TWO
Section Seven

Concerning creation in its entire infinite extent, both in space and time. Origin of a large system of the fixed stars. Central body in the mid-point of the system of stars. Infinity of creation. General systematic relationship in its entire being. The central body of all of nature. Successive continuation of creation into all infinity of times and spaces through the ceaseless development of new worlds. Observation on chaos in undeveloped nature. Gradual decay and destruction of the cosmic structure. Appropriateness of such a concept. Renewal of fallen nature.

PART TWO
Supplement to Section Seven

Universal theory and history of the sun in general. Why the central body of a cosmic structure is a fiery body. Closer observation of its nature. Thoughts on the alterations in the air surrounding the sun. Extinguishing of suns. Closer glance at its shape. Mr. Wright's opinion concerning the mid-point of all of nature. An improvement on this opinion.

PART TWO
Section Eight

General proof of the correctness of a mechanical theory for the arrangement of the cosmic structure in general, and particularly for

the certainty of the present theory. The fundamental capability in the nature of things to raise themselves on their own to order and perfection is the most beautiful proof of the existence of God. Defence against the charge of naturalism.

The arrangement of the cosmic structure is simple and not set beyond the forces of nature. Analogies which confirm the mechanical origin of the world with certainty. The very same point proved from the deviations. Citing an immediate order created by God does not deal satisfactorily with these questions. Difficulty which made Newton give up the mechanical theory. Solution to this difficulty. The proposed system is the only possible way to deal satisfactorily with the basic principles of both sides. Further proof from the relationship of the density of planets, their masses, the space in between their locations from the sun, and the gradual interrelationships of their determinants. The motivating principles of God's choice do not immediately determine these conditions. Justification with respect to religion. Difficulties which present themselves with the theory of the immediate order created by God.

PART THREE

Contains a comparison between the inhabitants of the stars. Whether all the planets are inhabited. Reasons to doubt this. Basis of the physical relationships between the inhabitants of the different planets. Observation on human beings. Causes of the imperfections in human nature. Natural relationship of the physical characteristics of living creatures according to their different distances from the sun. Consequences of this relationship for their spiritual capacities. Comparison of thinking beings on different celestial bodies. Confirmation from certain circumstances in their dwelling places. Further proof from the disposition of God's providence, which is created in their best interests. Short digression.

CONCLUSION

The conditions of human beings in the future life.

DEDICATION

To the most serene, the mightiest king and master
Frederick
King of Prussia
Margrave of Brandenburg
Lord Chamberlain and Elector of the Holy Roman Empire
Sovereign and Highest Lord of Silesia, etc. etc.
My most all-honoured King and Master,
Most serene and mighty king,

Most All-honoured King and Master,

The feeling of my own lack of worth and the radiance from the throne cannot make my foolishness so timid, when the honour which the most gracious monarch dispenses with equal magnanimity among all his subjects gives me grounds for hope that the boldness which I undertake will not be looked upon with ungracious eyes. In most submissive respect I here lay at the feet of your eternal kingly majesty one of the most trifling samples of that eager spirit with which your highness's schools, through the encouragement and the protection of their illustrious sovereign, strive to emulate other nations in the sciences. How happy I would be if the present endeavour could succeed in making the efforts with which the humblest and most respectful subject constantly tries to make himself in some way of service to the Fatherland win the highest possible feeling of goodwill of his king. With the utmost devotion until my dying day,

Your eternal majesty's most humble servant
The author

Königsberg
14 March, 1755

PREFACE

I have selected a subject which, both in view of its inherent difficulty and also with respect to religion, can right at the very start elicit an unfavourable judgment from a large section of readers. To discover the systematic arrangement linking large parts of creation in its entire infinite extent and to bring out by means of mechanical principles the development of the cosmic bodies themselves and the cause of their movements from the first state of nature, such insights seem to overstep by a long way the powers of human reason. From another perspective, religion threatens with a solemn accusation about the presumption that one is allowed to be so bold as to attribute to nature left to itself such consequences in which we rightly become aware of the immediate hand of the Highest Being and worries about encountering in the inquiry into such views a defence of the atheist. I do perceive all these difficulties, and yet I do not become fainthearted. I feel all the power of the obstacles ranged against me, and nevertheless I am not despondent. On the basis of a slight assumption I have undertaken a dangerous journey, and I already see the promontories of new lands. Those people who have the resolution to set forth on the undertaking will set foot on these lands and have the pleasure of designating them with their very own names.

I made no commitment to this endeavour until I considered myself secure from the point of view of religious duties. My enthusiasm has doubled as I witnessed at every step the dispersal of the clouds which behind their obscurity seemed to hide monsters and which, after they scattered, revealed the majesty of the Highest Being with the most vital radiance. Since I know that these efforts are free of all reproach, I will faithfully introduce what well-meaning or even weak-minded people could find shocking in my proposal and am candidly ready to submit it to the strict inspection of a council of true believers, which is the mark of an honest disposition. The champion of the faith, therefore, may be allowed to let his reasons be heard first.

If the planetary structure, with all its order and beauty, is only an effect of the universal laws of motion in matter left to itself, if the blind mechanism of natural forces knows how to develop itself out of chaos in such a marvellous way and to reach such perfection on its own, then the proof of the primordial Divine Author which we derive from a glance at the beauty of the cosmic structure is wholly discredited, nature is self-sufficient, the divine rule is unnecessary, Epicurus lives once again in the midst of Christendom, and an unholy philosophy treads underfoot the faith which proffers a bright light to illuminate it.

If I found this criticism had a firm basis, then the conviction which I have of the infallibility of divine truths is for me so empowering, that I would consider everything which contradicts it sufficiently refuted by that fact and would reject it. But the very agreement which I encounter between my system and religion raises my confidence in the face of all difficulties to an unshakable composure.

I recognize all the value of those proofs which people derive from the beauty and perfect organization of the cosmic structure to confirm the most eminently wise Author. If we do not obstinately deny all conviction, then we must agree with such incontrovertible reasons. But I maintain that the people who defend religion in this way, by using these reasons badly, perpetuate the conflict with the naturalists, because they present an unnecessarily weak case.

People are accustomed to take note of and to point out the harmonies, beauty, purposes, and a perfect interplay of means and ends in nature. But while they, on the one hand, extol nature, on the other hand, they seek to diminish it again. This fine arrangement, they say, is foreign to nature. Left alone to its universal laws, it would bring forth nothing but disorder. The harmonies demonstrate a foreign hand, which knew how to force material left without any regularity into a wise design. But I answer that if the universal efficient material laws were established equally as a result of the highest design, then they could

presumably have no purposes except to strive to act on their own to fulfil the plan which the Highest Wisdom has set out for Itself or, if this is not the case, should we not be drawn into the temptation of believing that at least matter and its general laws were independent and that the most eminently wise power, which knew how to make use of them so splendidly, may indeed be great, but not infinite, certainly powerful, but not totally self-sufficient?

The defender of religion fears that the harmony which can be explained by a natural tendency of matter would demonstrate the independence of nature from divine providence. He clearly confesses that if people can discover natural reasons for all the order in the cosmic structure, reasons which can bring this into existence from the most universal and essential characteristics of matter, then it may be unnecessary to invoke a highest Ruling Power. According to the natural scientist's calculations, he finds nothing to quarrel with in this claim. He acquires examples which establish the fertility of general natural laws for perfectly beautiful consequences and brings true believers into danger through reasons, which in their hands could become invincible weapons. I wish to cite examples. People have already often proposed, as one of the clearest proofs of a benevolent providence solicitous of human welfare, that in the hottest parts of the earth the sea winds, right at the very time when the heated soil most requires their cooling, spread over the land and refresh it, as if they had been summoned. For example, in the island of Jamaica, as soon as the sun has climbed sufficiently high to heat the soil most strongly, just after 9 in the morning, a wind begins to rise from the sea and blows from all sides over the land. Its strength increases proportionally with the elevation of the sun. Around 1 in the afternoon, when it naturally is the hottest, the wind is at its strongest. It gradually decreases again with the setting of the sun, so that in the evening the very same stillness reigns as at the start. Without this welcome arrangement, the island would be uninhabitable. All coastal lands lying in the hot places on the Earth enjoy this same benefit. Moreover, it is most essential for them, because, since they are the lowest places on dry land, they also suffer the greatest heat. For the higher regions in the country, which this sea wind does not reach, are also in less need of it, because their higher location places them in a region of cooler air. Is not all this beautiful? Are there not clear purposes which have been realized by judiciously applied means? However, by way of a counterargument the natural scientist must find the natural causes of this in the most general characteristics of air, with no need to assume any special arrangements for the phenomenon. He observes correctly that these sea winds have to go through such periodic movements, even if no human beings lived on the island, thanks to no property other than the elasticity of air and gravity, without having any purposeful intention in the matter, even if it is indispensably necessary merely for the growth of plants. The sun's heat upsets the air's equilibrium by thinning out the air over the land, thus allowing the cooler sea air to rise from its position and take its place.

What benefits generally advantageous to our planet Earth do the winds not possess? And what uses does the keen intelligence of human beings not make of them? However, no other arrangements were necessary to create them except these same general properties of air and heat, which also had to occur on the Earth without reference to these purposes.

At this point the freethinker says: if you concede the point that when people can derive useful and purposeful arrangements from the most general and simplest natural laws, then we have no need for the special rule of a Highest Wisdom and thus you see here proofs which will catch you by your own admission. All nature, especially inorganic nature, is full of such proofs, which permit us to recognize that matter, which organizes itself through the mechanical operation of its own forces, has a certain correctness in its effects and without compulsion satisfactorily acts by rules of what is appropriate. When, in order to come to the rescue of the worthy cause of religion, a well-meaning person wishes to contest this capacity of general natural laws, then he will embarrass himself and by a poor defence give atheism a chance to triumph.

However, let us see how these reasons, which we fear in the hands of our opponents as injurious, are,

by contrast, strong weapons to use in the fight against them. Matter, which organizes itself according to its most general laws, produces through its natural behaviour or, if we prefer, through a blind mechanical process, good consequences, which appear to be the design of a supremely High Wisdom. When we observe air, water, and heat left to themselves, they produce wind and clouds, rain, streams which moisten the lands, and all the useful consequences without which nature would have had to remain sad, empty, and barren. However, they produce these results not through mere chance or accident, which could just as readily have resulted in something detrimental. But we see that these consequences are limited by its natural laws so as to work only in this way. What should we then think of this harmony? How would it really be possible that things with different natures should strive to work in cooperation with one another for such perfect coordination and beauty, even with purposes in such matters which are to a certain extent beyond the range of lifeless material stuff, namely, for the benefit of human beings and animals, unless they recognized a common origin, that is, an Infinite Understanding, in which all things were designed with reference to their essential properties? If their natures were necessarily isolated and independent, what an astonishing contingency that would be, or rather, how impossible it would be that with their natural efforts they should mesh so exactly together, as if an overriding wise selection had united them.

Now, I confidently apply this concept to my present enterprise. I summon up the material stuff of all worlds in a universal confusion and create out of this a perfect chaos. According to the established laws of attraction, I see matter developing and modifying its motion through repulsion. Without the assistance of arbitrary fictions, I enjoy the pleasure of seeing a well-ordered totality emerge under the influence of the established laws of motion, something which looks so similar to the same planetary system which we see in front of us, that I cannot prevent myself from believing that it is the same. This unanticipated unfolding of the order of nature on a grand scale I find at first suspicious, because it establishes such a well-coordinated and correct system on such a meagre and simple foundation. Finally, on the basis of the previously outlined observation, I advise myself that such a natural development is not something unheard of in nature but that its fundamental striving necessarily brings such things with it and that this is the most marvellous evidence of its dependence on that Primordial Essence which has within Itself the source of being and the first laws by which nature operates. This insight doubles my trust in the proposal I have made. The confidence increases with each step I take as I continue on, and my timidity disappears completely.

But the defence of your system, it will be said, is at the same time a defence of the opinions of Epicurus, to which it has the closest similarity.[1*] I will not completely deny all agreement with him. Many people have become atheists through the apparent truth of such reasons which, with a more scrupulous consideration, could have convinced them as forcibly as possible of the certain existence of the Highest Being. The consequences which a perverse understanding infers from innocent basic principles are often very blameworthy. Although his theory was what one would expect from the keen intelligence of a great spirit, Epicurus' conclusions were also of this kind.

I will also not deny that the theory of Lucretius or of his predecessors (Epicurus, Leucippus, and Democritus) has much similarity to mine.[2*] Like those philosophers, I set out the first condition of nature as that state of the world consisting of a universal scattering of the primordial materials of all planetary bodies, or atoms, as they were called by these writers. Epicurus proposes a principle of heaviness which drives these elementary particles downwards, and this appears not very different from Newton's power of attraction, which I assume. He also assigned to these particles a certain deviation from the straight linear movement of their descent, although at the same time he had an absurd picture of the cause and consequences of this deviation. This deviation comes about to some extent with the alteration in the straight linear descent, a change which we derive from the force of repulsion of the particles. Finally, came the eddies, which arose from the confused movement of the atoms, a major part of the theories of Leucippus and Democritus. We will meet them also in our theory. But such a close affinity with a theory

which was the true theory of atheism in ancient times does not lead mine to be grouped in the company of their errors. Even with the most foolish opinions which can win popular applause, sometimes there is some truth to remark upon. A false basic assumption or a pair of unexamined coordinating principles lead people from the footpath of truth through unnoticed misdirections right into the abyss. Nonetheless, there remains, in spite of the above-mentioned similarity, a fundamental difference between the ancient cosmogony and the present one, so that one can derive from the latter totally opposite consequences.

The previously mentioned teachers of the mechanical development of the cosmic structure derived all order which can be observed in it from chance accident, which allowed the atoms to come together in such a fortunate way that they created a well-ordered totality. Epicurus was even so unconscionable that he demanded that the atoms swerved from their direct linear movement without any cause, so that they could run into each other. Collectively these writers pushed this absurdity so far, that they even attributed the origin of all living creatures to this blind collision and, in effect, derived reason from irrationality. In my theory, by contrast, I find matter bound to certain necessary laws. I see a beautiful and orderly totality developing quite naturally in its complete dissolution and scattering. This does not happen through accident or chance. By contrast, we see that natural characteristics necessarily bring this condition with them. Hence, will we not be moved to inquire why matter had have just such laws which aim at order and propriety? Was it really possible that many things, each of which has its own nature independent of the others, should on their own constitute themselves in such a way that a well-ordered totality thereby arises? And if they do this, is there not an undeniable proof of the commonality of their first primordial origin, which must be a self-sufficient Highest Reason, in which the natures of things were designed for harmonious purposes?

The material which is the primordial stuff for all things is thus bound to certain laws. Freely left subject to these laws, it must necessarily bring forth beautiful combinations. It has no freedom to deviate from this plan of perfection. Since it also finds itself subject to the loftiest wise purpose, it must of necessity be set in such harmonious relationships through a First Cause which rules over it. *There is a God for just this reason, that nature, even in a chaotic state, can develop only in an orderly and rule-governed manner*.

I have such a high opinion of the honest minds of those people who confer upon this proposal the honour of testing it, that I remain confident that, where the basic principles mentioned above will still not be able to get rid of all worries about the deleterious consequences of my system, nevertheless at least they place the sincerity of my intentions beyond doubt. If, in spite of this, there are malicious zealots who consider it a duty worthy of their holy calling to attach shameful explanations to the most innocent opinions, then I am sure that their judgment will have precisely the opposite effect among reasonable people. Besides, people will not deprive me of the right which Descartes enjoyed in his time among disinterested critics when he ventured to explain the development of world bodies from merely mechanical laws.[3*] I wish therefore to quote from the author of Universal World History:[4*] “Thus we can do nothing other than believe that the attempt of this philosopher, who endeavoured to explain the development of the world in a certain time from confused matter simply through the continuation of a movement once impressed on it using a few easy and universal laws of motion, or of others *who since then have, with more approval, attempted the same thing through the primordial properties of matter, with which it was created, is far from being worthy of punishment or demeaning to God, as many have imagined, since in this way a higher idea of His infinite wisdom is far more likely to be brought about*.”

I have sought to clear away the difficulties which seem, from a religious point of view, to threaten my propositions. There are some no less significant difficulties with respect to the subject matter itself. Even if it is true, people will say, that God has set in the forces of nature a hidden art of developing a perfect world order out of chaos on their own, will human understanding, which is so stupid in the commonest

circumstances, be capable of investigating hidden properties in such a massive enterprise? Such an undertaking amounts to much the same thing as when people say: Give me only the material, and I will create a world out of it for you. Can the weakness of your insights, which are shamed by the most insignificant things, which come into your mind daily and close by, not teach you that it is vain to discover the infinite and what was happening in nature even before there was a world? I demolish this difficulty, for I clearly show that of all the attempts which could be devised to learn about nature, this very endeavour may be the one in which we can most easily and surely go right to the origin. Just as among all problems of research into nature, none will be resolved more correctly and certainly than the true constitution of the planetary structure on a large scale, the laws of motions, and the inner workings which drive all planetary orbits, in which Newtonian philosophy can provide such insights that we find nothing like them in any other part of philosophy, in the same way I maintain that among all the natural phenomena whose first cause we are investigating, the origin of the planetary system and the production of the heavenly bodies, together with the causes of their movements, is the one which we may hope to consider reliably from first principles. The reason for this is easy to perceive. The heavenly bodies are round masses with the simplest development which a body whose origin we are exploring can ever have. Their movements are equally clear. They are nothing other than a free continuation of an impetus impressed upon them once, a motion which, combined with the force of attraction of the body at the mid-point, becomes circular. Moreover, the space in which they move is empty, the intermediate distances, which separate them from each other, are exceptionally large, and thus everything is laid out for undisturbed motion as well as for clear observation of them in as manifest a way as possible. In my view, we could say here with certain understanding and without presumption: Give me the material, and I will build a world out of it! That is, give me the material, and I will show you how a world is to come into being out of it. For if there is material present which is endowed with an inherent power of attraction, then it is not difficult to establish those causes which could have led to the arrangement of the planetary system, considered on a large scale. We know what is involved for a body to acquire a spherical shape. We grasp what is required for freely suspended spheres to take on a circular movement around the middle point towards which they are attracted. The position of the orbits relative to each other, the agreement in the direction, the eccentricity, everything can arise from the simplest mechanical causes, and we may hope with confidence to discover them, because they can be established with the easiest and clearest reasons. However, can we boast of such advantages for the smallest plants or insects? Are we in a position to say, give me the material, and I will show you how a caterpillar could have developed? Do we not remain here on the bottom rung because of our ignorance of the true inner constitution of the object and of the development inherent in its multiple elements? Thus, people must not let themselves be disconcerted when I venture to say that we will be able to understand the development of all the cosmic bodies, the causes of their movements, in short, the origin of the entire present arrangement of the planetary system, before we completely and clearly understand the development of a single plant or caterpillar on mechanical principles.

These are the reasons on which I base my confidence that the physical part of natural philosophy gives us hope that in future it will indeed have the same perfection to which Newton raised the mathematical part of the subject. Next to the laws according to which the arrangement of the cosmic structure stands in its present state perhaps there are no others in the entire study of nature so capable of such mathematical accuracy as those laws by which it has developed, and without doubt the hand of an experienced surveyor would find work in these fields unproductive.

Now that I have allowed myself to promote a favourable reception for what I am proposing in my examination, I will be permitted briefly to explain the way I have dealt with it. The first part is concerned with a new system for the structure of the cosmos on a large scale. Mr. Wright from Durham, whose essay I learned about in the *Freie Urteile* from Hamburg for the year 1751, first gave me the occasion to

consider the fixed stars, not as a scattered teeming mass without perceptible order, but as one system with the closest similarity to a planetary system.[5*] Thus, just as in the latter the planets are located very near to a common plane, the fixed stars in their positions are also related as closely as possible to a certain plane which must be imagined drawn through the entire heavens, and because of their densest accumulation toward this same plane they project that band of light called the Milky Way. I have become convinced that, since this zone illuminated by countless suns is very precisely structured in the orientation of an extremely large circle, our sun must similarly be located very near this large interconnecting plane. While I was exploring the causes of this structure, I have found it very probable that the so-called fixed or firm stars could really be slowly moving, wandering stars of a higher order. To endorse what will be found about this concept later in its own section, I wish only to cite here a passage from a text by Mr. Bradley concerning the movement of the fixed stars:[6*] "If we wish to judge the result of a comparison between our best contemporary observations and earlier ones with tolerable accuracy, then it seems clear that some fixed stars really have changed position with respect to each other and, indeed, in such a way, that we see this is not the result of some movement in our planetary system, but can be ascribed only to a movement of the stars themselves. Arcturus readily provides strong proof of this point. For when we compare the present declination of Arcturus with its location as determined by Tycho as well as by Flamsteed, we will find that the difference is greater than we can assume to have arisen from the inaccuracy of their observations.[7*] We have reason to suppose that other examples of a similar phenomenon must occur among the large number of visible stars, because their positions relative to each other could have altered for various reasons. For if we imagine that our own solar system changes its position in celestial space, then after a certain time has gone by, this will give rise to a perceptible change in the angular distance of the fixed stars. And because in such a case this would have a greater effect on the positions of the nearest stars than on the positions of the ones far distant, then their positions would appear to change, although the stars themselves really remain immovable. And if, by contrast, our own planetary system stands still and some stars do, in fact, move, these will similarly change their apparent position, and the apparent movement will be greater the closer the stars are to us or the more the direction of their motion is arranged so that we can perceive it. Now, since the positions of the stars could thus be altered by so many different causes, when we consider the astonishing distances at which some of them are indubitably located, it will take the observations of several human lifetimes to determine the laws for the perceptible alterations of even a single star. Thus, it must be even more difficult to establish laws for all the most remarkable stars."

I cannot precisely determine the boundaries between Mr. Wright's system and my own, nor in what parts I have merely copied his design or developed it further. However, I had very good reasons to expand one aspect of the design considerably. I took into account the species of nebulous stars, which M. de Maupertuis considers in his treatment of the shape of the stars and which display more or less open elliptical shapes, and I easily convinced myself that they could only be an accumulation of many fixed stars.[8*] The fact that these shapes, when measured, were always round taught me that here there must be arranged an unimaginably numerous host of stars and, further, that they are around a common mid-point, because, if that were not the case, their free positioning in relation to each other would display wholly irregular shapes, not measurable figures. I also perceived that in the system in which they are brought together they must be for the most part limited to a single plane, because they are not circular but elliptical in shape, and that because of their pale light they are located incredibly far away from us. What I have concluded from these analogies the discussion will itself present for the unprejudiced reader's evaluation.

In the second part, which contains the proposal most germane to this treatise, I endeavour to develop the arrangement of the cosmic structure from the simplest condition of nature merely by mechanical laws. If, for those who are shocked at the daring of this undertaking, I may venture to propose a certain order in the manner with which they honour my ideas by testing them, I would request that they first read through

the eighth section, which, I hope, will prepare their judgment for a correct insight. Meanwhile, when I invite the well-disposed reader to examine my opinions, I am justly concerned that, since hypotheses of this sort commonly are considered no better than philosophical dreams, it is a sour pleasure for a reader to resolve to undertake a careful investigation on his own into the histories of nature and patiently to follow the author through all the turns by which he moves around the difficulties which he runs into, so that at the end the reader perhaps laughs at his own credulity, like those who look at the London Market Crier.[9][*] However, I dare to promise that, if the reader will, as I hope, be convinced by the preparatory chapter placed at the start to undertake such a physical adventure based on such plausible assumptions, he will not meet, as he continues on his way, as many crooked diversions and impassable obstacles as he is perhaps worried about at the beginning.

In fact, I have rejected with the greatest care all arbitrary fictions. After I place the world in the simplest chaos, I have applied to it no forces other than the powers of attraction and repulsion, so as to develop the great order of nature. These two forces are both equally certain, equally simple, and at the same time equally primal and universal. Both are taken from Newtonian philosophy. The first is now an incontestably established law of nature. The second, which Newtonian science perhaps cannot establish with as much clarity as the first, I here assume only in the sense which no one disputes, that is, in connection with the smallest distributed particles of matter, as, for example, in vapours. From such simple grounds as these, I have produced the system which follows in a natural manner, without imagining any consequences other than those which the reader's attentiveness must observe entirely on its own.

Finally, may I be permitted to provide a short explanation concerning the validity and the alleged value of those propositions which will appear in the following theory and according to which I hope to be assessed by reasonable judges. We evaluate an author fairly by the same stamp which he impresses on his own work. Thus, I hope people will demand from the different parts of this treatise no stronger validity for my opinions that what I myself establish for them in the scale of values. Generally, the greatest geometrical precision and mathematical certainty can never be demanded from a treatise of this sort. If the system is based upon analogies and harmonies in accordance with the rules of credibility and a correct way of thinking, then it has met every demand raised by its object. I believe I have reached this level of quality in some parts of this essay, as in the theory of the system of fixed stars, in the hypothesis about the composition of the nebulous stars, in the general design for the mechanical development of the cosmic structure, in the theory of Saturn's ring, and in some others. In some particular parts the treatment will be somewhat less persuasive, as, for example, the determination of the relationships of the eccentricity, the comparison of the masses of the planets, the various deviations of comets, and some others.

Therefore, when in the seventh section I pursue the consequences of this theory as far as possible, attracted by the fecundity of the system and the pleasing nature of the greatest and most awesome subject imaginable, always guided by analogy and a reasonable credibility, although with a certain boldness, and when I propose to the power of imagination the infinite nature of the entire creation, the development of new worlds and the destruction of old ones, and the unlimited space of chaos, I hope that people will be sufficiently indulgent to the attractive charm of the subject and the pleasure which one has in witnessing the harmony in one's theory pushed to its furthest limit not to judge it according to the strictest geometrical precision, which, in any case, does not occur in a theory of this sort. I await exactly the same fairness with respect to the third part. There people will constantly come across something more than merely arbitrary, although always something less than certain.

PART ONE

OUTLINE OF A SYSTEMATIC ARRANGEMENT OF THE FIXED STARS AND OF THE VAST NUMBER OF SUCH SYSTEMS OF FIXED STARS

Is the great chain, that draws all to agree,
And drawn supports, upheld by God, or thee?
(Pope)[10]*

SHORT OUTLINE OF THE NECESSARY FUNDAMENTAL PRINCIPLES OF NEWTONIAN PHILOSOPHY REQUIRED FOR AN UNDERSTANDING OF THE FOLLOWING THEORY[11]*

Six planets, including three with accompanying satellites, Mercury, Venus, Earth with its moon, Mars, Jupiter with four satellites, and Saturn with five, describe orbits around the sun as the mid-point and, together with the comets, which do the same thing from all sides in very long orbits, make up a system which we call the Solar System or the planetary world structure. The fact that the movement of all these bodies takes the form of a circle and returns back on itself presupposes two forces which are equally necessary for any sort of theory, namely, a projectile force, by which at every point of their curved linear movement the bodies would continue on a straight line and disappear into the infinite distance, unless another force, whatever it may be, constantly required them to leave this path and move on a curved track around the mid-point of the sun. This second force, as geometry itself has established with certainty, always aims at the sun and is therefore called the sinking force, the centripetal force, or gravity.

If the orbits of the celestial bodies were exact circles, then the very simplest breakdown of the compounded curved movements would reveal that a continuous impulse towards the central point would be required for the arrangement. However, although the movements of all planets and comets are ellipses in which the sun is located at a common focal point, higher geometry with the help of Kepler’s model (according to which the *radius vector* or the line drawn from the planet to the sun always cuts out on its elliptical path areas proportional to the times) similarly establishes with unequivocal certainty that a force must constantly draw the planet throughout its entire orbital path towards the midpoint of the sun.[12]* This sinking force, which governs throughout the whole space of the planetary system and directs itself to the sun, is thus an accepted natural phenomenon. Equally clearly demonstrated is the law according to which this force extends from the mid-point of the sun into the far distances. It always decreases inversely as the square roots of the distances from the centre increase. This rule is derived in an equally infallible way from the time which the planets need at different distances to complete their orbits. These times are always in a ratio to the square root of the cubes of their average distance from the sun. From this we deduce that the force which pulls these cosmic bodies to the mid-point of their orbits must decrease inversely as the square of the distance.

This very same law which governs among the planets in their movements around the sun occurs also in connection with small systems, namely, with those which are made up of moons moving about their main planet. Their orbital times are in exactly the same way proportional to the distances and establish a relationship of the force which causes sinking towards the planet, which is exactly the same as the one by which the planet is pulled towards the sun. All this, derived from the most infallible geometry and uncontested observations, has been placed forever beyond contradiction. From this arises now the idea that this sinking force may be exactly the same impetus which is called heaviness on the surface of the planet and which gradually diminishes with the distances from the surface according to the above-mentioned law. We see this from the comparison of the quantity of heaviness on the surface of the earth

with the force which pulls the moon to the mid-point of its orbit. These stand in relation to each other just as the force of attraction in the entire planetary system, namely, in inverse proportion to the square of the distances. Hence people also call this frequently reported central force gravity.

Moreover, because there is the highest degree of probability that if an effect occurs only in the presence of and in proportion to the distance to a certain body and if the direction of this effect is related as precisely as possible to this body, then it is credible that this body is the cause of the effect, however it occurs. Therefore, we have sufficient reason to think that this universal downward movement of the planets towards the sun can be attributed to the power of attraction of the sun and to ascribe the capacity for the power of attraction in general to all the celestial bodies.

Hence, if a body is left free to the influence of this impulse which drives it to sink toward the sun or some other planet, then it will fall towards it with a constantly accelerating motion and soon will be united with that same mass. However, if it gets a push directing it to the side, then, if that push is not powerful enough to achieve an exact equilibrium with the sinking force, the body will sink down to the central mass with a curved movement. And if, before the sinking body touches the outer surface of the central mass, the impulse impressed on it has grown at least strong enough to shift it from the vertical line about half the thickness of the body at the mid-point, then it will not touch this surface but, after it has swung closely around it, will, thanks to the velocity achieved in its fall, be raised up high again just as far as it fell, so as to continue its path in a constant circular movement.

Thus, the difference between the orbital paths of the comets and the planets consists in the sideways deviation in opposition to the force which drives them to fall. The more these two forces approach an equilibrium, the more the orbit will become circular in shape; the more unequal they are, the weaker the projectile force in relation to the force pulling to the centre, then the longer the orbit, or, as we say, the more eccentric the orbit is, because the celestial body in one part of its path comes far closer to the sun than in another.

Because nothing in all nature is exactly balanced, no planet has an entirely circular motion. However, the comets deviate the most from a circular orbit, because at their first distance from the sun the impetus which was impressed on them towards the side was the least proportional to the force pulling them to the centre.

In this treatise I will very often use the expression a systematic arrangement of the cosmic structure. So that people will have no difficulty clearly imagining what this term is to mean, I will explain it briefly. Strictly speaking, all the planets and comets which belong to our cosmic structure already form a system by the fact that they rotate around a common central body. However, I take this term in an even narrower sense, because I consider the more precise relationships which have united them with each other in a regular and uniform way. The orbits of the planets are, in relation to each other, as nearly as possible on a common plane, namely, on the extended equatorial plane of the sun. The deviations from this rule occur only in connection with the outermost borders of the system, where all movements gradually cease. When therefore a certain number of cosmic bodies, ordered around a common mid-point and moving around it are at the same time restricted to a certain plane, so that they have minimal freedom to deviate on both sides of this plane, and when the deviation occurs gradually only with those which are furthest distant from the mid-point and participate less in the interconnections than the others, then I say that these bodies are bound together in a systematic arrangement.

ON THE SYSTEMATIC ARRANGEMENT OF THE FIXED STARS

The theory of the general arrangement of the cosmic structure has not achieved any remarkable progress since the time of Huygens.[13*] At this point we still know no more than we already knew then, namely, that six planets with ten companions, all of which have the circle of their orbit set almost on a single plane, and the eternal spheres of the comets, which run riot on all sides, make up a single system, whose mid-

point is the sun, towards which everything sinks, around which their movements run, and from which they all are illuminated, warmed, and kept alive, and finally that the fixed stars are just so many suns, the mid-points of similar systems, in which everything may be set up in just as large and orderly a way as in our system and that infinite space teems with cosmic systems, whose number and excellence have a relationship to the infinite nature of their Creator.

The systematic arrangement which took place in the union of the planets which move around the sun disappeared in the crowd of fixed stars, and it seemed as if the rule-governed relationship encountered in miniature does not hold sway on a large scale among the links of all the worlds. The fixed stars were subject to no law, by which their positions were confined relative to each other, and we saw all heaven and the heaven of all heavens filled without order and without design. Since human curiosity limited itself in this way, we did nothing further, other than to infer from this state the immensity of the One who had revealed Himself in such inconceivably huge works and to admire Him.

It was reserved for Mr. Wright, an Englishman from Durham, to take a happy step to an observation which he himself does not seem to have developed into anything insightful and whose useful application he did not sufficiently note. He looked at the fixed stars not as a disorganized and scattered swarm without purpose but found a systematic arrangement in their totality and a general relationship of these stars with respect to a major plane of the space which they occupy.

We wish to improve the idea which he presented and to redirect it, so that it can generate important consequences. The complete confirmation of these is something we leave for future ages.

Anyone who gazes at the starry heavens on a clear night will notice that bright band which presents a steady light through the crowd of stars which have accumulated there more than elsewhere and which perceptibly lose themselves in the huge expanse. People have called this band the Milky Way. Because of the structure of this recognizably distinct area in the sky, it is remarkable that observers of the heavens were not long ago prompted to derive from it strange conclusions about the locations of the fixed stars. For we see that the band has an immense circular orientation and, indeed, in a continuous arrangement taking up the entire heavens. These two factors possess such a precise determination and characteristics so recognizably different from uncertain approximations that from them keen astronomers should long ago naturally have been motivated attentively to investigate the explanation for such a phenomenon.

The stars are not placed on the apparently hollow sphere of the heavens, but from our point of view stand at some distance from each other, some further than others, disappearing into the depths of the heavens. From this phenomenon it follows that, at those distances where they are located one behind the other in relation to us, they do not occur in an equal scattering in every direction, but must be arranged in particular relation to a certain plane which goes through our viewpoint and to which their locations are fixed as closely as possible.

This relationship is such an unambiguous phenomenon that even the remaining stars, which are not included in the white band of the Milky Way, are themselves observed to be that much closer together and more dense, the nearer they are located to the circle of the Milky Way, so that of the 2000 stars which the naked eye perceives in the sky, we find the largest number in a relatively narrow area, the middle of which is taken up by the Milky Way.

Now, if we imagine a plane drawn through the starry heavens and extending an unlimited distance and assume that all the fixed stars and all the solar systems have a common spatial relationship to this plane, so that they are closer to it than to any other areas, then the eye which is located on this common plane, as it looks out into this field of stars, into the hollow spherical surface of the firmament, will see the thickest accumulation of stars in the direction of the drawn plane, in the form of an area illuminated with more lights. This band of light will sweep out in the direction of a huge circle, because the onlooker's viewpoint is on the plane itself. This area will be swarming with stars. Because of the undifferentiated smallness of bright points, a single one of which escapes the eye, and because of the apparent density of a

uniform white gleam, it will look, in a word, like a Milky Way. The rest of the heavenly host, whose relationship with the drawn plane becomes less and less apparent or which are also located closer to the observer's position, will be seen as more scattered, although their accumulation will be related to this same plane. From this, finally, it follows that, because from our solar system we see this arrangement of fixed stars in the orientation of a very large circle, our solar system is located in precisely the same large plane and makes one system with the others.

In order that much better to penetrate the composition of the common interrelationship governing this cosmic structure, we wish to try to discover the cause which has arranged the locations of the fixed stars, relating them to a single common plane.

The Sun does not limit the extent of its powers of attraction to the narrow region of the planetary system. According to all appearance, this power extends an infinite distance. The comets which go very far above Saturn's orbit are forced by the sun's powers of attraction to turn back again and to move in orbits. Whether it is more likely for the nature of a force apparently incorporated into the essence of matter to act without limits and whether, in addition, it will be really recognized as such by those who assume Newton's principles, we wish only to have it conceded that this power of attraction of the sun extends approximately to the nearest fixed star and that the fixed stars act on each other as just so many suns to the same extent. Thus, it follows that the entire host of fixed stars strives to come closer together through this power of attraction, so that all the world systems are in a situation where sooner or later they fall into one clump, through this reciprocal moving closer together, which is continuous and unhindered, unless these systems are saved from this disaster by forces which pull away from the central point, as with the spheres in our planetary system. These forces bend the heavenly bodies away from falling in a straight line and, working together with the forces of attraction, bring about the timeless orbits. Thus the structure of creation is preserved from collapse and has been skilfully created to last eternally.

Hence, all the suns in the firmament have orbiting motions, either around one common central point or around many. But with them, we can everywhere apply the analogy of what we observe about the orbital paths of our solar system, namely, that just as that very cause which has imparted to the planets a force moving them away from the centre, through which they maintain their orbits, has directed their orbital paths so that they are all related to a single plane, so also the cause, whatever it might be, which has given the suns of the higher world as well as so many wandering stars of the higher world structure the force of their orbit has at the same time brought their orbits as much as possible into one plane and has worked to limit deviation from this plane.

According to this conception, we can picture the system of fixed stars to a certain extent by means of the planetary system, if we magnify the latter infinitely. For if instead of six planets with their ten satellites we assume many thousands of similar bodies, and instead of the twenty-eight or thirty comets which we have observed, we assume a hundred or a thousand times more of them, and if we think of these particular bodies as generating their own light, then to the eye of the observer who looks out at them from the Earth there would appear exactly the same light as appears from the fixed stars of the Milky Way. For the planets we have imagined, because of their close relationship to the same common plane in which we find ourselves with our Earth, would display a densely lit area made up of countless stars, whose direction went in a very large circle. This band of light would have a sufficient number of stars everywhere, although, according to this hypothesis, as moving stars, they are not fixed to a single spot. For, because of their movement, there would always be enough stars on anyone side, even though other stars had moved from that location.

The width of this illuminated zone, which projects a sort of zodiac, will be set by the different levels of deviation of designated erratic stars from their reference plane and by the inclination of their orbits in relation to this same plane. Since most of them are near this plane, their number will appear more scattered in relation to the extent they are distant from it. However, the comets, which occupy all regions

without distinction, will cover the field of the heavens on both sides.

The shape of the heaven of fixed stars thus has no cause other than the same systematic arrangement on a grand scale as the cosmic structure of the planetary system on a small scale, since all the suns make up one system, whose common interconnecting plane is the Milky Way. Those which are the least related to this plane will be seen to the side; for that very reason, however, they are less dense, more widely scattered, and less frequent. They are, so to speak, comets among the suns.

This new theory, however, attributes a forward motion to the suns, and yet everyone acknowledges that they are motionless and that they have been fixed in their positions from the start. The name which the fixed stars have acquired from this seems confirmed and unambiguous because of all the centuries of observation. This difficulty, if soundly based, would destroy the proposed theory. But this lack of movement, according to all appearances, is only something apparent. It is either merely an exceeding slowness, caused by the enormous distance of their orbits from the common mid-point or the impossibility of perceiving them brought about by the distant location of the observer. Let us estimate the plausibility of this notion by calculating the movement which one of the fixed stars located close to our sun would have, assuming that our sun is the mid-point of its orbit. If, following Huygens, we assume that the distance of this star is more than 21000 times greater than the distance of the sun from the Earth, it then follows from the established law of the time of orbiting bodies, which is proportional to the square root of the cube of the distances from the mid-point, that the time which this star must take to complete its circle once around the sun would be more than one and a half million years and that in 4000 years this would have established a shift in its position of only about one degree. Now, because perhaps only a very few fixed stars are as close to the sun as Huygens assumed for Sirius, and because the distance of the rest of the heavenly host perhaps exceeds by far the distance of Sirius, therefore they would require a far longer time for such periodic orbits. Moreover, it is also more probable that the motion of the suns in the celestial stars goes around a common mid-point whose distance away is extraordinarily far, and the forward motion of the stars can hence be exceedingly slow. Consequently, we can probably assume from this that all the time since human beings have been keeping records of celestial observations has perhaps still not been sufficient for them to notice the change which has taken place in these stellar positions. We must meanwhile not yet give up hope that we will discover this change in time. To achieve that will require subtle and careful observers, together with a comparison of observations far distant from each other. We must direct these observations especially at the stars of the Milky Way, the main plane of all movement.[14*] Mr. Bradley has observed the almost imperceptible movement of the stars. The ancients marked stars in particular places in the sky, and we see new ones in other places. Who knows that these are not the latter which have merely changed position? The excellence of the instruments and the perfecting of our knowledge of the stars give us ground to hope for the discovery of such remarkable and important observations.[15*] The plausibility of the matter itself, based on nature and analogy, supports this hope so well, that it can stimulate the attentive work of scientists to bring it to completion.

The Milky Way is, so to speak, also the zodiac of new stars, alternately appearing and disappearing in this region in a way hardly matched in any other celestial region. If this alteration in their visibility proceeds from their periodic moving further away and closer to us, it seems clear from the proposed systematic arrangement of the stars that such a phenomenon must mainly be seen only in the region of the Milky Way. For there are stars in that location moving in very elongated orbits around other fixed stars, as satellites move around their main planets. Thus, the analogy with our planetary system, in which only heavenly bodies near the common plane of movement have a companion moving around them, requires that only the stars in the Milky Way will have suns orbiting around them.

I am coming to that part of the proposed theory which makes it most particularly attractive because of the sublime picture it presents of creation's plan. The series of ideas which has led me to it is short and natural. It consists of the following. If a system of fixed stars, all spatially related to a common plane, just

as we have sketched out the Milky Way, is so far distant from us that all perception of individual stars making up the system is no longer possible, even with a telescope, if the distance of this system has exactly the same relationship to the distance of the stars in the Milky Way as the latter have to the distance of the sun from us, in short, if such a world of fixed stars is seen at such an immeasurable distance from the eye of the observer located outside this world, then this world will appear in a small angle as a tiny and weakly lit area, with a circular shape if its plane is oriented directly in the line of sight and elliptical if it is viewed from the side. The weakness of the light, the shape, and the recognizable extent of its diameter will clearly distinguish such a phenomenon, when present, from all the stars which are seen individually.

We do not need to search a long time for this phenomenon among the observations of the astronomers. It has been clearly confirmed by different observers. People have wondered about its strangeness, have made assumptions, and have subscribed sometimes to odd imaginary images and sometimes to plausible ideas, which, however, just like the former, had no basis. We are talking about the nebulous stars or, rather, a type of them, which M. de Maupertuis wrote about as follows:[16*] “There are small places whose light is somewhat more than the darkness of empty celestial space, which all are alike in the fact that they display more or less open ellipses, but their light is much weaker than any other that we are aware of in the heavens.” The author of the *Astrotheology* imagined that these were openings in the firmament through which he believed he saw heavenly fire.[17*] A philosopher of illuminating insights, the above-mentioned M. de Maupertuis, in thinking about the shape and the recognizable diameter of these stars, considers that they are astonishingly large celestial bodies which display an elliptical shape because of the large flattening caused by the impetus of their rotation, when viewed from the side.

It is easy to be convinced that this last explanation also cannot hold. Because this kind of nebulous stars must undoubtedly be at least as far away from us as the other fixed stars, not only would their size be astonishing (for in this respect they would have to exceed by a factor of many thousands even the largest stars), but the strangest point of all would be that with this extraordinary size, made up of self-illuminating bodies and suns, these stars should display the dimmest and weakest light.

Much more natural and comprehensible is the idea that there are no such individual huge stars but systems of many stars, whose distance makes them appear in such a narrow space, that the light, which cannot be seen for each individual star, because of the countless crowd of them, comes out in a uniform pale glow. The analogy with the system of stars in which we find ourselves, their shape, which is exactly as it must be according to our theory, the weakness of the light, which this previously mentioned infinite distance requires, all these endorse perfectly the idea that these elliptical figures should be taken as exactly the same world systems and, so to speak, as Milky Ways, whose structure we have just gone through. And if suppositions in which analogy and observation are in full agreement and support each other have precisely the same value as formal proofs, then we must take the certainty of this system as demonstrated.

Now the attentiveness of those who observe the heavens has sufficient motivation to concern itself with this undertaking. The fixed stars, as we know, are all connected to a common plane and thus create a coordinated totality, a world of worlds. We see that in the immeasurable distances there are more such star systems and that creation in the entirely of its infinite extent is everywhere systematic and mutually interconnected.

We could further suppose that these particular higher world orders are not unconnected to each other and through this mutual relationship establish once again an even more immeasurably great system. In fact, we see that the elliptical shapes of these sorts of nebulous stars, which M. de Maupertuis mentions, have a very close relationship to the plane of the Milky Way. Here a wide field stands open to discoveries, for which observation must provide the key. The properly named nebulous stars and those about which there is a dispute whether we should call them nebulous must be investigated and tested according to the

guidelines of this theory. If we view the parts of nature according to a design and a plan we have discovered, then certain characteristics reveal themselves which are otherwise overlooked and remain hidden, when observation squanders its time on all objects without any guidance.

The theory which we have proposed opens up for us a view of the infinite field of creation and offers an idea of the work of God appropriate to the infinite nature of the Great Master Builder. If the size of a planetary system in which the Earth is hardly seen as a grain of sand fills the understanding with astonishment, how delightfully astounded we will be when we examine the infinite crowd of worlds and systems which fill the totality of the Milky Way. But how much greater this wonder when we know that all these immeasurable arrangements of stars once again create a numbered unity, whose end we do not know and which is perhaps, like the previous one, inconceivably large and yet, once again, only a unit in a new numbered system. We see the first links of a progressive relationship of worlds and systems, and the first part of this unending progression already allows us to recognize what we are to assume about the totality. Here there is no end, but an abyss of a true infinity, in which all capacity of human thought sinks, even when it is uplifted with the help of mathematics. The wisdom, goodness, and power which has revealed itself is limitless and, to exactly the same extent, fruitful and busy. The plan of its revelation must, therefore, be, just like it, infinite and without borders.

However, there are important discoveries to be made, and not just in large things, which serve to expand the idea we can formulate about the magnitude of creation. In smaller things there is no less undiscovered, and we see even in our solar system the links of a system which stand immeasurably far from one another and between which we have not yet found the intermediate parts. Saturn is the outermost of the wandering stars which we know about. Are there to be no more planets between Saturn and the least eccentric comet which comes down to us from a distance perhaps ten or more times removed, no planet whose orbit could approach more closely a comet's orbit than Saturn does? And should not other planets be gradually changing into comets by means of a series of intermediate types approximating the composition of comets and linking together the family of planets with the family of comets?

The law according to which the eccentricity of the planetary orbits is directly related to their distance from the sun supports this assumption.[18*] The eccentricity in the movements of the planets increases with the distance of the planet from the sun, and the furthest planets, therefore, come closer to the condition of comets. We can thus assume that there are still other planets beyond Saturn which are even more eccentric and hence even more closely akin to comets, thanks to a continual gradation which finally turns planets into comets. The eccentricity of Venus is 1/126th of the semi-axis of its elliptical orbit; in the case of Earth, the eccentricity is 1/58th; in the case of Jupiter, it is 1/20th, and in the case of Saturn 1/17th. Thus, the eccentricity evidently increases with the distances. It is true that Mercury and Mars are exceptions to this law, because their eccentricity is much greater than the measurement of their distance from the sun permits. But we will learn in what follows that the very same cause which gave some planets in their development a small mass also deprived them of the impulse required for a circular path, with the result that they were pulled into an eccentric movement, thus leaving them incomplete in two respects.

Is it not a probable consequence that the increase in the eccentricity of the cosmic bodies located immediately beyond Saturn will be approximately proportional to the ones beneath, and that the planets are related to the family of comets through a less abrupt gap?[19*] For it is certain that this very eccentricity is the fundamental difference between the comets and the planets. The comet's tail and its misty spheres are only consequences of eccentricity. Similarly, the particular cause, whatever it may be, which has given the celestial bodies their orbital paths, because of the greater distances not only was weaker in making the circular impulse equal to the downward force, thereby allowing eccentric movements, but also for this very reason was less capable of bringing the orbits of these spheres into the common plane on which the lower bodies move. Thus was produced the deviation of the comets to all regions.

According to this hypothesis, we would still perhaps hope for the discovery of new planets beyond Saturn, which would be more eccentric than Saturn and thus closer to the characteristic of comets. But for this very reason we would be able to see them only for a short time, that is, when they approach the sun. This factor, together with the smaller extent of their approach and the weakness of their light, has hindered their discovery up to now and must make that difficult in future. If we wanted, we could call the last planet and the first comet the one whose eccentricity was so large that in its approach to the sun it intersected the orbit of the nearest planet to it, and perhaps Saturn's, as well.

PART TWO. SECTION ONE

Concerning the first condition of Nature, the development of the celestial bodies, the causes of their movement and their systematic interrelationship both with the structure of planets in particular and also with the entire creation.

See plastic Nature working to this end,
The single atoms each to other tend,
Attract, attracted to, the next in place
Form'd and impell'd, its neighbour to embrace.
See Matter next, with various life endu'd
Press to one centre still, the gen'ral Good.
(Pope)[20]*

Concerning the Origin of the Planetary World Structure in General and the Causes of Its Movements

So far as concerns the reciprocal relationships which the parts of the cosmic structure have among themselves and through which they reveal the cause which brought them about, observation of this arrangement displays two aspects, both of which are equally probable and worthy of consideration. On the one hand, if we think of the fact that six planets with ten companions describe orbits around the sun at their mid-point, that all move in one direction, in fact, the same direction as the axial rotational of the sun itself, which governs all their orbits though the power of attraction, that their orbits do not deviate far from a common plane, namely, the extrapolated equatorial plane of the sun, that among the furthest celestial bodies belonging to the solar system, in the region where the common cause of movement was, according to the hypothesis, not so strong as in the region close to the mid-point, deviations from the precision of these conditions occur, which are sufficiently related to the lack of impressed motion, if, I say, we consider all this interconnection, then we will come to believe that one cause, whatever it may be, had a pervasive influence throughout the entire extent of the system and that the conformity in the direction and position of the planetary orbits is a consequence of the coordinated agreement which they must have had with that material cause through which they were set in motion.

On the other hand, if we consider the space in which the planets of our system orbit, then we find it is completely empty and deprived of all material stuff which could have subjected these celestial bodies to a common set of influences and brought with it coordination among their movements.[21]* This fact has been established with more perfect certainty and its probability is, where possible, greater than the probability of the previous claim. Swayed by this reason, Newton could not point to any material cause which should maintain by its extension into the space of the planetary system the commonality of movements. He maintained that the immediate hand of God had set up this order without the use of natural forces.

Considering the matter impartially, we see that the reasons here on both sides are equally strong. And they have an equal value as completely certain. However, it is also just as clear that there must be a concept which could and should unite these two apparently conflicting reasons and that in this concept we are to seek the true system. We wish briefly to announce that concept. In the present arrangement of space, in which the spheres of all the planetary worlds move around, there is no material cause present which could impress itself on or direct their movements. This space is completely empty, or at least as good as empty. Thus, it must have in earlier times been differently constituted and full of matter sufficiently

capable of conferring movement on all the celestial bodies located there and of bringing them into harmony with its motion and, as a consequence, into harmony with each other. When the power of attraction unified the above-mentioned space and collected all the scattered matter in particular clusters, the planets must have from then on freely and unchangingly continued the orbital movement, once impressed upon them, in an unresisting space. The reasons for the first-mentioned probability absolutely require this notion. And since there is no third possibility between the two, we look upon this idea with approval as an excellent one, an approval which raises it above the plausibility of a hypothesis. If we wished to be long winded, we could, with a series of successive inferences in the manner of a mathematical demonstration, with all the display which this involves and with an even greater plausibility than its introduction in physical subjects customarily elicits, finally arrive at the proposal itself, which I will set down, concerning the origin of the cosmic structure. But I would rather present my opinions in the form of a hypothesis and leave it to the reader's insight to put its value to the test, than render its validity suspect because of the appearance of a devious demonstration, something which might thus captivate the ignorant but lose the approval of those who understand.

I assume that all the matter making up the spheres belonging to our solar system, all the planets and comets, at the origin of all things was broken down into its elementary basic material and filled the entire space of the cosmic structure in which these developed bodies now move around. If we consider this state of nature in and of itself, without reference to a system, it seems to be merely the simplest which can follow upon nothingness. At that time nothing had yet developed. The incorporation of heavenly bodies located separate from one another, their distance from each other controlled according to the powers of attraction, and their shape, arising from the equilibrium of the collected materials, are a later condition. Nature, on the immediate edge of creation, was as raw and undeveloped as possible. Only in the fundamental properties of the elements which make up the chaos can we perceive the sign of that perfection which nature has from its origin, since its being is a consequence arising from the eternal idea of the Divine Understanding. The simplest, most universal characteristics, apparently designed without purpose, the material, which seems merely passive and in need of forms and structures, has in its simplest condition a tendency to build itself up by a natural development to a more perfect arrangement. The difference in the types of elements by itself was the most important factor contributing to the movement of nature and to the development of chaos, so that the tranquillity which would have ruled in a state of universal equality among the scattered elements would be lifted, and the chaos begin to develop itself at points where the particles have a stronger power of attraction. The types of this basic material are undoubtedly infinitely different, to match the immensity which nature displays in every respect. Given the equal distribution in planetary space, the materials with the greatest specific density and power of attraction, which in and of themselves take up less room and are also rarer, therefore become more scattered than the lighter varieties of material. Elements with a specific heaviness one thousand times greater are a thousand, perhaps a million, times more scattered than those which are lighter in this proportion. And since these differences must be imagined as infinite as possible, then, just as there can be one sort of physical component which exceeds another in its measured density, as a sphere drawn with the radius of the planetary system exceeds another sphere with the diameter of the thousandth part of a line, so the heavier type of scattered elements are separated from each other by a much greater distance than the lighter kinds.

The universal tranquillity in space replete in this way lasts only for an instant. The elements have essential forces which set each other in motion and are, indeed, themselves an origin of life. The material is under an immediate impulse to develop. The denser type of scattered materials, thanks to the power of attraction, collect from a spherical area around them all the material with a lesser specific weight. But they themselves, together with the material which they have united with them, converge in the points where the small pieces of an even denser type are located, and these again to even denser points, and so

on. When we think about this idea of a self-developing nature throughout the entire extent of chaos, we will easily see that all the consequences of this process will finally consist of the assembling of different clusters, which, after the completion of their development, would be calm and eternally motionless because of the equality in the force of attraction.

But nature has still other forces in store, which manifest themselves especially when the material is dispersed in fine particles, so that these particles repel each other and by their conflict with the power of attraction induce that movement, which is, as it were, an enduring life of nature. Because of this force of repulsion, which reveals itself in the elastic nature of fumes, in the diffusion from strong-smelling bodies, and the spreading of all gaseous materials and which is an uncontested phenomenon of nature, the elements sinking towards their points of attraction will shift each other sideways from their vertical movement, and the straight linear descent will end up in orbital movements which surround the mid-point towards which they were sinking at the centre. In order clearly to grasp the development of the cosmic structure, we want to limit our observation of the infinite essence of nature to a particular system, like the one to which our sun belongs. Once we have explored the development of this system, then we will be able to proceed in a similar way to the origin of the higher world structures and bring together into one theory the infinite nature of the entire creation.

Thus, if a point is found in a very large space where the power of attraction of the elements located there exerts a stronger influence than at any other points around it, then the basic material stuff of elementary particles spread out in all the surrounding area will sink toward this point. The first effect of this general sinking is the development of a body at this mid-point of the attraction which, so to speak, proceeds to grow from an infinitely small seed in rapid stages. But as this mass increases, it will, in exactly the same proportion, with its more powerful force move the surrounding particles to unite with it. When the mass of this central body has grown so extensive that the velocity with which it draws the small particles to itself from great distances is diverted sideways by the weak level of the force of repulsion with which these particles interfere with one another, it produces lateral movements, which, thanks to the centrifugal force *[Centerfliehkraft]*, are such that they can move in a circle around the central body. Thus, large vortexes of small particles develop, each of which, because of the combination of the force of attraction and the force leading to a sideways rotation describes its own curving path. These sorts of circles all intersect each other, something which their large scattering in this space leaves room for. Meanwhile, these movements, in various ways in conflict with each other, strive naturally to bring one another into equilibrium, that is, into a single state where the movement of one hinders the movement of another as little as possible. This occurs, first, because the particles restrict the movement of other particles for as long as it takes until they all are moving forward in one direction; and second, because the particles restrict their vertical movement, thanks to which they approach the centre of the attraction, until the time when they are all moving horizontally, that is, in circles running parallel around the sun at their mid-point, no longer intersecting with one another, and, thanks to the equilibrium between the centrifugal force *[Schwungskraft]* and the force drawing them downwards, maintaining constant free circular orbits at the heights where they are suspended, so that finally only those particles remain suspended in the volume of space which have attained through their fall a velocity and through the resistance of other particles a direction by means of which they can continue a free circular movement. In this condition, where all the particles run around the central body in one direction and in circles arranged in parallel, namely, in free circular movements by means of the required centrifugal force, the conflict and the collision of the elements disappear, and everything is in the condition of the smallest reciprocal interaction. This result always occurs naturally with materials subject to conflicting movements. It is thus clear that from the scattered mass of particles a large number must, on account of the resistance through which they seek to bring each other to this state, succeed in attaining such an exact arrangement, although a much greater number do not reach this condition and serve only to increase the cluster of the central body,

into which they sink, since they cannot hold their position freely at the height where they are suspended, but intersect the circles of the lower particles and eventually, because of the resistance, lose all their movement. This body at the middle point of the force of attraction, which, on account of of the large amount of its assembled material, has accordingly become the main piece of the planetary structure, is the sun, although at this time it does not yet immediately have that flaming glow, which breaks out on its surface when its development is fully complete.

We must still note that while all the elements of self-developing nature, as demonstrated, thus move in one direction around the sun as the mid-point, in the case of such orbits which are set up in a single direction and which occur, so to speak, around a common axis, the rotation of fine material cannot remain in this way, because, according to the laws of central motion, all orbital movements must intersect the mid-point of the force of attraction with the plane of their rotation. Among all these orbits moving in one direction around a common axis, however, there is only one which intersects the mid-point of the sun. Therefore, all the material from both sides of this imagined axis moves quickly to that circle which goes directly through the axis of rotation right at the central point of the common downward movement. This circle is the plane which establishes a relationship for all the elements hovering around; as much as possible they accumulate around it and, by contrast, leave the regions far away from this plane empty. For those elements which cannot approach so closely to this plane towards which everything is drawn will not be able to maintain themselves indefinitely in those places where they are suspended, but, as they collide with the elements floating around, will bring about their own final fall toward the sun.

Thus, if we consider this fundamental material of the planets hovering around in a state where it develops itself through the power of attraction and the mechanical consequence of the general law of repulsion, then we see a region which is contained between two planes standing not far from each other. In the middle of these two is located the common interconnecting plane, extending from the mid-point of the sun out to an unknown distance. All the particles we can think of carry out mathematically precise circular movements in free orbits on this common plane, each proportional to the extent of its distance and to the force of attraction which governs there. Because in such an arrangement they interfere with each other as little as possible, they would remain in this form for ever, if the force of attraction of these particles of basic matter did not then start to exercise its effect and in this way to cause new developments, the seeds of planets which are to arise. For since the elements moving around the sun in parallel circles and positioned where the distance from the sun is not very different, because of the equality in the parallel movements, are almost calm relative to each other, then the force of attraction of elements located there with an excessive specific attraction initiates at once a significant effect, collecting the nearest particles to start the development of a body. In proportion to the growth of its cluster, the power of attraction of this body expands, and elements from a wide area move to combine with it.[22*]

In this system, the development of the planets has this advantage over any other theoretical possibility: the cause of the masses provides simultaneously the cause of the motions and the position of the orbits. Indeed, even the deviations from the greatest precision in this arrangement, as well as the harmonies themselves, are illuminated in an instant. The planets are developed out of particles, which, at the heights where they are suspended, have precise movements in circular orbits. Thus, the masses formed by their combination will continue exactly the same movements at precisely the same level and in exactly the same direction. This is sufficient to understand why the movement of the planets is approximately circular and why their orbits are on a single plane. Moreover, they would be exactly circular if the distance from which they gather the elements for their development were very small and thus if the difference in their movements were very insignificant.[23*] But because the development of a thick planetary cluster involves a wider surrounding area, throughout which the fine basic stuff is scattered so much in celestial space, the difference in the distances of these elements from the sun and thus also the difference in their velocities are no longer insignificant. As a result, given this difference in the movements, it would be necessary, in

order to maintain on the planet an equilibrium between the central forces and the circular velocity, for the particles which collide with the planet from different distances and with different motions to offset each other's aberrations exactly. Although this, in fact, occurs fairly accurately, nonetheless, this compensation falls somewhat short of perfection and brings the deviations from circular movement and eccentricity with it.[24][*] It is just as easy to shed light on the fact that although the orbits of all planets should properly be in one plane, nevertheless in this part we also come across a small deviation, because, as already discussed, the elementary particles which find themselves as close as possible to the general plane of their movements nevertheless take up some space on either side of it. It would be only too fortunate a coincidence if all the planets were to begin to develop exactly in the middle between these two sides on the plane connecting them, something which would already cause some inclination of their orbits towards each other, although the impulse of the particles from both sides would restrict this deviation as much as possible, allowing it only within narrow limits. Thus, we must not be surprised about the fact that here, too, we rarely come across the most precise accuracy in the arrangements, as is the case with all things in nature, because generally the multiplicity of circumstances involved in every natural condition does not permit an exact regularity.

PART TWO. SECTION TWO

Concerning the Different Densities of the Planets and the Relationship of Their Masses

We have shown that the particles of the elementary basic material, distributed equally by themselves in cosmic space, through their sinking downward towards the sun remain suspended in the places where the velocity which they attained in their descent reaches a precise equilibrium in relation to the force of attraction and that their direction would be altered so as to be perpendicular to the radius of the circle, as should be the case with circular movements. However, if we now think of the particles of different specific density at the same distance from the sun, then the ones with a greater specific heaviness drive more deeply through the resistance of the other particles toward the sun and will not be diverted from their path as soon as the lighter ones. Thus, their movement will form a circular orbit only at a closer distance to the sun. On the other hand, the elements of the lighter type are diverted from a straight vertical fall earlier and take on circular movements before they are driven so deep toward the centre. Thus, they remain suspended at greater distances away. Moreover, they are not able to drive so deeply downward through the space filled with the elements, without the resistance of these elements decreasing their motion, and they will not be able to attain the high level of velocity required for a circular movement closer to the mid-point. Hence, according to the required equilibrium in the movements, the specifically lighter particles will orbit at distances further from the sun; the heavier ones occur, however, at closer distances. The planets which are built out of these elements will therefore be of a denser variety when they are nearer the sun than when they are formed from the combination of these atoms further away from the sun.

Thus, there is a sort of statistical law which establishes for the material of cosmic space an inverse relationship between its distance from the centre and its density. Nonetheless, it is just easy to grasp that it is not essential that each distance contain only particles of the same specific density. Of the particles of a certain specific type, some remain hovering at greater distances from the sun and attain the permanent circular motion appropriate to their fall at a greater distance. These have moved down toward the sun from further away. On the other hand, those whose original location in the universal distribution of the materials in chaos was nearer the sun, regardless of the fact that their density is no greater than the former group, will attain a circular orbit closer to the sun. Since the locations of the materials in relation to the mid-point of their descent is determined not only by the specific heaviness of the material but also by its original place in the first calm state of nature, it is therefore easy to see that very different types of material will combine at every distance from the sun, so as to remain suspended there and that, nevertheless, generally we will find the denser material more frequently closer to the mid-point than further away and thus that, notwithstanding the fact that the planets will be a mixture of very different materials, nonetheless, in general, their masses must be denser in proportion to their closeness to the sun and less dense when their distances away are greater.

In the matter of this law governing planetary densities, our system manifests an advantageous comprehensiveness in comparison with all those ideas which people have come up with or even could come up with about its cause. Newton, who established the density of some planets by calculation, thought that the cause of this relationship set according to the distance was to be found in the appropriateness of God’s choice and in the fundamental motives of His final purpose, since the planets closer to the sun must endure more solar heat and those further away are to manage with a lower level of heat, something which would not seem to be possible, unless the planets near the sun were composed of a denser kind of material and those further away of a lighter material. But to perceive the inadequacy of such an explanation does not really require much reflection. A planet, for example, our Earth, is composed of

types of material very different from each other. Of these, it was necessary only that the lighter varieties, which will be more deeply penetrated and affected by the same solar working and whose composition has a relationship to the heat through which the sun's rays work, be spread out on the planet's outer surface. But the fact that the mixture of the remaining material in the total cluster must have this relationship sheds light on nothing at all, because the sun has no effect on the inside of the planets. Newton was afraid that if the Earth had been in a lower position in the proximity of Mercury, then in the sun's rays it would have to burn up like a comet, and the Earth's materials would have insufficient protection against fire not to become scattered by this heat. But, by contrast, it is the sun's own material stuff, which is four times lighter than the material making up the Earth, which would have to be destroyed by this blazing heat. Or why is the Moon twice as dense as the Earth, yet still suspended at the very same distance away from the sun as the Earth? Thus, we cannot attribute the proportional densities to the relationship with the sun's heat, without entangling ourselves in the greatest contradictions. Instead we recognize that a cause which allocates the locations of the planets according to the density of their clusters must have had a relationship to the inner material and not to the material on the surface. This cause would have to determine this relationship with the density only according to the total composition, still permitting a differentiation in the materials in one and the same celestial body, without regard to the consequences which it established. Whether some statistical law other than the one which is presented in our theory can achieve this satisfactorily I leave to the insight of the reader to judge.

The relationship of the planetary densities brings with it one more circumstance which corroborates the validity of our theory by completely endorsing the previously proposed explanation. The celestial body standing at the mid-point of other spheres orbiting around it is commonly of a lighter sort than the bodies orbiting most closely around it. The Earth with respect to the Moon and the Sun with respect to the Earth manifest such a relationship vis-à-vis their densities. According to the proposal which we have laid out, such a relationship is necessary. For the lower planets were built up mainly from the excess elementary material which, thanks to the advantage of its density, could have driven with the required degree of velocity right to an area close by the mid-point. By contrast, the body at the very mid-point was put together out of the material of all varieties present, without distinction, which did not attain the velocity required by the law. Since among these, the lighter materials make up the greatest portion, it is easy to see that, because the celestial body orbiting closest to the mid-point or the ones nearest to it has within it, as it were, a selection of the denser forms of material, but the central body has a mixture of all types, without differentiation, then the former will be a substance of a denser sort than the latter. In fact, the moon has twice the density of the Earth, and the Earth is four times denser than the sun, which, according to all assumptions, will be exceeded by the planets even closer to the sun, Venus and Mercury, with an even higher degree of density.

We now turn our attention to the relationship which, according to our theory, the masses of the celestial bodies should have in comparison to their distances from the sun, in order to test the results of our system against Newton's infallible calculations. It does not require many words to make people understand that the central body must always be the major part of its system and that, consequently, the sun must be preponderantly greater than the planets collectively, just as the same point will hold for Jupiter and Saturn in relation to their nearby planets. The central body is developed from the downward sinking from the entire extent of the sphere of its power of attraction of all particles incapable of attaining the most precisely established circular movement and a close relationship to the common plane. The number of these must undoubtedly be extraordinarily greater than the number of those which attain orbital movement. To apply this observation in particular to the sun: if we wish to estimate the spatial extent in which particles with a circular orbit which have served as basic material for the planets have deviated furthest from the common plane, then we can assume that it is, as an approximation, somewhat larger than the width of the greatest deviation of the planetary orbits from each other. Now, while they deviate from the

common plane on both sides, their greatest angular difference with respect to each other is hardly 7.5 degrees. Thus, we can picture all the material out of which the planets were developed as having been distributed in that space which we imagine between two planes extending out from the mid-point of the sun and enclosing an angle of 7.5 degrees. However, a zone 7.5 degrees wide extending in the direction of the largest circle is a bit more than the seventeenth part of the spherical surface. Thus, the physical space between the two planes, which cut out a part of planetary space in the width of the above mentioned angle, is somewhat more than a 17th part of the physical contents of the entire sphere. Hence, according to this hypothesis, all material used for planetary development would comprise approximately the seventeenth part of the material which the sun assembled for its composition on both sides out as far as the furthermost planet is located. But this cluster of the central body has a preponderance over the combined content of all the planets which is not 17 to 1 but 650 to 1, as Newton’s calculations have established. However, it is easy to see that in the higher regions beyond Saturn, where planetary development either ceases or is rare, where only a few comet bodies have arisen, and especially where the movements of the basic material, because in that location it is not rapid enough to attain the equilibrium with the centripetal force as required by law, as happens in the regions close to the centre, ended up in an almost universal sinking toward the mid-point and increased the size of the sun with all the material from such a vast expanse of space, it is easy, I say, to see that for these reasons the sun would have to acquire such a preponderantly large mass.

However, in order to compare the planets with each other with respect to their masses, we first observe that, in accordance with the method of development I have indicated, the quantity of material which combines in the composition of a planet depends particularly on the extent of its distance from the sun, for the following reasons: (1) Because of its power of attraction, the sun limits the sphere of the planet’s power of attraction; however, in the same circumstances, it does not restrict the more distant planets so narrowly as the close ones. (2) The circle from which all the particles have come together to make a more distant planet will be described with a larger radius and thus contain more basic material than the smaller circles. (3) For the very reasons just mentioned, the width between the two planes of the greatest deviation at a constant angle is greater at a greater distance than at a small distance. On the other hand, this advantage for the more distant planets over the ones lower down will be limited by the fact that the particles nearer the sun will be of a denser type and, everything considered, will also be less scattered than at a greater distance away. But we can easily estimate that for the development of large masses the first advantage far exceeds the limitation just mentioned and that, in general, the planets which develop far distant from the sun would have to acquire larger masses than the ones close to the sun. This happens insofar as we imagine a planet’s development with only the sun present. But if we admit the development of several planets at different distances, then one planet will restrict the extent of the power of attraction of another planet through the sphere of its own force of attraction. This brings about an exception to the previous principle. For the planet which is near another one of exception mass will lose a very great deal from the sphere of its development and thus will become unusually smaller than the relationship of its solar distance by itself requires. On the whole, the planets have a greater mass as they are further from the sun, just as Saturn and Jupiter, in general, the two main parts of our system, are thus the biggest because they are furthest from the sun. However, deviations from this analogy do occur. But in them the mark of their common development is always manifest: the principle which we maintain concerning the heavenly bodies, namely, that a planet of exceptional size takes away from the nearest ones on both sides the mass appropriate to them, given their distance from the sun. For it attracts to itself a portion of the material which should go into the development of both of them. In fact, because of its location, Mars should be bigger than the Earth. But Mars has a diminished mass because of the force of attraction from Jupiter, which is so large and close by. And although Saturn itself has an immediate advantage over Mars because of its distance from the sun, nevertheless Saturn has not been entirely free

from suffering a considerable loss thanks to Jupiter's power of attraction. And it seems to me that Mercury owes its exceptionally small mass not only to the force of attraction of the powerful sun, which is so close to it, but also to the fact that Venus is a neighbouring planet. If we compare the presumed density of Venus with its size, Venus must be a planet of considerable mass.

Everything agrees as splendidly as we might wish in order to confirm the adequacy of a mechanical theory for the origin of the cosmic structure and the celestial bodies. Now, as we estimate the space in which the material stuff of the planets was distributed before their development, we wish to consider how diffuse the material was which filled this middle space at that time and how free or unrestricted the particles suspended all around were to establish their rule-governed motions in it. If the space holding in itself all the planetary material was contained in that part of the sphere of Saturn which was between two imaginary planes subtended at an angle of about 7 degrees to each other from the mid-point of the sun out into the full reaches of space (and which therefore comprised one seventeenth of the entire sphere which we can describe with a radius equal to the distance of Saturn), then in order to calculate the diffusion of the basic planetary material filling this space, we wish to set the distance of Saturn at 100,000 Earth diameters. Thus, the entire sphere of Saturn's orbit will exceed the volume of Earth's globe by a factor of 1000 billion.[25*] If we take instead of the seventeenth part only the twentieth part of the space in which the elementary basic stuff was suspended, this still must exceed the volume of Earth's sphere by a factor of 50 billion. Now, if, following Newton, we set the mass of all the planets along with their satellites at only 1/650 of the mass of the cluster of the sun, then the Earth, which is only 1/169282 of this mass, will be related to the collective mass of all the planetary material in the ratio of 1 to 276.5. And if we then made all this material the same specific density as the Earth, we would produce a body which would take up a space 276.5 times greater than the Earth.[26*] Assuming that the density of the entire cluster of the Earth is not much greater than the density of the firm material which we encounter under Earth's outermost layer, as is required by the characteristics of the shape of the Earth, and assuming that this outer material is about 4 or 5 times denser than water and that water is 1000 time heavier than air, then, if all the planetary material were expanded to the density of air, it would take up a space almost 1,400,000 times larger than Earth's sphere. Comparing this space with the space in which, according to our theory, all planetary material was spread out, it is 30 million times smaller. Thus, the scattering of the planetary material in this space is much more thinly distributed than the particles of our atmosphere. In fact, the thin density of this scattered distribution, as inconceivable as it may appear, was nonetheless neither unnecessary nor unnatural. It had to be as thin as possible, in order to permit the suspended particles all freedom of movement, almost as in an empty space, and infinitely to reduce the resistance which they could have created for each other. They could, however, have assumed such a thinly distributed state on their own. We cannot doubt this point if we know a little about the diffusion which matter undergoes when it is transformed into vapour or when, to stay on the subject of the heavens, we consider the thinning out of the material in the tail of a comet, whose diameter, of an unheard of thickness, exceeds the diameter of the earth by a factor of well over a hundred and yet it is so transparent that the small stars can be seen through it, something which our air, when it is illuminated by the sun at a height many thousand times smaller, does not allow.

I conclude this section by bringing out an analogy which in and of itself can raise the present theory of the mechanical development of the celestial bodies above the probability of a hypothesis to a formal certainty. If the sun is composed of particles of the same basic material from which the planets have developed and if the difference between them consists only in the fact that in the sun undifferentiated material of all sorts accumulated, while in the planets the density of their types was distributed according to the different distances, then if we consider the material of all the planets as a collective unity, from their complete intermixing the result would have to be a density almost equal to the density of the sun. Now, this necessary consequence of our system finds happy confirmation in the comparison which M. de

Buffon, that justly celebrated philosopher, set out between the densities of the total aggregate of planetary material and the material of the sun.[27*] He found a similarity between the two in the ratio of 640 to 650. When unbiased and necessary consequences of a theoretical conception encounter such happy confirmations in true natural relationships, can we really then believe that mere contingency has brought about this agreement between theory and observation?

PART TWO. SECTION THREE

Concerning the Eccentricity of the Planetary Orbits and the Origin of Comets

We cannot make the comets a special class of celestial bodies entirely different from the family of planets. Here, as elsewhere, nature works by imperceptible stages, and while going through all the series of changes, links together distant qualities with ones close at hand, thanks to a chain of intermediate rungs. The eccentricity in the case of the planets is the result of a lack of that impetus by which nature strives to make planetary movement precisely circular, something which, however, she can never perfectly attain because of the intervening influence of various causes. However, the deviation from circular motion is greater at the larger distances from the sun than close by.

This condition goes through a constant scale with all possible levels of eccentricity from the planets right up finally to the comets. True, this interconnection seems to be severed in the case of Saturn because of a large gap which completely separates the family of comets from the planets. But in the first part we have remarked that there may well be still other planets beyond Saturn which are more like comets because of a greater deviation from circularity in their orbital path and that it is only through a lack of observations (or also the difficulty involved in such observations) that this affinity was not long ago revealed as clearly to eye as to the understanding.

In the first section of this part we have already referred to a cause which can render eccentric the orbit of a cosmic body developing out of the basic material suspended all around, if we also assume that this body in all its locations has carefully balanced forces moving it directly in a circular motion. Because the planet collects materials from places at a considerable distance from each other, where the orbital velocities are different, the materials collectively reach the planet with different degrees of inherent orbital velocity. These deviate from the velocity appropriate to the distance of the planet from the sun and thus induce an eccentricity for the planet insofar as these different impressions of the particles fail to offset each other's deviation completely.

If the eccentricity had no other cause, it would be moderate everywhere. Also it would be less significant with the small planets far from the sun than with the closer and larger planets, that is, if we assumed that previously the particles of the basic material really did have a precise circular movement. Now, these estimates do not agree with observation, since, as has already been mentioned, the eccentricity increases with the distance from the sun, and the small size of the masses appears instead to create an exception to an increase in eccentricity, as we see with Mars. Thus, we are forced to limit the hypothesis about the precise circular movement of the particulate basic materials, so that, while they very nearly attain the determined precision in the regions near the sun, they nevertheless admit wider deviations from that precision the further the elementary particles hovered from the sun. Such an adjustment of the basic principle of the free circular movement of the basic material is more naturally appropriate. For regardless of the spatial diffusion, which seems to leave them free to limit each other at the point of completely balanced equilibrium of the central forces, no less considerable are the causes which hinder the attainment of this natural goal. The further the dispersed parts of the original material are from the sun, the weaker the force which induces them to sink down. The resistance of the particles below, which should bend their fall sideways and force them to assume a direction perpendicular to the radius of the circle, is proportionally diminished as these particles sink downward under it either to be incorporated into the sun or to assume an orbit in a region closer to the sun. The fact that this more distant material has a predominant specific lightness does not permit it to acquire the downward movement, which is the basis for everything, with the force necessary to move the resisting particles aside, and perhaps these distant particles still restrict each other in order finally to attain this uniformity after a long

time. Thus, among these distant particles already small masses have developed as the starting point of so many celestial bodies, which, because they are assembled from weakly moving material, have only an eccentric movement with which they sink toward the sun and on the way are increasingly diverted from a perpendicular fall by taking on more quickly moving pieces. Finally, however, they remain comets if those spaces in which they have developed have, through the sinking down toward the sun or through the assembling in particular clusters, become cleansed and empty. This is the reason why the eccentricity of the planets and those celestial bodies called comets increases with the distance from the sun. Comets have their name for the very reason that in this characteristic they far exceed the planets.[28*] There are, it is true, two exceptions which violate the law concerning the increase in eccentricity with the increasing distance from the sun. We see them in the two smallest planets of our system, Mars and Mercury. But with the first the cause is presumably the vicinity of a planet as large as Jupiter, which through its power of attraction on its side of Mars deprives it of particles for its development and thus only allows Mars a special area in the direction of the sun in which to extend itself. This brings with it an excessive central force and eccentricity. So far as Mercury, the lowest but also the most eccentric of the planets, is concerned, it is easy to believe that, because the sun's axial rotation does not yet by a long way equal Mercury's velocity, not only does the resistance which the sun presents to the material in the space surrounding it deprive the nearest particles of their central movement but also this resistance could easily extend right out to Mercury, and its orbital velocity would on this account have been considerably diminished.

Eccentricity is the most notable mark differentiating the comets. Their atmosphere and tail, which expand through the heat of their close approach to the sun, are only consequences of the eccentricity, although they have always served in times of ignorance as uncommon images of horror, announcing to the common folk imaginary destinies. Astronomers, who pay more attention to the laws of motion than to the strangeness in the shape, notice a second characteristic distinguishing the family of comets from planets, namely, unlike planets, comets do not confine themselves to the zone of the zodiac, but establish their orbits in all celestial regions without restriction. This peculiarity has exactly the same cause as the eccentricity. The planets have confined their orbits to the narrow region of the zodiac because the elementary material in the vicinity of the sun acquires circular movements which in each revolution try to intersect the interrelated plane and do not allow a body, once developed, to deviate from this surface towards which all the material from both sides presses. Thus, basic material from the spaces far from the mid-point, which, weakly moved by the force of attraction, cannot attain free orbital movement for the very reason which produces eccentricity, is not capable of accumulating at this height on the plane interconnecting all planetary movement so as to maintain the bodies developed there primarily on this track. Since it is not limited to a particular region, as is the case with the lower planets, the scattered basic material will instead develop on its own into celestial bodies equally easily on both sides, far from the interconnecting plane just as often as it will near to it. Therefore, comets will be fully free to descend toward us from all regions. However, those which first developed in a place not far above the planetary orbits will manifest less deviation from the limitations of their paths as well as less eccentricity. With the increasing distances from the mid-point of the system, this lawless freedom of the comets in relation to their deviations increases and loses itself in the depths of the heavens in a total lack of orbital movement. This leaves the bodies developing in the outer regions free to fall toward the sun and establishes the last frontiers of the systematic arrangement.

In this outline of the comet's movements, I assume that, so far as their direction is concerned, for the most part they have one in common with the planets. It seems to me that in the case of the comets close by this is undoubtedly true. Also this similarity of form cannot get lost in the depths of the heavens before the point where the elementary basic stuff in the least energetic state of motion establishes the rotation which arises in all directions from the downward sinking. For, because of the commonality of the movements lower down, the time required to align them in a common direction is, on account of the large distance,

too long for them to be able to extend themselves far enough for the natural development in the lower region to take place. Hence, there will perhaps be comets which will establish their orbits in the opposite direction, namely, from east to west, although I might equally well almost persuade myself, for reasons which I am reluctant to cite here, that of the nineteen comets in which we have observed this peculiarity, in some of them an optical illusion may have given rise to this observation.

I must still note something about the masses of the comets and about the density of their material. For the reasons mentioned in the previous section, according to the rules the development of these celestial bodies in the upper regions should proceed always according to the principle that, as the distance increases, their masses get larger. And we can believe that a few comets are larger than Saturn and Jupiter. But it is just not credible that this quantity of the masses always increases in this manner. The scattering of the basic materials and the specific lightness of their particles make the development in the furthest region of cosmic space slow. The uncertain diffusion of this material in the entire infinite expanse of this space without any tendency to accumulate in the direction of a certain plane permits several smaller developments in place of a single considerable one. And the lack of central force draws the largest portion of the particles down to the sun, without their having assembled themselves into masses.

The specific density of the stuff out of which the comets develop is more worthy of attention than the size of their masses. Presumably, since they develop in the uppermost reaches of the cosmic structure, the particles which compose them are of the lightest sort. We cannot doubt that this is the major cause of the vapour sphere and the tail, which distinguish them from the other celestial bodies. We cannot attribute this dispersal of the comet's material in a vapour mainly to the effect of solar heat. A few comets in their approach to the sun hardly reach the depth of the Earth's orbit. Many remain between the orbits of Earth and Venus and then turn back. If such a moderate level of heat dissolves and thins out the material on the surface of these bodies to this extent, then they would have to consist of the lightest material which undergoes, under the influence of heat, more thinning out than any material whatsoever in all nature.

Moreover, it is not possible to attribute the vapours which arise so frequently from the comet to the heat which its body has left over from the earlier approaches to the sun. For indeed we may suppose that at the time of its development a comet has gone through quite a few orbits with greater eccentricity and that these were reduced only gradually. But the other planets, for which we could assume the very same, do not manifest this phenomenon. However, they would inherently display it, if the varieties of the lightest material included in the composition of the planets were present just as much as they are with the comets.

The Earth has something in itself which we can compare with the dispersal of the comet's vapours and their tails.[29*] The finest particles which the effect of the sun draws from Earth's outer surface pile up around one of the poles, when the sun directs the semi-circle of its orbit into the opposite hemisphere. The finest and most energetic particles, which arise in the hot equatorial regions, having attained a certain atmospheric altitude, are compelled by the effect of the sun's rays to move away to and accumulate in those regions which at that period are directed away from the sun and buried in a long night. These particles compensate the inhabitants of the icy regions for the absence of the great light, which even at this distance sends them the effects of its heat. Just this same power of the sun's rays, which creates the Northern Lights, would bring out a vapour circle with a tail, if the finest and volatile particles on the Earth were encountered just as frequently on the Earth as on the comets.

PART TWO. SECTION FOUR

Concerning the Origin of Moons and the Axial Rotation of the Planets

The attempt of a planet to develop from the range of basic materials is at the same time the cause of its axial rotation and produces the moons which are to orbit around it. What the sun with its planets is on a large scale a planet with a sphere of attraction extending far out is on a small scale, namely, the major part of a system whose pieces have been set in motion through the force of attraction of the central body. Since the developing planet activates for its development the particles of the basic material from the total sphere of its power of attraction, it will produce from all these sinking motions, thanks to their reciprocally interacting effects, circular movements, and will, in fact, finally produce movements which settle upon a single common direction. Some of these motions will get moderated appropriately for free circular movement and in this limited area will be located close to a common plane. In this space, as with the main planets around the sun, the moons also will develop around the planets, when the extent of the power of attraction of such cosmic bodies offers favourable conditions for their production. Incidentally, what was said in connection with the origin of the solar system can be applied equally well to the system of Jupiter and of Saturn. The moons will have arranged their orbital circles in one direction almost in a single plane and this, in fact, for the same reasons as those in the large-scale analogy. But why do these satellites in their common orientation move far more in the direction in which the planets move than in any other? The moons' orbits are not produced through the circular movements of the planet. They acknowledge as cause only the power of attraction of the main planet, and, so far as this force is concerned, all directions are equally good. Mere contingency will select the direction out of all possible directions, according to which the sinking movement of the material changes into circles. In fact, the circular path of the main planet does nothing at all to impress orbital motion around the planet upon the material out of which the moons are to develop. All the particles surrounding the planet move with it in the same motion around the sun and are thus, in relation to the planet, respectively at rest. The power of attraction of the planet achieves everything by itself. But since, as far as direction is concerned, this power is in and of itself indifferent to them all, the orbital movement which is to arise out of that requires only a small external stimulus to deflect it more to one side than to the others. This small degree of steering the orbital movement acquires from the forward movement of the elementary particles which run simultaneously around the sun but at a higher velocity and reach the sphere of the planet's power of attraction. For this requires the particles closer to the sun, which orbit at a faster momentum, to abandon the direction of their path when they are already at a considerable distance and to move up over the planet in an extended curve. Because these particles have a higher degree of velocity than the planet itself has, when they are drawn down by the planet's power of attraction, they produce in their perpendicular descent and also in the descent of the other particles a curved deviation from west to east. It requires only this slight steering to see to it that the orbital movement in which the descent, initiated by the power of attraction, finishes up takes on this direction rather than any other. For this reason, all the moons will coordinate their direction with the direction of the orbit of the main planets. However, the plane of their path also cannot deviate far from the plane of the planetary orbits, because the material out of which they develop, for the very reason which we have referred to concerning orbital direction in general, is also guided according to this most precise arrangement, namely, coordinating itself with the plane of the principal orbits.

From all this we clearly see what the circumstances are in which a planet may be able to acquire satellites. The power of attraction of the planet must be large and, as a result, the extent of the sphere in which this power is effective must extend far out, so that not only are the particles which move to the

planet through a long descent, without regard to the effects of resistance, at length able to attain the velocity for a free orbital momentum, but also there must be present sufficient material for the development of moons in this region, something which cannot occur with a slight power of attraction. Thus, only planets with large masses and at a great distance from the sun are endowed with satellites. Jupiter and Saturn, the two largest and also most distant of the planets have the most moons. The Earth, much smaller than those planets, is assigned only one. And Mars, which on account of its distance might have merited some share of this advantage, goes without because its mass is so small.

We observe with pleasure how the same force of attraction of the planet which brought the material for building moons and at the same time determined its movement extends to the very body of the planet itself, in giving it an axial rotation, by means of exactly the same action through which the planet develops, in the common direction from west to east. The particles of the descending basic material, which, as mentioned, acquire a common rotational movement from west to east, fall for the most part onto the surface of the planet and are mixed into its cluster, because they do not have the appropriate velocity to maintain themselves in freely suspended orbital motion. Since they now come into the composition of the planet, they must, as parts of it, continue just the same rotational movement and in exactly the same direction which they had before they were united with the planet. And because, in general, we can see from the foregoing that the number of particles which the lack of necessary movement drives down to the central body must be very much greater than the number of those others capable of attaining the appropriate degree of velocity, then we can easily grasp why this central body will in its axial rotation be a long way from possessing the velocity to achieve an equilibrium between the gravity on its surface and the centrifugal force. Nevertheless, the axial rotation of planets with a larger mass and at a considerable distance from the sun will be much faster than with the small ones close to the sun. In fact, Jupiter has the fastest axial rotation that we are aware of, and I do not know what system would enable us to reconcile this fact with a body whose cluster exceeds all the others, unless we could see that its movements are themselves the effect of that power of attraction which this celestial body exerts in accordance with the mass of this very cluster. If the axial rotation were an effect of an external cause, then Mars would have to have a more rapid axial rotation than Jupiter, for the very same power of movement affects a smaller body more than a larger one. We would quite correctly be surprised at this, since all the orbital movements diminish with distance from the mid-point, but the speeds of the rotations increase with the distance. With Jupiter the rotational movement could be even three and a half times faster than its annual motion around the sun.

Thus, we must recognize in the daily rotations of the planets the very same cause which is, in general, the common origin of movement in nature, namely, the force of attraction. This style of explanation, therefore, will successfully prove its truth through the natural quality of its basic concept and the natural consequences of that.

But if the development of a body itself produces the axial rotation, then it is reasonable that all the spheres of the cosmic structure must have it. Why, then, does the moon not have it? It does seem, although the idea is false, to have reached a kind of rotation, because it always has the same side turned towards the earth, but this comes far more from a kind of overbalancing of one hemisphere than from a true rotating momentum. Must the moon really have rotated on its axis at an earlier period more quickly and through some unknown cause or other have gradually reduced this movement until it was brought to this slight and measured remainder? We need to resolve this question only in connection with one of the planets. Then the application to all planets will follow of itself. I am postponing this solution to another occasion, because it has a necessary connection to the assignment which the Royal Academy of Sciences in Berlin has established for the prize in the year 1754.

The theory which is to explain the cause of the axial rotations must also be able to produce from exactly the same causes the orientation of the planetary axes in relation to their orbital plane. We have

reason to be surprised why the equator of the daily rotation is not in the same plane as the one in which the moons orbit as they move around the same planets. For this same movement which directs the orbit of a satellite, through its extension to the body of the planet, produced its axial rotation, and it should give it exactly the same determinate direction and orientation. Celestial bodies which have no planets orbiting closely around them, nevertheless, because of exactly the same movement of the particles which served them as material and the same law which limited each one to the plane of its periodic orbit, settle into an axial rotation which, for the same reasons, had to coincide with the direction of their orbital plane. As a result of this cause, it is reasonable that the axes of all celestial bodies would have had to be oriented perpendicular to the common interconnecting plane of the planetary system, which does not deviate far from the ecliptic.[30*] But the axes are perpendicular only with the two most important parts of this cosmic structure, with Jupiter and the sun. With the others whose rotation we know, the axes are at an angle in relation to the plane of their orbits, Saturn more than the others, but the Earth more than Mars, whose axis is also almost perpendicular to the ecliptic. The equator of Saturn (insofar as we are able to ascertain it from the direction of its ring) is inclined at an angle of 31 degrees to the plane of its orbit. However, the Earth is inclined towards its plane at an angle of only 23.5 degrees. We can perhaps attribute the cause of this deviation to the inequality in the movements of the material which came together to build the planet. The preponderant movement of the particles was around the planet's mid-point in the direction of the plane of its orbit. And there the interconnecting plane was in place around which the elementary particles accumulated to make the movement there circular, where possible, and to pile up material for the development of the satellites, which for this reason never deviate far from the plane of the planet's orbit. If the planet developed for the most part only out of these particles, then its axial rotation in its first growth would be as little offset from that plane as the satellites which orbit around it. But the planet develops, as the theory has established, more from particles which sank down on both sides and whose number or velocity appears not to have been totally balanced, so that one hemisphere would be able to acquire a small excess of movement with respect to the other and thus cause some displacement of the axis.

Setting these reasons aside, I consider this explanation only as a supposition which I do not have the confidence to establish. My true view is as follows. The axial rotation of the planets in the original state of their first development was quite accurately aligned with the plane of their annual rotation, and causes were present which pushed these axes out of their first position. A celestial body which is moving out of its first volatile condition into a firm condition undergoes, when it develops completely in this way, a large change in the regularity of its outer surface. This surface becomes firm and hardens while the deeper material has not yet sufficiently sunk down according to the measure of its specific gravity. The lighter types of material intermixed in its cluster, after separating out from the rest, finally move under the outermost crust, which has become firm, and create large holes. The largest and widest of these holes, for reasons which would take too long to discuss here, occur under or near the equator. The above mentioned crust finally sinks down into these depressions and produces various inequalities, mountains and rifts. Now, since in something like this manner, as must apparently have happened with the Earth, the Moon, and Venus, the outer crust became uneven, the planet could not achieve an equilibrium any more on all sides in the circle of its axial rotation. A few prominent sections of considerable mass, which had nothing equal to them on the opposite side, which could act as an effective counterweight to the momentum, must have then shifted the axial rotation and sought to place it in a position around which the material was equally poised. Thus, exactly the same cause as in the complete development of the celestial body changes its outer crust from a horizontal state into broken up inequalities. This general cause has made it necessary to change somewhat the original orientation of the planet's axis. We perceive this to be the case with all the celestial bodies which the telescope can reveal sufficiently clearly. But this change has its limits, so that the deviation is not excessive. The inequalities, as already mentioned, show up more near

the equator of an orbiting celestial body than at a distance from it. In the region of the poles they disappear almost entirely. The discussion of the causes of this I am reserving for another time. Thus, the most prominent masses rising above the even surface will be found near the equatorial circle. Since the masses strive to bring themselves close to this circle because of the major influence of their momentum, they will be able to raise the axis of the celestial body at the most only a few degrees out of its perpendicular orientation with its orbital plane. As a consequence, a celestial body which has not yet fully developed will still have this orientation of its axis perpendicular to its orbital path. The angle will perhaps be altered only with the long succession of centuries. Jupiter appears to be still in this condition. The preponderance of its mass and size and the lightness of its material meant that it had to assume a firm and calm condition a few centuries later than other celestial bodies. Perhaps the inside of its cluster is still in motion, as the parts composing it sink toward the centre according to the determination of their heaviness, and through the separation of the thinner varieties from the heavy ones it is developing a firm state. According to such an account, Jupiter cannot yet appear calm on its outer surface. Collapses and ruin govern there. The telescope itself has confirmed that for us. The shape of this planet is constantly changing, while the Moon, Venus, and the Earth remain unaltered. Indeed, we can also with justice estimate that the completion of the developmental period is several centuries later in the case of a celestial body which exceeds our Earth in size by a factor of more than twenty thousand and which has a smaller density by a factor of four. When its outer surface reaches a tranquil composition, then undoubtedly much larger inequalities, like the ones which cover the surface of the Earth, combined with the velocity of its rotational impulse, will in a relatively short period give its axial rotation the constant orientation which the equilibrium of its forces will require.

Saturn, which is three times smaller than Jupiter, because of its greater distance from the sun can perhaps have the advantage of a faster development than Jupiter. At least Saturn’s much quicker axial rotation and the large ratio of its centrifugal force to the gravity on its outer surface (which is to be presented in the following section) see to it that the inequalities which have thus presumably developed there have very quickly given it a shift toward the side of the excess weight through a displacement of the axis. I freely concede that this part of my system concerning the position of the planetary axes is still incomplete and quite far from being subject to geometrical calculation. I preferred to reveal this candidly rather than through all sorts of devious but apparently competent reasons damage the rest of the theory and give it a weak part. The section which follows can provide confirmation of the credibility of the entire hypothesis. There we wish to explain the movements of the cosmic structure.

PART TWO. SECTION FIVE

Concerning the Origin of Saturn's Ring and the Calculation of the Daily Rotation of the Planet from the Relationships to this Ring

Thanks to the systematic arrangement in the cosmic structure, its parts are linked together by a ladder of alterations in their characteristics, and we can assume that a planet located in the remotest region of the world will have approximately the same characteristics which the nearest comet would take on, if through a diminution of its eccentricity, it were raised into the family of planets. With this in mind, we wish to examine Saturn as if it had gone through several orbits with a greater eccentricity, in a manner similar to the motion of a comet, and had been gradually brought into a path more similar to a circle.[31*] The heat which the planet incorporated in its approach to the sun raised the light material from its outer surface. As we know from previous sections, this material, in the case of the most distant celestial bodies, is excessively thinly distributed and with low levels of heat undergoes diffusion. Meanwhile, after the planet was brought in several orbits to the distance where it is now suspended, in such a moderate climate it gradually lost the heat it had absorbed, and the vapours, which still constantly spread around it from its outer layer, gradually stopped moving up into tails. New materials did not move upward any longer with the same frequency to supplement the old ones. In short, the vapours already going around Saturn remained, for reasons which we will refer to presently, suspended in a permanent ring around the planet and kept the reminder of its previous comet-like nature, while Saturn's body exuded the heat and finally became a calm and cleansed planet. Now we wish to point out the secret which in this celestial body could have held the vapours which had come up from it in free suspension, indeed, which changed these vapours from an atmosphere spread out around the planet into the form of a ring standing completely apart from it everywhere. I assume that Saturn had an axial rotation. Nothing more than this is necessary to reveal the entire secret. No mechanism other than this single one produced for the planet the phenomenon mentioned above, as an immediate mechanical result. I am sufficiently confident to assert that in all of nature only a few things can be brought to such a comprehensible origin as this special feature of the heavens can be derived from the raw state of the planet's first development.

The vapours rising up from Saturn had their own inherent movement and established themselves freely at the altitude to which they rose. This motion they acquired as parts of the planet from its axial rotation. The particles which moved up from close to the equator of the planet must have had the fastest motions, and those further away right up to the poles that much slower motions, according to the higher latitude of the place from which they arose. The relationship to the specific heaviness established the different altitudes to which the particles rose. But the only particles which could maintain their locations at their distance away in a constant free circular momentum were the ones set at those distances which demanded a central force similar to the velocity which these particles had made their own thanks to the axial rotation. The remaining particles, to the extent that the interaction with the others could not bring them this precise velocity, must either through their excess motion leave the planetary sphere or through their lack of motion necessarily sink back onto the planet. The particles scattered throughout the total extent of the vapour sphere, thanks to the very same central law, in the motion of their curved momentum, would strive to intersect the extended equatorial plane of the planet from both sides. And in coming together on this plane from both hemispheres, they would stop each other and accumulate there. Since I assume that the above-mentioned vapours are the very ones which the planet in its cooling last sent back up, all the scattered vapour material will collect close to this plane in a space not particularly wide and leave the space on both sides empty. In this new and changed orientation, however, the materials will nonetheless continue exactly the same movement which they maintained while suspended in free concentric circular

orbits. In such a manner, the circle of vapour now alters its shape, which was a full sphere, into the form of an extended surface coinciding precisely with Saturn's equator. But this surface must also, for exactly the same mechanical reasons, finally assume the form of a ring, whose outer edge will be determined by the effect of the sun's rays, which, by means of their force, scatter and disperse those particles which have distanced themselves a certain way from the mid-point of the planet, as they do with comets, and in this way designate the outer limit of their circle of vapours. The inner edge of this emerging ring will be determined by the relationship to the velocity of the planet under its equator. For that distance away from its mid-point where this velocity attains an equilibrium with the power of attraction for that location is the closest approach to the planet where the particles which have arisen from its body are able to describe circular orbits thanks to their own movement acquired from the planet's axial rotation. Because the particles closer than that require a higher velocity for such an orbit, which they cannot have because the movement even on the equator of the planet is not faster, they will maintain eccentric orbits which intersect each other, weaken each other's motions, and finally will all fall back down onto the planet from which they arose. Now, there we see an amazingly strange phenomenon, the sight of which since its discovery has always astonished astronomers and whose cause we could not ever entertain even a probable hope of discovering, come about in an easy mechanical way, free of all hypotheses. What happened to Saturn, as can easily be seen from this, would happen just as regularly to any comet with a sufficient axial rotation, if it were set at a constant height in which its body could gradually cool down. Nature, left to its own forces, is fertile in excellent results, even in chaos, and the development following from this produces such wonderful relationships and harmonies for a creature's common needs that it even enables us to recognize with unanimous certainty in the eternal and unchanging laws of their fundamental characteristics that Great Being in whom they are all united, thanks to their common dependency in a collective harmony. Saturn derives important advantages from its ring. It lengthens its day and under so many moons illuminates its night to such an extent, that the absence of the sun is easily forgotten. But must we then, on that account, deny that the common development of material through mechanical laws, without the need for anything other than their universal regulations, could have produced relationships which create advantages for reasoning creatures? All beings have a common dependency on a single cause: the Divine Understanding. They can therefore produce no other consequences after them except those which bring with them an image of the perfection of exactly the same Divine Idea.

Now we wish to calculate the time of the axial rotation of this celestial body from the relationships of its ring, according to the hypothesis of its development mentioned above. Because all the movement of the ring's particles is a motion absorbed from the axial rotation of Saturn, on whose outer surface they were located, the fastest movement which these particles possess among themselves will be the same as the fastest rotation which occurs on Saturn's outer surface. In other words, the velocity at which the particles of the ring orbit on its inner edge is equal to the velocity of the planet at its equator. But we can easily find that when we look for it in the velocity of one of Saturn's satellites, for we assume that it is proportional to the square root of the distances from the mid-point of the planet. From the velocity we have discovered, the time of Saturn's axial rotation is immediately given: it is six hours, twenty-three minutes, and fifty-three seconds. This mathematical calculation of an unknown movement for a celestial body, which is perhaps the only prediction of its kind in the real theory of nature, awaits confirmation from the observations of future ages. The telescopes known up to this time do not enlarge Saturn sufficiently, so that we can discover the spots (which we can assume are on its outer surface) in order to be able to perceive its axial rotation through their forward displacement. But the telescopes have perhaps not yet reached that perfection which we can hope from them and which the hard work and skill of the craftsmen seem to promise us. If we once succeed in providing visible confirmation of our conjectures, how certain the theory of Saturn would be and what an overwhelming credibility the entire system which is built upon the same principles would derive from that. The time of Saturn's daily rotation establishes the

relationship of the centrifugal force away from the mid-point at its equator to the force of gravity on its outer layer. The former is to the latter as 20 is to 32. Thus, the force of gravity is only around 3/5 greater than the centrifugal force. Such a large proportion as this brings about necessarily a very observable difference in the diameters of this planet. And we could anticipate that this difference must have developed to such an extent that the observation of this planet, although it is only enlarged a little by the telescopes, would have to make it all too clearly visible. But in truth this does not happen, and the theory could thus suffer a disadvantageous blow. A thorough proof completely removes this difficulty. According to Huygens' hypothesis, which assumes that the gravitational force inside a planet is the same throughout, the difference in the diameters is proportional to the diameter at the equator in a ratio twice as small as the proportion of the centrifugal force to the gravitational force at the poles.[32*] For example, in the case of the Earth, the force moving away from the mid-point at the equator is 1/289 of the gravitational force at the poles. Thus, in Huygens' hypothesis, the diameter of the equatorial plane is 1/578th greater than the earth's axis. The cause is as follows: the gravitational force, according to what has been assumed, inside the Earth's cluster in all regions close to the mid-point is as great as it is on the outer surface, but the centrifugal force diminishes as one moves close to the mid-point. Thus, the centrifugal force is not always 1/289th of the gravitational force. For these reasons, the entire loss in weight of a liquid column on the plane of the equator amounts, not to 1/289th but to half of that, i.e., to 1/578th. On the other hand, according to Newton's hypothesis, the centrifugal force, which initiated the axial rotation, has the same relationship to the gravitational force at a specific location on the entire equatorial plane right to the mid-point, because the gravitational force inside the planet, assuming the planet has the same density throughout, decreases with the distance from the mid-point in the same proportion as the centrifugal force decreases, so that the latter is always 1/289th of the former. This creates a lightening of the liquid column at the equatorial plane and also a rise in it of 1/289. This difference of the diameters in this theory is increased even more by the fact that the shortening of the axis involves bringing the parts closer to the mid-point, and with that an increase in the gravitational force; but the increase in length of the equatorial diameter involves moving parts further from the very same mid-point and thus lessening the gravitational force. For this reason, the flattening of the Newtonian spheroid increases to the point where the difference in the diameters increases from 1/289 to 1/230.

According to these reasons, the diameters of Saturn would have to be in an even larger ratio to each other than 20 to 32. They would have to reach a proportion almost equal to 1 to 2, a difference which is so large that the slightest attentiveness would not miss it, no matter how small Saturn might appear through the telescopes. But from this one can only conclude that the assumption of the uniform density, which seems to be quite correctly applied to the case of the Earth's body, in the case of Saturn deviates far too widely from the reality. This is already inherently probable in the case of a planet whose cluster consists, for the greatest part of its content, of the lightest materials and which leaves the heavier sorts of materials much freer to settle down toward the mid-point, according to their gravitational make up, than do those celestial bodies whose much denser stuff delays the settling down of the material and allows it to harden before this settling can occur. When we also assume in the case of Saturn that the density of its material in the interior increases as one moves closer to the centre, then the gravitational force no longer declines in this ratio, but the growing density compensates for the deficiency in those parts which are set at heights above the point located in the planet and which contribute nothing by their power of attraction to the planet's gravitational power there.[33*] When this preponderant density of the deepest material is very large, thanks to the laws of attraction, the density changes the gravitational force which in the interior declines toward the centre into something almost uniform and establishes the ratio of the diameters close to Huygens' proportion, which is always half the ratio between the centrifugal force and the gravitational force. Thus, since with respect to each other, these were as 2 is to 3, then the difference in the diameters of Saturn will not be 1/3, but 1/6 of the equatorial diameter. Finally, this difference will still be concealed

because Saturn, whose axis makes a constant angle of 31 degrees with its orbital plane, never orients the position of its axis perpendicular to its equator, as happens with Jupiter, something which diminishes the appearance of the previous difference by almost one third. Under such circumstances, and especially considering Saturn's great distance away, we can easily believe that the flattened shape of its body will not be as readily visible as we would think. However, astronomy, whose progress depends particularly on the perfecting of the instruments, with their help will perhaps be in a position to discover such a remarkable characteristic, if I do not flatter myself excessively.

What I say about the shape of Saturn can, to some extent, serve as a general remark about the natural theory of the heavens. According to an exact calculation, Jupiter has a ratio of the gravitational force to the centrifugal force at its equator of at least 9.25 to 1. If its cluster were of uniform density throughout, in accordance with Newton's theories, this planet should show a difference between its axis and the equatorial diameter even greater than 1/9. But Cassini found it to be only 1/16, Pound 1/12 and sometimes 1/14.[34*] At least all these different observations, which in their difference confirm the difficulty of this measurement, agree in that they establish the difference as much smaller than it should be in Newton's system, or rather, according to his hypothesis of uniform density. And if we therefore change the assumption about the uniform density, which permits such a wide discrepancy between theory and observation, into the much more probably assumption that the density of the planetary cluster is arranged so that it increases towards the centre of the planet, then we will validate the observations not only of Jupiter but also of Saturn, a planet much harder to measure, so as to be able to understand clearly the cause of the smaller flattening of its spherical body.

From the development of Saturn's ring, we have taken the opportunity to venture on the bold step of determining through calculation the time of its axial rotation, something which the telescopes are not capable of discovering. Let us add to this attempt at a physical prediction yet another concerning the very same planet, a claim whose validity we can expect to be witnessed by more perfect instruments of future ages.

According to our assumption that Saturn's ring is an accumulation of particles which, after they arose as vapours from the outer surface of this celestial body, thanks to the momentum which they receive and continue from the planet's axial rotation, maintain themselves at the altitude of their distance away in free circular movement, these particles do not have the same periodic orbital times at all their distances from the mid-point. The times are, by contrast, determined according to the square root of the cube of their distance from the planet, if the particles are to keep themselves suspended according to the laws of the central forces. Now, the time in which, according to this hypothesis, the particles of the inner edge complete their orbit is about ten hours, and the orbital time for the particles on the outer edge is, according to the appropriate calculations, fifteen hours. Thus, when the lowest parts of the ring have completed three orbits, the furthest parts have completed only two. Even if we estimate that the interference which the particles create for each other in the plane of the ring through their great dispersal is as insignificant as we like, it is nevertheless probable that the slower movement of the particles further away in each of their orbits gradually delays and retards the more quickly moving lower parts. On the other hand, the lower parts would have to impart to the upper parts some of their motion, so as to create a more rapid rotation. If this reciprocal interaction were not finally interrupted, this process would last until such a time as all the particles in the ring, both the low ones and those further away, were brought to rotate in the same time, in which state they would be at rest relative to each other and would have no effect in displacing one another. But such a condition, if the movement of the ring ended up like this, would destroy it completely. For if we take the middle of the plane of the ring and establish that the movement there remain what it was before and what it must be to be capable of achieving free orbital movement, the lower particles would not hold themselves suspended at their altitude, because they would be held back considerably, but would intersect each other in oblique and eccentric motions. The more

distant particles, however, through the impulse of a motion greater than it should be for the central force at their distance from the planet, would move away from Saturn further than the outer boundary of the ring set by the effect of the sun and would, of necessity, be scattered behind the planet by the sun's effect and carried away.

But we need not fear all this disorder. The mechanism of the developing motion of the ring involves an arrangement which, thanks to the very causes which should destroy it, establish it in a secure state by means of which it is divided up into several concentric circular bands which, because of the intervening gaps which separate them, have no more common interaction with each other. For while the particles orbiting on the inner edge of the ring with their faster motion push forward the particles above somewhat and accelerate their orbit, the higher level in velocity provides these particles with an excess of centrifugal force and moves them further away from the place where they were suspended. But if we assume that while these particles strive to separate themselves from the lower ones, they have to overcome a certain interconnection which, whether it is because they are scattered vapours, nevertheless appears to be not entirely insignificant for them, then this increased level of momentum seeks to overcome the interrelationship mentioned above, but will not do so by itself, so long as the excess in the centrifugal force causing them to move around in the same orbital time as the lowest particles does not exceed the central force of their position and their interconnectedness. And for this reason the interconnectedness must remain in a stripe of a certain breadth of this ring, although because its parts perform their orbits in the same time, the upper particles must make an effort to pull themselves away from the lower ones, but not in a larger width, because, while the velocity of these particles orbiting in equal times increases with the distances more than it should according to the central laws, when it has gone beyond the level which can sustain the interconnection of the vapour particles, they must tear themselves away from it and take up a distance away from the planet appropriate to the excess momentum of the orbital forces over the centripetal force at that location. In this way, the intervening space will be set up, which keeps the first band of the ring away from the rest. And in the same way, the accelerated motion of the particles above, through the rapid rotation of those below, and their interconnection with them, which seeks to hinder the separation, will make a second concentric ring, from which the third arises around a moderate intervening gap. We could calculate the number of these circular bands and the width of the intervals between them, if we knew the extent of the interconnection linking the particles to each other. But we can be satisfied that we have, in general, found out with a good degree of probability the composition of Saturn's ring, which prevents its destruction and keeps it suspended through free movements.

The conjecture gives me no little satisfaction thanks to the hope of seeing it confirmed some day through effective observations. A few years ago there was a report from London that when people observed Saturn with a new Newtonian telescope, an improved model by Mr. Bradley, its ring seemed to be essentially a combination of many concentric rings, separated by intervening spaces. This report has not been taken further since that time.[35*] The observational instruments have opened up for our understanding the knowledge of the most distant boundaries of the cosmic structure. If now it is particularly up to them to undertake new steps in this business, from the attentiveness of our time to all those things which can expand human ideas we really can have probable grounds for hoping that they will turn particularly in a direction which presents them with the greatest expectation of important discoveries.

However, if Saturn has been so fortunate as to make a ring for itself, why then has no other planet shared this advantage? The reason is clear. The ring is to arise from the ascending vapours of a planet, which it gives off in its raw condition, and the planet's axial rotation must give these vapours their impetus which they only have to continue when they have reached the altitude where they can attain an exact equilibrium between the planet's gravitational power and the motion imparted to them. Thus, we can easily determine by calculation the altitude to which the vapours from a planet must rise, if they are to maintain themselves in a free circular movement by means of the motions which they had at the planet's

equator, provided we know the diameter of the planet, the period of its axial rotation, and the gravitational force on its outer surface. According to the law of central movement, the distance of a body which can go freely in circles around a planet at a velocity equal to the planet's axial rotation is in exactly the same ratio to the semi-diameter of the planet as the centrifugal force away from the centre at the equator is to the gravitational force. Given these reasons, the distance of the inner edge of Saturn's ring is equal to 8, when we assume that the half-diameter of the planet is 5. These two numbers are in the same ratio as 32 to 20, which, as we have previously noted, expresses the ratio of the gravitational force to the centrifugal force at the equator. For the same reasons, if we establish that Jupiter is to have a ring developed in this way, its smallest half-diameter would exceed the half-diameter of Jupiter by a factor of 10. That would exactly match the distance where its most remote satellite orbits around it. For these reasons and also because the vapours rising up from a planet cannot expand so far out from it, it is impossible for Jupiter to develop a ring. If we wanted to know why the Earth has acquired no ring, we will find the answer in the size of the half diameter, which the inner edge of the ring alone would have to have had. This would have to have been 289 Earth semi-diameters. With the slower moving planets the possibility for the development of a ring gets even more remote. Thus, there is no example left where a planet could have acquired a ring in the manner which we have explained, other than the example of the planet which really has one. This is not an insignificant confirmation of the plausibility of our manner of explanation.

But what makes me almost certain that the ring going around Saturn has not come about in the common way and was not built up through the universal laws of development governing throughout the entire system of planets, which also produced Saturn's satellites, and certain, I say, that no external material provided the material for this ring, but that it is a creation of the planet itself, which moved its most volatile parts upward up by heat and gave them a rotational momentum from its own axial rotation, is this fact: unlike the other satellites of this planet and, in general, all orbiting bodies which accompany a main planet, the ring is not oriented on the common interrelated plane of planetary motions, but deviates from it considerably. This is a certain proof that it did not develop from the common basic material and acquire its motion from the sinking down of this material, but arose from the planet long after its complete development and, through the orbital force implanted in it, as the planet's separated part, acquired from the planet's axial rotation a related motion and direction.

The pleasure of having grasped one of the strangest peculiarities of the heavens in the full extent of its nature and development has involved us in an extensive discussion. With the permission of our indulgent readers, let us keep going wherever we like, all the way to excess, so that after we have permitted ourselves a pleasant sort of arbitrary opinion with a kind of freedom from restraint, we will turn back to the truth once more with that much more caution and care.

Could we not imagine that the Earth, exactly like Saturn, once had a ring? It might have arisen from its outer layer precisely as Saturn's did and have maintained itself a long time, since the Earth had gone from a much faster rotation than the present one to the existing rate, for who knows what reasons. Or we could attribute the building of it to the common basic material sinking down according to the rules which we explained above, which we must not take so strictly if we want to indulge in our liking for the unusual. But what a supply of beautiful explanations and consequences such an idea offers us! A ring around the Earth! How beautiful the sight for those who were made to live on Earth as a paradise. How much comfort for those whom nature was to greet with a smile on all sides! But this is still nothing in comparison to the confirmation which such a hypothesis can derive from the ancient lore of the creation story, no small recommendation for approval among those people who believe they are not dishonouring revelation but endorsing it when they use it to ennoble the excess displays of their wit. The waters of the firmament, which the Mosaic account talks of, have already caused interpreters no small problem. Would it not be possible for us to use this ring to assist ourselves out of this difficulty? This ring undoubtedly

consisted of vapours rich in water. And in addition to the advantage which it could provide for the first inhabitants on the earth, we have the fact that it was, when necessary, capable of breaking apart in order to punish the world, which had made itself unworthy of such beauty, with deluges. Either a comet, whose power of attraction brought the rule-bound movements of ring's parts into total confusion, or the cooling in the region where it was positioned united its scattered vapour particles and hurled them down upon the ground in the most horrifying of all inundations. We understand readily what the consequences of this were. The whole world went under water and absorbed, in addition to the foreign and volatile vapours of this unnatural rain, that slow poison which brought all creatures closer to death and destruction. From now on the shape of a pale light bow vanished from the horizon, and the new world, which could never remember what this looked like without experiencing terror before this fearful instrument of the divine revenge, saw perhaps with no less dismay in the first rainfall that coloured bow which seems to develop its shape like the first one, but which through the covenant of a forgiving heaven was to be a sign of grace and a memorial to the lasting establishment of the now changed surface of the Earth. The similarity in the form of this memorial sign to the event I have described could make such a hypothesis appealing for those people who follow the prevailing inclination to bring the wonders of revelation into one system with the orderly laws of nature. I find it more advisable completely to sacrifice the transitory approval which such agreement can arouse for the true pleasure which comes from the perception of regular interconnections when physical analogies reinforce each other in the designation of physical truths.

PART TWO. SECTION SIX

Concerning the Lights of the Zodiac

The sun is surrounded by a subtle and vaporous essence, going around it at the level of its equatorial plane up to a great altitude, with only a small extension on both sides. So far as this is concerned, we cannot be certain whether, as M. de Mairan pictures it, it touches the outer surface of the sun in the shape of an uneven polished lens (*figura lenticulari*) or, like Saturn's ring, is always located at a distance away.[36*] It may be either of these. But sufficient similarity remains to establish a comparison of this phenomenon with Saturn's ring and to infer a common origin. If this spread out material is something flowing out from the sun, and it is most probable to consider it in that manner, then we cannot miss the cause which has brought it to the common plane of the sun's equator. The lightest and most volatile material, which the sun's fire raises and has for a long time already raised from its outer surface will through the same process expand far over it and remain suspended at a distance, according to how light it is, where the forward driving effect of its rays comes into an equilibrium with the gravitational power of these vapour particles, or they will be reinforced by the stream of newer particles which continuously come up to them from below. Now, because the sun, as it rotates on its axis, imparts to these vapours torn away from its outer surface their regular motion, the latter maintain a certain orbital momentum by which, in accordance with the central laws, they are driven from both sides in their circular motion to intersect the sun's extrapolated equatorial plane. And thus, because they are driven down to this in equal quantities from both hemi-spheres, they pile up there with equal forces and form an extended flat surface on the designated solar equatorial plane.

But regardless of this similarity with Saturn's ring, there remains a fundamental difference, which causes the phenomenon of the zodiac light to differ considerably from Saturn's ring. The particles of Saturn's ring maintain themselves in freely suspended circular orbits through the implanted rotating motion; but the particles of the zodiacal light are kept at their altitude by the power of the sun's rays, without which their inherent motion from the axial rotation of the sun would be far from sufficient to hold them in free orbits and to prevent their falling down. For since the centrifugal force of the axial rotation on the surface of the sun is not even 1/40000 of the power of attraction, these vapours which have moved upward would have to be 40000 semi-solar diameters away from it in order to find at such a distance a power of gravitation which could for the first time achieve an equilibrium with their allotted motion. Thus, we are certain that this solar phenomenon is not given to it in the same way as Saturn's ring.

Nevertheless, there remains a not insignificant probability that this solar necklace perhaps acknowledges the same cause which nature collectively acknowledges, namely, the development out of the universal basic material, whose parts, since they were suspended all around the highest regions of the solar world, first moved down to the sun in a late descent only after the full and complete development of the entire system, with weaker curved motion, but still from west to east, and, thanks to this type of orbital path, intersected the extrapolated solar equatorial plane. By their accumulation there on both sides, once this motion stopped, they occupied a plane stretching out in this location, where they now maintain themselves always at the same altitude, in part through the power of repulsion of the sun's rays, in part through the real orbital motion they have attained. The present explanation has no value other than what one gives to an assumption and makes no demand other than for an arbitrary acceptance. The judgment of the reader may direct itself to that option which seems to him most worthy of adopting.

PART TWO. SECTION SEVEN

Concerning Creation in the Total Extent of its Infinity both in Space and Time

With its immeasurable size and its infinite multiplicity and beauty radiating out in all directions around it, the cosmic structure presents a silent wonder. If the picture of all this perfection now stirs the imaginative power, from a different perspective the understanding derives another type of delight, when it observes how so much splendour, such an enormous greatness, flows out from one single universal rule in an eternal and justified order. The planetary structure in which the sun at the centre makes the spheres found in its system orbit in eternal circles by means of its powerful force of attraction is entirely developed, as we have seen, from the originally distributed basic stuff of all planetary material. All the fixed stars which the eye discovers in the high recesses of the heavens and which appear to display a kind of extravagance are suns and central points of similar systems. The analogy permits us here no doubt that these were built and developed in the same manner as the one in which we find ourselves, from the smallest particles of elementary materials which filled empty space, this infinite extension of the Divine Presence.

Now, if all planets and planetary systems acknowledge the same sort of origin, if the power of attraction is unlimited and universal, if the power of repulsion of the elements is similarly continuously at work, and if, in comparison with the Infinite, the large and the small are both small, should not the cosmic structures have acquired in a like manner an interconnecting relationship and a systematic coordination among themselves, as the celestial bodies of our solar system have on a small scale, like Saturn, Jupiter, and the Earth, which are special systems on their own and yet are linked together amongst themselves as parts in an even greater system? If we take one point in the infinite space in which all the suns of the Milky Way were developed, a point around which, for some unknown reason, the first development of nature out of chaos began, then at that location the largest mass and a body of the most exceptional power of attraction will have arisen, which thus would have become capable of forcing everything in a huge sphere around it in the process of developing systems to move down towards it as their central point and to build around it on a large scale a system like the one which the same elementary basic material which developed the planets created around the sun on a small scale. Observation makes this supposition almost indubitable. The army of stars, through its orientation in relation to a common plane, makes up a system just as much as the planets of our solar system do around the sun. The Milky Way is the zodiac of these higher world orders, which deviate from its zone as little as possible. Its band is always illuminated by their lights, just as the zodiac of planets is illuminated here and there by the shining of these spheres, although only in a very few points. Each one of these suns, along with its orbiting planets, makes up a particular system of its own, but this does not prevent them from being parts of an even greater system, just as Jupiter or Saturn, in spite of their own satellites, are confined in the systematic arrangement of an even greater cosmic structure. Can we not acknowledge with such a precise harmony in the arrangement the same cause and manner of production?

Now, if the fixed stars make up a system whose extent is determined by the sphere of attraction of the body located at the centre, will not more solar systems and, so to speak, more Milky Ways have arisen, which were produced in the limitless field of space? With astonishment we have seen figures in the heavens which are nothing other than such systems of fixed stars restricted to a common plane, such Milky Ways, if I may express myself in this way, which present themselves to our eyes in different positions with a weakly glimmering elliptical shape appropriate to their infinite distance away. They are systems, so to speak, of infinitely more infinite diameter than the diameter of our solar system, but without doubt they arose in the same way, are organized and arranged by the same causes, and maintain themselves by the

same dynamics as our system in its arrangement.

If we see these systems of stars once more as links on collective nature's great chain, we have just as many reasons as before to think of them in a mutual relationship and in combinations which, thanks to the laws governing throughout all nature, constitute the first development of a new and even greater system, controlled by the force of attraction of a body with incomparably more forceful attractive power than were all former systems, from the centre of their rule-bound positions. The force of attraction, the cause of the systematic arrangement among the fixed stars of the Milky Way, still works even at the distance of these very cosmic structures to bring them out of their positions and to bury the world in an unavoidable impending chaos, if the allotted rule-bound forces of motion did not develop a counterweight to the force of attraction and produce from the combination of the two of them that relationship which is the basis of the systematic arrangement. The force of attraction is without doubt a characteristic of matter as widely extensive as the coexistence which creates space, because it unites substances through a mutual dependency, or, to speak more precisely, the power of attraction is just this common relationship which unites the parts of nature in space. Thus, it expands through the total extent of space right into all its infinite distances. If the light from these remote systems, which is only an impressed movement, reaches us, must not the power of attraction, this primordial origin of motion, which antedates all motion, which requires no foreign cause and cannot be halted by any barrier, because it works in the innermost core of matter in the universal calm of nature without any external impulse, must not the force of attraction, I say, have set in motion these systems of fixed stars with their material in an undeveloped scattering in the first movements of nature, regardless of their immeasurable distances away, a motion which, as we have seen on a small scale, is the very origin of the systematic union and the enduring permanence of its links, the factor which keeps them secure from collapse?

But then what will finally be the end of the systematic arrangements? Where will creation itself cease? We well note that to think of creation in relation to the power of the Infinite Being means it must have no boundaries at all. We come no nearer to the infinity of the creative power of God if we enclose the space of its revelation in a sphere described with the radius of the Milky Way than if we enclose it in a ball with a diameter an inch long. Everything finite which has its limits and a determined relationship to unity is equally far away way from infinity. Now, it would be absurd to set the Divine into effective action with an infinitely small part of His creative capacity and to imagine His infinite power, the treasure house of a true infinity of natures and worlds, incapacitated and locked into an eternal deficiency in practice. Is it not much more appropriate or, to express the matter better, is it not necessary to present the embodiment of creation as something which cannot be measured by any standard, which is how it must be, in order to bear witness to that power? For this reason the field of the revelation of divine properties is just as infinite as these properties themselves.[37*] Eternity is not sufficient to bear witness to the Highest Essence where it is not united with spatial infinity. It is true that attraction, shape, beauty, and perfection are relationships of the basic elements and of substance making up the material of the cosmic structure. And we notice it in the arrangement which the wisdom of God still effects at all times. It is also most appropriate to the wisdom of God that these develop themselves as an unforced consequence out of the universal laws implanted in them. And therefore we can with good reason establish that the order and arrangement of the cosmic structure take place gradually from the supply of created natural matter in a temporal succession. But the basic material itself, whose properties and forces form the basis for all changes, is an immediate result of the Diving Being and itself must be simultaneously so rich and so perfect that the development of its compositions could in the flow of eternity extend over a plan enclosing in itself everything which can be, a plan which has no dimensions, which is, in short, infinite.

Now, if creation is spatially infinite or at least was really already that from the beginning as far as its material is concerned or according to its form or development is prepared to become so, cosmic space will become active with worlds without number and without end. Will that systematic union, which we

have previously mentioned in particular among all the particles, now extend to the totality and the universe collectively, the All of nature, be tied together in a single system through the union of the power of attraction and the centrifugal force? I say yes. If nothing but separate cosmic structures without having among themselves any unifying relationship to a totality were the only things present, then, if we were to assume this chain of links as truly endless, we could imagine that a precise equality in the power of attraction in its parts on all sides could keep this system secure from destruction which the inner reciprocal force of attraction threatens them with. But this condition needs to be determined with such precise measurement of the distances carefully weighed against the power of attraction that the slightest displacement would bring destruction to the universe and would deliver it over to collapse. The time would be long, but finally it would have to come to an end. A cosmic arrangement which did not keep itself going in the absence of a miracle does not have the mark of permanence which is the sign of God's choice. Thus, we find it much more appropriate if we make of creation collectively a single system creating all worlds and world structures, which fill all infinite space and which are made with reference to a single central point. A scattered confusion of cosmic structures, which might be separated from each other by distances as great as you like, would have an unhindered tendency to rush to dissolution and destruction, unless there were in place a certain arrangement in relation to a common mid-point, the centre of the power of attraction in the universe and, because of systematic movements, the foundation point of all nature.

Around this universal central point of downward movement in all nature, both developed and raw, at which is undoubtedly located the cluster with the most extensive power of attraction, encompassing in its sphere of attraction all worlds and ordered systems which time has produced and eternity will produce, we can probably assume that nature initiated its development and also that there the systems have accumulated in the greatest density but that further away from that mid-point, the systems are lost in ever increasing stages of disorder in the infinity of space. We could assume this principle from the analogy to our solar system, and this arrangement can, in any case, serve to show that at great distances not only the common central body but also all the systems moving in close proximity to it collectively combine their power of attraction and, so to speak, out of a single cluster exercise their effect on systems even further away. This will then help us to grasp all nature in the entire infinity of its extent in one single system.

Now, in order to trace the foundation of this universal system of nature from the mechanical laws of matter striving to develop, in the endless space of the dispersed elementary basic material some point or other of this matter must have accumulated with the greatest density, so as to have assembled through the development going on there more than anywhere else a mass which serves as the foundation point. It is indeed the case that in an infinite space no point can really justifiably be called the centre. But thanks to a certain relationship based upon the inherent levels of density of the primordial stuff, according to which at the time of creation this material had accumulated more densely particularly at one certain location and its density had grown increasingly scattered with the distance away from this point, such a place can have the privilege of being called the centre. And it truly does become that through the development of the central mass because of the strongest power of attraction in it. It becomes the point to which all the remaining basic material incorporated in particular developments moves down, and thus, no matter how far unfolding nature may extend, it creates out of the entire totality only a single system in the infinite sphere of creation.

However, what is important and what, provided that it wins approval, is worthy of the greatest attention is the fact that, as a consequence of the ordering of nature in this system of ours, creation or, rather, the development of nature, first begins with this central point and with constantly progressive steps extends itself gradually out into all the further distances, in order to fill limitless space with worlds and order in the progress of eternity. Let us contemplate this picture with quiet pleasure for a moment. I find nothing which can elevate the human spirit to a more noble astonishment than this part of the theory

concerning the successive completion of creation, as it opens up for humanity a glimpse into the unending field of the Almighty. If people grant me that the matter which is the building stuff of all worlds is not homogeneous in the entire infinite space of the Divine Presence but was distributed in accordance with a certain law which perhaps concerned itself with the density of the particles and according to which with the increasing distance from a certain point, like the location of the densest accumulation, the scattering in this primordial material increases, then in the original movement of nature the development will have started in the region next to this centre and then, in a progressive temporal sequence, the more remote space will have gradually developed worlds and planetary structures in a systematic arrangement linked to this centre. Any one finite period, whose duration is connected to the magnitude of the completed work, will, in its development, always produce a sphere only a finite distance from this central point. The remaining infinite part will meanwhile still be combating confusion and chaos and will be that much further from a condition of complete development, the further away it is located from the sphere of already developed nature. As a consequence of this, although from the place where we reside we have a view into, as it seems, a fully completed world and, so to speak, into an infinite host of planetary structures which are systematically united, nevertheless we find ourselves in reality only in proximity to the mid-point of all nature, where it has already developed out of chaos and attained its appropriate completion. If we could step over to a certain sphere, we would there witness chaos and the scattering of the elements, which, in proportion to their proximity to the central point partly leave their raw condition and are closer to the completion of their development. But with the degrees of distance away they gradually are lost in a total scattering. We would see how the limitless space of the Divine Presence, in which we find the store of all possible natural developments, buried in a quiet night, full of matter to serve as the stuff of worlds to be produced in the future and full of the initiating energies to bring it into motion. With a weak stimulus these begin those movements with which immeasurable nature of this barren space is still to be activated in the future. Perhaps a succession of millions of years and centuries is to flow by before the sphere of developed nature in which we find ourselves grows to the perfection now inherent in it. And perhaps an even longer period will elapse before nature will take such a wide step into chaos. But the sphere of developed nature is ceaselessly occupied with expanding itself. Creation is not the work of a moment. After creation made a beginning by producing infinite substances and materials, it is efficacious with constantly increasing degrees of fecundity throughout the total succession of eternity. Millions and whole mountains of millions of centuries will pass, during which new worlds and new world systems will constantly develop and reach completion, one after the other, in the expanses far from the central point of nature. Regardless of the systematic arrangement among their parts, they will have a common relationship to the central point, which became the first point of development and the centre of creation through the capacity of the power of attraction of its preponderant mass. The infinity of the future temporal succession, for which eternity is inexhaustible, will thoroughly activate all the spaces of God's presence and gradually set it into rule-bound regularity, appropriate to the excellence of its design. And if, in a daring picture, we could, so to speak, sum up all eternity in a single idea, then we would be able to see the entire infinite space filled with world systems and a completed creation. However, because, in fact, in the temporal sequence of eternity the part to come is always infinite and the part gone by is finite, the sphere of developed nature is always only an infinitely small part of that being which has in it the seeds of future worlds and strives to develop itself out of the raw condition of chaos in long or short periods of time. Creation is never complete. True, it once began, but it will never cease. It is always busy bringing forth new natural phenomena, new things, and new worlds. The work which it brings into being has a relationship to the time nature expends on it. It needs no less than an eternity to bring the entire limitless extent of infinite spaces alive with numberless worlds without end. We can say about creation what the noblest of the German poets writes about eternity.

Eternity! Who knows you?
For you worlds are days and humans moments.
Perhaps the thousandth sun is now turning
And thousands still remain behind.
Like a clock animated by a weight,
A sun rushes by, moved by the power of God.
Its impulse comes to an end, and another throbs.
But you remain and do not count them.

(von Haller)[38]*

There is no small pleasure in letting one's imagination roam over the limits of completed creation into the space of chaos and to see half raw nature in the vicinity of the sphere of the developed world losing itself gradually through all the stages and shades of incompleteness in the whole of undeveloped space. But is that not a culpable daring, people will say, to throw down a hypothesis and to praise it as a design for the delight of the understanding, a plan which is perhaps merely too arbitrary when we claim that nature is only developed to an infinitely small extent and limitless spaces are still at strife with chaos, so that they will display in the succession of future times entire hosts of worlds and world systems in all appropriate order and beauty? I am not so devoted to the consequences which my theory offers that I should not acknowledge how the conjecture about the successive expansion of creation through endless spaces containing material for that purpose cannot fully counter the objection that it is beyond proof. Meanwhile, however, I hope from those who are in a position to appreciate levels of probability, that such a map of infinity, although it touches on a plan that seems destined to be concealed forever from human understanding, will not for that reason immediately be seen as a fantasy, especially when we take the analogy as an aid which must always show us the way in such cases where the understanding lacks the guiding threads of indubitable proofs.

However, we can still support the analogy with reasons worthy of consideration. The insight of the reader who, I may flatter myself, will approve will perhaps be able to multiply these reasons with even more important ones. For when we consider that creation does not bring with it a characteristic stability, insofar as it does not establish for the common striving of the power of attraction, which works through all its parts, such a precise universal modification which can sufficiently withstand the tendency of this power to bring destruction and disorder, unless creation allotted the orbital forces which, in combination with the central tendency, fixes in place a systematic arrangement, then we will be required to assume a common central point for the entire totality of worlds, a point which holds all the parts of this totality together in a united relationship and makes only one system out of the entire essence of nature. If, in addition to this, we pursue the idea of the development of world bodies out of scattered elementary matter, as we have outlined the subject previously, but do not limit the idea here to one particular system, and instead extend it to all nature, then we will have to imagine such a distribution of the basic matter in the space of primordial chaos which naturally involves a central point of all creation, so that in the latter the effective mass which encompasses all nature collectively in its sphere of attraction brings the material together and makes the general relationship work, so that all worlds make up only one single structure. However, in limitless space a sort of distribution of the primordial basic material can hardly be imagined which is to establish a true central point towards which collective nature is to sink down, other than one in which the distribution is arranged according to a law of increasing disorder from this point out into all the far distances. This law, however, at the same time establishes a difference in the time which a system requires in the different regions of limitless space to come to its mature development. This period is shorter, the closer the location of the development of a world system is to the centre of creation, because in the closer region the elements of matter have accumulated more thickly; by contrast, the further

the distance away from this centre, the longer the time required, because the particles there are more scattered and are later in coming together in order to develop.

If people consider the entire hypothesis that I have drawn up to the full extent of what I have said, as well as what I will still actually present, they will at least not think that the boldness of its claims cannot be excused. We can estimate the inevitable tendency which each world system brought to completion has to move gradually towards its destruction among the reasons which can establish that the universe, in contrast to that destruction, will be fertile with worlds in other regions, to make up for the deficiency which it has suffered in one location. Although the entire part of nature that we know about is only equivalent to an atom in comparison with what remains hidden above or below our horizons, it nevertheless confirms this fertility of nature, which is without limit, because it is nothing other than the working out of the Divine Omnipotence itself. Numberless animals and plants are destroyed every day and are a sacrifice to mortality. But nature, with its inexhaustible productive capacity, creates just as many over again in other places and fills up the emptiness. Considerable parts of the earth's surface which we inhabit are being buried once again in the sea out of which they were pulled at a favourable time. But in other places, nature makes up for the loss and produces other areas which were hidden deep under water, in order to extend over these areas new riches from her fertile store. In the same way, worlds and world systems go under and are swallowed up in the abyss of eternity. But, on the other hand, creation is always busy organizing new developments in other regions of the heavens and making up for the loss with advantage.

We should not be amazed to admit mortality even in the greatness of God's works. Everything finite, with a starting point and a cause, has within itself the mark of its limited nature. It must die and have an end. On account of the excellence of its arrangements, the duration of a world system has a inherent permanence which, according to our ideas, comes close to a limitless time span. Perhaps a thousand, perhaps millions of centuries will not destroy it. But because vanity, which adheres to finite natures, works continuously for their destruction, so eternity will hold in itself all possible periods, in order finally to bring about through a gradual decay the moment of its collapse. Newton, this great admirer of the attributes of God in the perfection of His works, the one who with the deepest insight into the excellence of nature combined the greatest devotion for the revelation of Divine Omnipotence, saw himself compelled to predict the decay of nature through the natural tendency which the mechanics of movement had to bring it about. If a systematic arrangement comes close to a state of confusion as the essential result of its fallibility over a long period of time, even in the very smallest part that we can imagine, then in the endless current of eternity there must be a moment in time when this gradual diminution exhausts all movement.

However, we must not lament the destruction of a cosmic structure as a real loss for nature. It demonstrates its richness with a kind of dissipation which, while a few parts pay tribute to mortality, maintains it undamaged in the full extent of nature's perfection with numberless new productions. What a countless number of flowers and insects a single cold day destroys. But how little we miss them, regardless of the fact that they are beautifully natural works of art and proofs of Divine Omnipotence! In another place, this death will be made up once again with excess. Humanity, which appears to be the masterpiece of creation, is itself no exception to this law. Nature shows that it is just as rich and just as inexhaustible in the production of the most excellent of creatures as it is of the most insignificant and that even their destruction is a necessary shadow amid the multiplicity of its suns, because producing humanity cost nature nothing. The harmful effects of infected air, earthquakes, and inundations wipe out entire peoples from the surface of the earth, but it does not appear that nature has suffered any damage because of this. In the same way, entire worlds and systems leave the stage when they have played out their roles. The infinite nature of creation is large enough that it looks upon a world or a Milky Way of worlds in comparison with it as we look upon a flower or an insect in comparison with the Earth. In the meantime,

while nature beautifies eternity with changing scenes, God remains busy with a ceaseless creation, forming material for the development of even greater worlds.

> Who sees with equal eye, as God of all,
> A hero perish, or a sparrow fall,
> Atoms or systems into ruin hurl'd,
> And now a bubble burst, and now a world.
>
> (Pope)[39][*]

Let us therefore get our eyes used to these terrifying collapses as the customary methods of providence and look at them with even a kind of pleasure. In fact, nothing is more appropriate to the richness of nature than this. For when a world system in the long sequence of its duration exhausts all the multiplicity which its organization can contain, when it has now become an expendable link in the chain of being, then nothing is more fitting than that it play the last role in the drama of the passing changes of the universe, which is part of every finite thing, namely, it gives up what it owes to mortality. Nature demonstrates, as mentioned, even in the small parts of its being this rule of its processes, which eternal fate has prescribed for it on a large scale. And I repeat that the magnitude of what is to pass away is in this matter not the slightest obstacle, for everything large becomes small. Yes, it becomes, so to speak, just a point, if we compare it with the infinity which creation will present throughout the succession of eternity in limitless space.

It appears that for worlds, as for all natural things, this fatal ending is subject to a certain law whose consideration gives the theory a new appropriate feature. According to this principle, the fatal ending originates among those celestial bodies located closest to the central point of the universe, just as the production and development first began close to this mid-point. From there the decay and destruction gradually work their way outward into the further distances, in order to bury all the world which has gone through its time, by means of a gradual decline in its motions, finally in a single chaos. On the other hand, nature is ceaselessly busy on the borders opposite to the developed world producing worlds from the raw material of the scattered elements, and while nature on one side close to the mid-point is aging, so on the other side it is young and fertile in new generations. The developed world, according to this, finds itself in a limited space in the middle, between the ruins of what has been destroyed and the chaos of undeveloped nature. And if we imagine, as is probable, that a world already growing to completion could last a longer time than it required to become developed, then the extent of the universe will in general increase, regardless of all the destruction which mortality ceaselessly brings about.

However, if we are still willing to allow an idea which is just as probable as the arrangement of the divine works is appropriate, then the satisfaction aroused by such a description of nature's changes will be raised to the highest level of delight. Can we not believe that nature, which was capable of setting itself up out of chaos into a rule-bound order and a finely tuned system, is equally in a position just as easily to organize itself once more out of the new chaos, into which the diminution of its motions has lowered it, and to renew the first unity? Might the springs which brought the scattered material stuff into motion and order not be able once more to be made effective by extended forces after the motionlessness of the machine has rendered them inert and, through the very same universal principles, be harmoniously restricted in the way in which the original development was produced? We will not examine the matter very long before conceding this, if we consider that, after the final exhaustion of the orbital motions in the cosmic structure has thrown the planets and comets together down onto the sun, the sun's fire must increase immeasurably through the mixing of so many large bodies, especially since the distant spheres of the solar system, as a consequence of the theory we have previously established, contain the lightest and most effective fuel in all nature. This fire, given the highest intensity by the new fuel and the most volatile

materials, will without doubt not only break down everything into the smallest elements once more but will also in this way spread them out with an expansive force appropriate to the heat and at a velocity which is not weakened by any resistance in the middle region. It will scatter and spread them out once again in the same wide space which they occupied before the first development of nature, so that, after the intensity of the central fire is damped down by the almost total destruction of the sun's mass, through the combination of the forces of attraction and repulsion the old generations, together with their systematically interrelated movements, will be repeated with no less regularity and will present a new cosmic structure. Thus, when a particular planetary system suffers destruction in this way and has been re-established by the fundamental forces, when indeed this play repeats itself again as before, then finally the period approaches when, in the same manner, the large system of which the fixed stars are links will collectively experience chaos through the lessening of it motions. We will have even fewer doubts here that the uniting of such an endless number of rich fiery storehouses as these burning suns, together with their attendant planets, will scatter the material making up their masses, which has been dissolved by the indescribable inferno, in the old space of the sphere in which they developed, and there the materials will provide for new developments through the same mechanical laws. As a result of this, the barren space can become active with worlds and systems once more. When we follow this phoenix of nature, which is only burned up in order to live again, renewed once more from its ashes, through all infinity of times and spaces, when we see how it progresses, even in the region where it decays and grows old, inexhaustible in new phenomena and, on another border of creation, in the space of undeveloped raw matter, with constant strides to unfold the plans of the divine revelation in order to fill eternity as well as all spaces with its wonders, then the spirit thinking about all this is lost in deep astonishment. But still dissatisfied with such great events as these, whose mortality cannot adequately satisfy the soul, he wishes to learn at close hand about that Being whose understanding and whose greatness are the fountain of that light which extends itself over all nature, as it were, from a central point. With what kind of awe must the soul not contemplate its very own essence, when it observes that it is to survive even all these changes. It can say to itself what the philosophical poet says concerning eternity:

> When then a second night will bury this world,
> When from everything nothing remains but the place,
> When still many other heavens bright with other stars
> Will have completed their course,
> You will be as young as now, just as far from death
> As eternally alive as now.
>
> (von Haller)

O how happy the soul, when among the tumult of the elements and the ruins of nature, it is at any time set on a height from which it can see rushing past, as it were, below its feet the devastation which the frailty of worldly things brings about! A blessedness which the understanding is never permitted to dare to expect teaches us to hope with conviction for the revelation. For when the bindings which keep us tied to the vanity of living creatures fall away in the moment established for the transformation of our being, then the immortal soul, freed from its dependency on finite things, will find in the companionship with the infinite essence the enjoyment of true blessedness. All nature, which has a universal harmonious relationship to the pleasure of the Deity, can fill that reasoning creature with nothing but eternal satisfaction, which finds itself united with this original fountain of all perfection. Nature seen from this central point will show on all side nothing but security, nothing but propriety. The changing natural scenes are not able to upset the calm bliss of a soul which has once been lifted up to such a height. While it already tastes in advance this condition with a sweet hope, it can set its mouth to work on those hymns of

praise with which in future all eternity will resound.

When Nature fails, and day and night
Divide thy works no more,
My ever grateful heart, O Lord,
Thy mercy shall adore.
Through all Eternity to Thee
A joyful song I'll raise;
For, oh! Eternity's too short
To utter all Thy praise.

(Addison)[40][*]

PART TWO. SUPPLEMENT TO SECTION SEVEN

Universal Theory and History of the Sun in General

There is still a major question the answer to which is essential in the natural theory of the heavens and in a complete cosmogony, namely, why will the middle point of every system consist of a burning body? Our planetary system has the sun as the central body, and the fixed stars visible to us are, all things considered, mid-points of similar systems.

In order to grasp why in the development of a planetary structure the body serving as the mid-point of the power of attraction must have a fiery body, while the other circular structures in the sphere of its power of attraction remain dark and cold world bodies, we need only remember the way in which a planetary system is produced, something we have outlined in detail in the previous parts. In the greatly expanded space in which the spread out elementary basic material prepares developments and systematic movements, the planets and comets are built up only out of those parts of the elementary basic matter moving downward towards the central point of the force of attraction which, through their fall and the reciprocal interaction of the particles collectively, were precisely adjusted for the velocity and direction required for orbital motion. This portion is, as has been established above, the smallest part of the total amount of matter moving downward and, in fact, is only what is left over of the denser varieties, which have been able to attain the degree of precision from the resistance of the other parts. In this mixture there are particularly light types of matter floating around, which, hindered by the resistance of space, do not in their descent push on through to the velocity appropriate to periodic orbits and which therefore, given the weakness of their orbital impetus, will all collectively fall down to the central body. Now, because these lighter and volatile parts are also the most effective at maintaining a fire, we see that, with their addition the body at the central point of the system has the distinction of becoming a flaming sphere, in a word, a sun. By contrast, the heavier and inert materials and those particles which are poor fuel for a fire will make planets which are robbed of these properties merely cold and dead clusters.

This addition of such light materials is also the reason why the sun ends up with a smaller specific density, so that it is even four times less dense than our Earth, the third planet away from the sun, although it is natural to think that in this central point of the planetary structure, as its lowest point, the heaviest and densest sorts of material are to be found and that without the addition of such a large amount of the lightest matter its density would exceed that of all planets.

The intermixing of the denser and heavier types of elements with these lightest and most volatile ones serves also to make the central body suitable for the most intense blaze which is to burn and maintain itself on its outer surface. For we know that the fire in whose nourishing fuel dense materials are found mixed in with volatile matter has the advantage of a greater intensity than those flames which are sustained only by the light varieties of matter. However, this mixture of some heavier sorts among the lighter types is a necessary consequence of our theory about the development of world bodies. It even benefits from the fact that the force of the heat does not immediately scatter the burning material on the outer surface and that the fire will be gradually and constantly fed by the fuel supply within the planet.

Now that we have resolved the question why the central body of a large system of stars is a flaming sphere, that is, a sun, it appears not irrelevant to concern ourselves with this subject some more and to investigate the state of such a celestial body in a careful examination, especially since the assumptions can here be derived from more effective reasons than are commonly used where investigations into the composition of distant celestial bodies are concerned.

To begin with, I firmly maintain that we can have no doubt that the sun is truly a flaming body and not a mass of smouldering and glowing material heated to the highest degree, as a few people have wished to

infer from certain difficulties they claim to find in connection with the former view. For when we consider that a flaming fire has this fundamental distinction over and above every other form of heat, that it, so to speak, works on its own, instead of being diminished or exhausting itself by sharing its heat and that through this it rather acquires even more strength and intensity and thus requires only material and fuel to maintain itself so as to keep going continuously, whereas, by contrast, the glow of a mass heated to the highest degree is in a merely passive condition, which by the common interaction with the material in contact with it constantly diminishes and has no forces of its own to expand from a small beginning or to revive itself again should it diminish, when we consider this, I say, (and I am not mentioning the other reasons) then we will already be sufficiently capable of seeing that that property must, in all probability, be attributed to the sun, the fountain of light and heat in every planetary system.

Now, if the sun, or rather suns in general, are flaming spheres, then the first requirement of their outer surfaces, which we can deduce from this point, is that air must be found on them, because without air no fire burns. This condition gives rise to remarkable consequences. For, first of all, if we first establish the atmosphere of the sun and its weight in relationship to the sun's cluster, how compressed will this air be and how capable will it become on account of this very compression to maintain the most intense level of fire through its elasticity *[Federkraft]*? According to all assumptions, in this atmosphere, the clouds of smoke from the materials broken up by the flames (which, we cannot doubt, have a mixture of coarse and lighter particles in them), once they have risen up to an altitude which keeps the air cooler for them, fall down with heavy rains of pitch and sulphur and provide new fuel for the flames. This very atmosphere is also, for the same reasons as on our Earth, not free from the motions of the winds, which, however, according to this view, must far exceed in intensity everything that the power of the imagination can merely picture. When some region or other on the surface of the sun, either through the suffocating force of the vapours pouring out or because of the limited supply of combustible material, sees the eruption of flames diminish, then the air above cools to some extent, and since it is contracting, makes room for the air in the immediate vicinity to rush into its space with a force proportional to its expansion and to re-ignite the extinguished flames.

However, all flames always consume a great deal of air, and there is no doubt that the elasticity of the volatile elements of the air which encircle the sun must, in this way, over time suffer not insignificant damage. If we apply here on a large scale what Mr. Hales has, through careful research, proven in this matter with respect to the effect of flames in our atmosphere, then we can see the ceaseless striving of the particles of smoke coming out of the flames to destroy the elasticity *[Elasticität]* of the sun's atmosphere as a serious problem, the solution to which is associated with difficulties.[41][*] Because the flames which burn over the entire surface of the sun themselves consume the air essential for their combustion, the sun is in danger of going out entirely when the largest portion of its atmosphere has been consumed. True, from the dissolution of certain materials fire also produces air. But the experiments demonstrate that more is always consumed than produced. In fact, when a part of the sun's fire under the suffocating vapours is deprived of the air which serves to maintain it, then, as we have already noted, violent storms destroy the vapours and work to carry them away. But on a large scale we will be able to make the replacement of this necessary element understandable in the following manner, if we bear in mind that in the case of a flaming fire the heat acts almost exclusively above it and only a little underneath it. When it has suffocated for reasons we have cited, its intensity turns to the inside of the sun's body and forces the deep hollow places to let the air enclosed in their depths break out and renew the fire once more. If, using that freedom permitted in dealing with such unknown circumstances, we assume there are in these depths special materials which, like saltpetre, are inexhaustibly rich with elastic air, then the sun's fire will not be able to suffer easily from a deficiency for an extremely long period, because the supply of air is constantly renewed.

However, we do see the clear marks of mortality also in this inestimably valuable fire which nature

sets up as the world's torch. There comes a time when it will be extinguished. The dispersal of the most volatile and finest materials, which, scattered by the intensity of the heat, never turn back again, and add to the stuff of the zodiacal light, the accumulation of incombustible and burned out materials, for example the ashes on the surface, and finally the lack of air will establish an end point when the sun's flames at some point in the future go out and eternal darkness will take over in its place, now the central point of light and life of the entire planetary structure. The alternating impulse of its fires by which it opens new caverns to become vital again and through which it renews itself perhaps several times before being overcome could provide an explanation for the disappearance and renewed illumination of a few fixed stars. There would be suns which are close to being extinguished and which still strive a number of times to live on from their debris. This explanation may win approval or not, but we will certainly let this idea serve for us to recognize that since, in one way or another, an unavoidable decay threatens the perfection of all planetary systems, we will find no difficulty with the laws referred to previously concerning their collapse through the tendency of the mechanical arrangement, which will, nonetheless, be particularly worthy of acceptance, since it brings with it the seeds of a renewal in the interaction with chaos.

Finally, let us use the power of our imaginations to picture such an amazingly strange object as a burning sun, as it were, at close hand. We see at a glance wide seas of fire, raising their flames towards the heavens, frantic storms, whose fury doubles the intensity of the burning seas, while they themselves make the fiery seas overflow their banks, sometimes covering the higher regions of this world body, sometimes allowing them to sink back down within their borders. Burned out rocks extend their frightening peaks up above the flaming chasms, whose inundation or exposure by the seething fiery element causes the alternating appearance and disappearance of the sun spots. Thick vapours which suffocate the fire, lifted up by the power of the winds, make dark clouds, which in fiery downpours crash back down again and as burning streams flow from the heights of firm land of the sun into the flaming valleys, the cracking of the elements, the debris of burned up material and nature wrestling with destruction — these bring about, along with the most awful condition of their disorder, the beauty of the world and the benefits for its creatures.[42*]

If, then, the mid-points of all large planetary systems are burning bodies, then we can assume that this is most particularly the case with the central body of that immeasurable system which comprises the fixed stars. Now, if this body, whose mass must be proportional to the magnitude of its system, were a self-illuminating body or a sun, will it not be visible with a exceptional illumination and size? However, we do not see anything like such a predominantly different fixed star shining out among the host in the heavens. In fact, we must not think it strange if such a thing does not occur. If the mass of such a sun was equivalent to a mass 10000 times greater than our sun, nevertheless, if we assume its distance away was 100 times greater than the distance of Sirius, it could appear no larger or brighter than Sirius.

However, perhaps it is reserved for future ages to discover at some later date at least the region where the central point of the system of fixed stars to which our sun belongs is located or perhaps really to determine where we must place the central body of the universe towards which all its parts aim with a common downward motion.[43*] As for what the composition of this fundamental part of the entire creation may be and what may be found on it, we wish to leave it to Mr. Wright from Durham to determine. With a fantastic enthusiasm, in this happy place he elevates, so to speak, on a throne of nature collectively a powerful being of the divine variety, with spiritual forces of attraction and repulsion, which, effective in an infinite sphere around it, draws all virtue to it but pushes back all vice. We do not wish to allow the daring of our conjectures, which we have permitted perhaps too much, to slip the reins into arbitrary poetical fictions. The Godhead is equally present in the infinity of the entire cosmic space everywhere. Wherever there are natures capable of rising above creature dependency into the company of the Highest Essence, that Essence will be immediately close at hand. The entire creation is permeated by His forces, but only that person who knows how to liberate himself from the living creature, the person who is noble

enough to appreciate that only in the enjoyment of this original fountain of perfection is the highest level of blessedness to be sought alone and by himself, only that person is capable of finding himself closer to this true point interconnecting all excellence than to any other place in all nature. Meanwhile, if I, without sharing the Englishman's enthusiastic picture, am to offer my conjectures about the different levels of the spiritual world from the physical relationship of their dwelling places in relation to the mid-point of creation, then I would seek with more probability the most perfect classes of reasoning beings further from this mid-point rather than close to it. The perfection of creatures endowed with reason, insofar as they are dependent on material composition, in connection with which they are limited, depends a very great deal on the fineness of the material stuff whose influence determines these creatures in their perception of the world and in their response to it. The inertia and resistance in matter excessively restrict the freedom of the spiritual beings in their work and in the clarity of their sensations of external things. It dulls the edge of their capabilities, since they cannot obey their movements with appropriate facility. For when we assume, as is likely, that the densest and heaviest sorts of materials are close to the mid-point of nature and, by contrast, that the increasing degrees of fineness and lightness are at the greater distances in the same proportion as in the analogy which governs our planetary structure, then the result is understandable. The reasoning beings whose place for development and habitation is located closer to the mid-point of creation are sunk in a stiff and immobile matter, which keeps their powers enclosed in an invincible inertia and is equally incapable of transmitting and reporting on the impressions of the universe with the necessary clarity and ease. Thus, we will have to count these thinking beings in the low group. By contrast, with the distances away from the common centre, this perfection in the spiritual world, which rests on the reciprocal dependency of it on matter, will grow as if on a constant scale. At the lowest depths toward the sinking point, therefore, we have to place the poorest and least perfect groups of thinking creatures and below this is the place where in all shades of diminution the excellence of beings finally loses itself in the utter lack of thought and reflection. In fact, if we consider that the central point of nature marks simultaneously the start of its development out of raw matter and its frontier with chaos, if we establish in addition that the perfection of spiritual beings, which really have an outermost border marking their beginning, where their capabilities jostle back and forth with unreason, but which have no limit to going forward over which they cannot be raised and instead discover in that direction a complete infinity in front of them, then, if indeed there is to be a law according to which dwelling places are distributed for reasoning creatures in accordance with the order of their relationship to the common mid-point, we will have to put the lowest and least perfect types, which, as it were, make up the beginning of the family of the spiritual world, in that place designated the start of the entire universe, in order at the same time as this to fill in the same forward movement all infinity of time and space with endlessly growing levels of perfection of the thinking capacity and, as it were, gradually to come closer to the goal of the highest excellence, namely, to the Godhead, but without ever being able to attain that.

PART TWO. SECTION EIGHT

General Proof of the Correctness of a Mechanical Theory, of the General Arrangement of the Planetary Structure, in particular of the Correctness of the Present Theory

We cannot look at the planetary structure without recognizing the supremely excellent order in its arrangement and the sure marks of God's hand in the perfection of its interrelationships. After reason has considered and wondered at so much beauty and excellence, it rightly grows indignant at the daring foolishness which permits itself to ascribe all this to chance and a happy contingency. There must have been a Highest Wisdom to make the design, and an Infinite Power must have produced it. Otherwise it would be impossible to encounter in the planetary structure so many purposes cooperating in a single intention. It comes down only to deciding whether the plan for the structure of the universe is already set in the fundamental composition of eternal natures by the Highest Understanding and implanted in the eternal laws of motion, so that they develop themselves freely from them in a manner appropriate to the most perfect order or whether the general characteristics of the component parts of the world are completely incapable of harmony and have not the slightest united relationship and it must have absolutely required an alien hand to produce that restriction and coordination which permit us to see the perfection and beauty in it. An almost universal judgment has made most philosophers oppose the capability of nature to produce something ordered through its universal laws, just as if it meant that we were challenging God's rule over the world, when we seek the primordial developments in the forces of nature, as if these forces were a principle independent of the Godhead and were an eternally blind fate.

However, if we consider that nature and the eternal laws prescribed for substances in their reciprocal relationships are not a self-sufficient, necessary principle with no connection to God, and, for that very reason, we see that because nature demonstrates so much harmony and order in what it produces by universal laws, the essential natures of all things must have their common origin in one particular Original Essence, and that for this reason nature must reveal nothing but mutual interrelationships and harmony, because its properties originate in one single Highest Intelligence, whose wise idea has planned it with universal interconnections and has planted in it that capability, whereby, left alone in its own state to do its work, it brings forth nothing but beauty, nothing but order; when we, I say, consider this, then nature will seem more worthy to us than it commonly appears, and we will expect nothing from natural developments but harmony, nothing but order. If we, by contrast, permit an ungrounded judgment that the universal natural laws in and of themselves produce nothing but disorder, and that all the coordination for useful purposes shining forth in relation to natural arrangements reveals the immediate hand of God, then we will be forced to transform all nature into miracles. We will have to account for the beautifully coloured bow appearing amid the rain drops, when it separates the colours of the sun's light, on the basis of its beauty, the rain on the basis of its benefits, the winds on the basis of the indispensable advantages which they bring in countless ways in answer to human needs, in short, we must not explain all the changes of the world which bring delight and order with them on the basis of implanted natural forces of matter. The natural scientist who begins by surrendering to such a philosophy will have to make a solemn apology before the judgment seat of religion. In fact, there will then be no more nature. There will be only a God in the machine who produces the world's changes. But what then will this curious method of demonstrating the certain existence of a Highest Being out of the fundamental incapacity of nature prove by way of an effectively counter to Epicurus? If the natures of things bring forth by the eternal laws of their being nothing but disorder and absurdity, then they will show in that very manner the nature of their independence from God. What sort of an idea will we be able to create for ourselves of a divinity whom the universal natural laws obey only through some sort of compulsion and in and of themselves act against

the wisest designs of the Divinity? Will the enemy of providence not win just as many victories from these false basic principles, when he can point to harmonies which the universally effective natural laws produce without any special limitations? And is it possible that he would really lack examples of such things? By contrast, let us with greater propriety and correctness conclude the following: nature left to its general properties is fertile in nothing but beautiful and perfect fruits, which not only display in themselves harmony and excellence, but also are in harmony to the total extent of their being with benefits for humanity and with the glorification of the properties of God. From this it follows that its fundamental characteristics can have no independent necessity but that they must have their origin in a Single Intelligence, the basis and the fountain of all being, in which they are designed according to common interrelationships. All things connected together in a reciprocal harmony must be united among themselves in a single being on which they collectively depend. Thus, there is present a Being of all beings, an Infinite Intelligence and Self-sufficient Wisdom, from which nature, even in its potentiality, draws its origin according to the whole embodiment of its purposes. From now on we must not deny the capacity of nature, claiming it is disadvantageous to the existence of a Highest Being. The more perfect nature is in its developments, the better its universal laws lead to order and harmony, then the more certain the proof of the Godhead from which nature derives these relationships. Its productions are no longer effects of contingency and results of accidents. Everything flows from it according to unchanging laws which thus must display nothing other than nature's skill, because they are exclusively features of the wisest of all designs from which disorder is prohibited. The chance collisions of the atoms of Lucretius did not develop the world. Implanted forces and laws which have their source in the Wisest Intelligence were an unchanging origin of that order inevitably flowing out from nature, not by chance, but by necessity.

If we can thus dispense with an old and ungrounded judgment and the shoddy philosophy which seeks to hide under a pious appearance an indolent lack of wisdom, then I hope to base a sure conviction on incontrovertible reasons *that the world gives evidence of a mechanical development from the general natural laws as the origin of its arrangement and, secondly, that the manner of the mechanical development which we have presented is the true one*. If we wish to render judgment whether nature is sufficiently capable of bringing into existence the ordering of the planetary structure through a mechanical sequence of its laws of motion, then we must first consider how simple the movements are which the celestial bodies observe: they have nothing inherently in them which requires a more precise determination than what the universal rules of natural forces bring with them. The orbital movements arise from the combination of the force moving downward, which is a certain consequence of the properties of matter, and the projectile movement, which can be seen as the effect of the first, as a velocity attained through the fall downward in which only a certain cause was necessary to deflect the vertical fall sideways. After once attaining the required determination of these movements, nothing else is necessary to maintain the orbital motions permanently. They arise in empty space through the combination of the projectile force, once impressed, with the power of attraction flowing from fundamental natural forces, and from that point on they suffer no change. The analogies in the harmony of this movement themselves demonstrate the reality of a mechanical origin so clearly that we can entertain no doubts about it, for the following reasons:

1. These movements have a continuous shared direction: of the six main planets and the ten satellites, not a single one moves, either in its forward motion or in its axial rotation, in any other direction than from west to east. Moreover, these directions are so precisely coordinated that they deviate only a little from a common plane, and this plane, to which everything is related, is the equatorial plane of the body which rotates on its axis at the central point of the entire system in exactly the same direction and which has become, through its predominant power of attraction, the reference point for all motions and thus necessarily participates in them as precisely as possible. This is proof that the collective movements arose and were determined in a mechanical way in accordance with general natural laws, that the cause

which either impressed or guided the sideways movements governed all the space of the planetary structure and there obeyed the laws which materials located and moving in a common space observe, and that all the different movements finally assume a single direction to align themselves as precisely as possible with a single plane.

2. The velocities are constituted as they must be in a space where the force of movement is at the central point, namely, they decrease in steady degrees with the distances from this point and are lost in the remotest distances with a total exhaustion of movement, which displaces the vertical fall to the side only very slightly. Beyond Mercury, which has the greatest orbital force, we see these velocities diminish in stages and in the outermost comets they are as insignificant as they can be without falling straight down toward the sun. We cannot object that the rules of the central movements in circular orbits require that the closer to the mid-point of the general downward motion, the faster the orbital velocity must be. For why must the particular celestial bodies near to this centre have circular orbits? Why are the closest ones not very eccentric and the ones further away not orbiting in circles? Or rather, since they all deviate from this measured geometric precision, why does this deviation increase with the distances? Do these relationships not indicate a point to which all movement originally was directed and, according to the measure of its proximity to this point, attained a greater level of precision, before other determining factors changed its directions into what they are now?

If, however, we now wish to exclude the planetary structure and the origin of movements from the general natural laws in order to ascribe them to the immediate hand of God, then we immediately realize that the analogies referred to openly contradict such an idea. For, firstly, with reference to the general harmony in direction, it is clear that here there is no reason why the celestial bodies must organize their orbits precisely in one single direction, unless the mechanics of their development had determined the matter. For the space in which they move provides an infinitely small resistance and limits their movements as little in one direction as in another. Thus, God's choice would not have the slightest motive for tying them to one single arrangement, but would reveal itself with a greater freedom in all sorts of deviations and difference. There is still more. Why are the planetary orbits so exactly related to a common plane, namely, to the equatorial plane of that large body which rules their orbits in the mid-point of all motion? This analogy of the immediate hand of God, instead of showing a reason for its inherent propriety, is rather the cause of a certain confusion, which would be removed through a free deviation in the planetary orbits. For the forces of attraction of the planets now disturb to a certain extent the similarity in the form of their movements, and they would not obstruct one another at all, if they were not so precisely moved to a common plane.

Even more than all these analogies, the clearest mark of the hand of nature is revealed in the lack of the most precise determination in those relationships which it has striven to attain. If it were for the best that the planetary orbits were oriented almost on a common plane, why are they not oriented with extreme precision? And why has a portion of that deviation remained in place, when it should be avoided? If, therefore, the orbits of planets near the sun have received a large enough orbital momentum to maintain an equilibrium with the force of attraction, why is there still something lacking for a complete equilibrium? And why are their orbits not perfectly circular, if only the Wisest Intention, reinforced with the greatest capability, worked to produce this arrangement? Is it not clear to see that the cause which set up the orbital paths of the celestial bodies, while striving on its own to bring them to a common plane, could not achieve that completely and that, in the same way, the force which governed celestial space when all matter, now developed into spheres, received its orbital velocities, really worked to bring the spheres near the mid-point into an equilibrium with the force pulling downward, but was unable to achieve complete precision. Can we not here recognize the general method of nature, which, because of the interference of the different interactions, is always made to deviate from exactly determined measurements? And will we really find the reasons for this way of constructing things only in the end

purposes of such an immediately commanding Highest Will? We cannot, without demonstrating stubbornness, deny that the estimable way of explaining the characteristics of nature through a recitation of their benefits does not in this instance contain the hoped for proof to demonstrate a basis for it. Certainly, with respect to benefits for the world, it was entirely irrelevant whether the planetary orbits were fully circular or a little eccentric, or whether they fully coincided with the common interrelating plane or should still deviate somewhat from it. Rather, if it was indeed necessary to be restricted with this sort of harmony, then it would be best for them to have it completely in themselves. If what the philosopher said is true, that God constantly practices geometry, and if this is reflected in the methods of the general natural laws, then certainly this principle of the immediate work of the Omnipotent Will would be perfectly traceable and the latter would reveal in itself all the perfection of geometrical precision. The comets belong among these natural deficiencies. We cannot deny that, with respect to their paths and the changes they thereby undergo, we should see them as imperfect links in creation, which can neither serve to provide comfortable dwelling places for reasoning beings nor to become useful for the greatest good of the entire system, in that they, as has been conjectured, could at some point have served the sun as nourishment. For it is certain that most comets would not achieve this purpose before the collapse of the entire planetary system had been reached. In the theory of the immediate highest organizing of the world without a natural development from universal natural laws such an observation would be objectionable, although at the same time it is certain. But in a mechanical form of explanation, the beauty of the world and the revelation of omnipotence of the Almighty are glorified by this in no small way. Since nature contains in itself all possible stages of heterogeneous variety, it extends its circumference over all types from perfection to nothingness, and even the deficiencies are a sign of the excess for which its essence is inexhaustible.

We can believe that the analogies cited could well prevail over prejudice to make the mechanical origin of the planetary system worthy of adopting, if certain reasons derived from the very nature of the subject did not still seem to contradict this theory completely. Celestial space, as has already been mentioned several times, is empty, or at least filled with infinitely sparse material, which, as a result, can provide no means of impressing the common motions on celestial bodies. This difficulty is so significant and valid that Newton, who had reason to trust the insights of his philosophy as much as any other mortal, saw himself compelled here to abandon the hope of resolving through natural law and material forces the transmission of the orbital forces present in the planets, in spite of all the harmony which pointed to a mechanical origin.[44*] It is a troubling decision for a philosopher to give up the effort of an investigation in the case of a compound phenomenon which is still remote from the simple basic laws and to be satisfied with the reference to the immediate hand of God. Nevertheless, Newton acknowledged here the dividing line separating nature and the finger of God from each other, the pattern of set laws of the former and the nod of the latter. After the doubt of such a great philosopher, it may appear presumptuous still to hope for some fortunate progress in a matter of such difficulty.

But this very difficulty which deprived Newton of the hope of understanding on the basis of natural forces the orbital forces allotted to the heavenly bodies, whose direction and arrangements make up the system of the planetary structure, was the origin of the theory which we have presented in the previous sections. It sets up a mechanical theory, but one which is far from the one which Newton found unsatisfactory and on account of which he rejected all basic causes, because, if I may be so bold as to say it, he made a mistake in maintaining that his doctrine was the only possible one of its kind. It is quite easy and natural, with the help of Newton's difficulty, from a short and basic conclusion to reach certainty about the mechanical style of explanation which we have set down in this treatise. If we presuppose (and we cannot do otherwise than acknowledge the fact) that the previous analogies establish with the greatest certainty that the harmonious and well-ordered interrelated movements and orbits of the celestial bodies point to a natural cause as their origin, then this cause cannot be the same material which now fills

celestial space. Thus, the material which earlier filled these expanses and whose movement was the reason for the present orbiting of the heavenly bodies, after it had collected on these spheres and thus cleaned out the spaces which we now see as empty, or, what flows directly from this, the materials themselves out of which the planets, the comets, even the sun are made up, must at the start have been spread out in the space of the planetary system and, in this condition, have set themselves in the motions which they maintained when they united in particular clusters and developed the celestial bodies, which contain in themselves all the previously scattered matter making up the worlds. We have little difficulty seeing in this idea the mechanical impulse which might have set in motion this material of self-developing nature. The very impulse which brought about the union of the masses, the force of attraction, which is inherently present in matter and which thus, with the first stirring of nature, is really suitable to consider the first cause of motion, was the source of that mechanical impulse. The direction which, through the effects of this force, always aims right at the mid-point, here creates no problems. For it is certain that the fine material of the scattered elements in its vertical motion downward must have developed motion in different directions both through the heterogeneity of the points of attraction and through the obstacles which their vectors create by intersecting with each other. Among these motions the certain natural law which causes all materials restricting each other through reciprocal interaction finally to be brought to a condition where they induce change in each other as little as possible produces both the uniformity in the direction and the appropriate levels of velocity, which are carefully balanced at each distance according to the centripetal force. Through the combination of these, the elements do not strive to deviate either above or below, for all the elements thus have been made to run, not just in one direction, but also in almost parallel free circles around the common point of downward motion in the sparse celestial space. These movements of the particles must have kept going from this time on, once the planetary spheres had developed out of them, and remain in place now, through the combination of the sideways momentum implanted once and the centripetal force, for an unrestricted future period. On this basic principle, so easy to grasp, rest the uniformity in the directions of the planetary orbits, the precise relationship to a common plane, the amount of the projectile impetus appropriate to the power of attraction at a location, the decreasing precision of these analogies over distance, and the free deviation of the outermost celestial bodies on both sides as well as in the opposite direction. If these indications of the reciprocal dependency in the requirements for development point with more obvious certainty to a material in motion originally distributed through all space, then the total lack of all materials in this now empty celestial space, except for what the bodies of the planets, the sun, and the comets are composed of, proves that this very material would have had to have been at the start in a condition of being spread out. The ease and correctness with which all the phenomena of the planetary structure have been derived from the assumption of this basic principle in the previous sections is the completion of such a conjecture and gives it a value which is no longer arbitrary.

The certainty of a mechanical theory for the origin of the planetary structure, particularly of ours, will be elevated to the highest peak of conviction, if we consider the development of the celestial bodies themselves, the importance and size of their masses, according to the relationship which they have with respect to their distance from the central point of gravitation. For in the first place, the density of their material, when we consider them as a total cluster, decreases in constant stages with distances from the sun, a fixed condition which points so clearly to the mechanical arrangements of the initial development that we can demand no more. They are put together out of materials in such a way that those of the heavier sort have reached a deeper position in relation to the common point of downward motion and, by contrast, the lighter sort a distance further away. This condition is necessary in all sorts of natural development. But with an arrangement issuing from the immediate Divine Will, there is not the slightest reason to encounter the relationships mentioned above. For although it might immediately seem that spheres further away must consist of lighter materials so that they could not notice the necessary effect of the diminished

force of the sun's rays, this purpose pertains only to the composition of the material located on the outer surface and not to the deeper varieties on the inside of its cluster. The heat of the sun never has any effect on these inner materials, which serve only to make effective the planet's power of attraction, which is to make the bodies moving around it sink down towards it. Therefore, they cannot have the slightest relationship to the strength or weakness of the sun's rays. If we then ask why the densities of the Earth, Jupiter, and Saturn, as determined by the correct calculations of Newton, stand in relation to each other as 400 to 94.5 to 64, then it would be absurd to attribute the cause to God's intention, which adjusted the densities according to the degrees of solar heat, for then our Earth can serve as a counterexample. In the case of the Earth, the sun only affects such a small part under the outer layer with its rays, that the part of the Earth's cluster which must have some relationship with these rays does not by a long way make up the millionth part of the total planet. And the remaining part is entirely indifferent in this matter. Thus, if the material of which the celestial bodies consist has a well-ordered relationship in mutual harmony with the distances and if the planets cannot now restrict each other, separated as they are from each other in empty space, then their matter must have previously been in a condition where they were able to bring about a common effect on one another in order to limit them to locations proportional to their specific gravity. This could have happened only if their parts before development had been spread out in the entire space of the system and if they took up locations appropriate to their densities, in accordance with the general laws of motion.

The relationship among the sizes of the planetary masses, which increases with distances, is the second reason by which the mechanical development of the celestial bodies, and especially our theory of that, is clearly demonstrated. Why do the masses of the celestial bodies approximately increase with the distances? If we subscribe to a theory which assigns everything to God's choice, then no purpose can be imagined why the further planets have to have larger masses other than the fact that because of the preponderant strength within their sphere of attraction they would be able to hold onto one or several moons, which are to serve the inhabitants destined for the planets by making their stay comfortable. But this purpose could have been achieved just as well by a preponderant density in the interior of their clusters. And why then would the lightness in the material flowing from special grounds, something which goes against this relationship, have had to remain and be so overwhelmed by the preponderance of the volume that the mass of the higher planets became more significant than the mass of the lower ones? When we do not take into account the manner of the natural development of these bodies, then we have difficulty being able to provide a reason for this relationship. But in the light of mechanical theory nothing is easier to grasp than this arrangement. When the material of all planetary bodies was still spread out in the space of the planetary system, the power of attraction developed spheres out of these particles. Undoubtedly the spheres must have been bigger the further the location of their developing globe was away from that common central body, which from the mid-point of the entire space limited and hindered this combining as much as it could by means of its powerful force of attraction.

We will notice with satisfaction the features of this development of the celestial bodies from basic material spread out at the start in the width of the intervening spaces separating their orbits from each other. These, according to this concept, must be deemed empty compartments from which the planets have appropriated the materials for their development. We perceive how these intervening spaces between the orbits have a relationship to the size of the masses which developed out of them. The width between the orbits of Jupiter and Mars is so large that the space enclosed in it exceeds the area of all the lower planetary orbits taken together. But it is worthy of the largest of all the planets, the one which has more mass than all the others collectively. We cannot attribute this distance of Jupiter from Mars to the intention that their powers of attraction were to interfere with each other as little as possible. For according to such a reason, the planet between two orbits would always find itself closest to the planet whose power of attraction combined with its own could disturb their dual orbits around the sun as little as possible; as a

result, the planet would be closer to the one with the smallest mass. Now, according to the correct calculations of Newton, the force with which Jupiter can affect the orbit of Mars is related to the force which it exercises on Saturn through their combined forces of attraction is as 1/12512 to 1/200. So we can easily calculate by how much Jupiter would have had to be closer to the orbit of Mars than to that of Saturn, if their distance away had been determined with their external relationship in mind and not through the mechanism of their development. However, this phenomenon is quite different. For in relation to the two orbits above and below it, a planetary orbit often stands further away from the one in which a smaller planet runs than from the path of the larger mass of the two. However, the extent of the space around the orbit of each planet always has a correct relationship to its mass. Thus, it is clear that the manner of their development must have established these relationships and that, because these arrangements seem to be bound up with this development, as their causes and effects, we will in reality estimate it most correctly if we consider the space included between the orbits as the container of that material out of which the planets were built. From this it immediately follows that the size of these spaces must be proportional to masses of the planets. However, this relationship will be augmented with the further planets because of the greater scattering of the basic material in their first state in these regions. Therefore, of two planets which are almost equal to each other in mass, the one further away must have a larger space in which to develop, that is, a greater distance to the two nearest orbits, both because the material there was inherently of a specifically lighter variety and because it was more widely scattered than in the case of the planet which developed closer to the sun. Thus, although the Earth together with the moon still does not appear to be equal to Venus in its physical contents, nevertheless, it required for itself a greater room for development, because it had to be built out of a more scattered material than this lower planet. For these reasons, we can assume, so far as Saturn is concerned, that its sphere of development stretched much further on the distant side than on the side of the central point (as this holds true for almost all planets). Consequently, the intervening space between Saturn's orbit and the path of the higher celestial body next to Saturn, which we can assume is above it, will be much wider than the space between Saturn and Jupiter.

Thus, everything in the planetary structure proceeds in stages out into all limitless distances with accurate relationships to the first force of development, which was more effective near the central point than far away. The diminution of the impressed projectile motion, the deviation from the most precise agreement in the direction and the orientation of the orbits, the densities of the celestial bodies, the scarcity of nature in relation to the space where they developed, everything diminishes stage by stage from the centre into the far distances. Everything shows that the first cause was bound up with the mechanical rules of movement and did not take place through a free choice.

But what illustrates as clearly as anything else the natural development of the celestial bodies out of the basic material originally spread out in the now empty celestial space is the agreement, which I take from M. de Buffon (which, however, in his theory does not by a long way have the benefit it does in ours). For, according to his observation, if we add up together the planets whose masses we can determine by calculation, namely, Saturn, Jupiter, Earth, and the Moon, they give a cluster whose density stands in relation to the density of the body of the sun as 640 to 650. In this comparison, since these are the major parts of the planetary system, the remaining planets (Mars, Venus, and Mercury) hardly merit counting. Thus, we will with good reason be astonished at the remarkable equality which governs between the materials of the planetary structure collectively, if we consider it as a single united cluster, and the mass of the sun. It would be an irresponsible foolishness to ascribe this analogy to chance, that materials, among a variety so infinitely different that there are a few encountered even on our Earth which are fifteen thousand times more dense than others, nevertheless comes so near a ratio of 1 to 1 in the total. And we must concede that, if we consider the sun as a mixture of all types of matter, which in the structure of the planets are separated from each other, all of them together seem to have developed in one space,

originally full of material uniformly spread out. These materials were collected on the central body without distinction. For the development of the planets, however, they were divided up in proportion to the altitudes. I leave it to those who cannot subscribe to the mechanical development of the celestial bodies to explain from the motives of God's choice such a remarkable arrangement as this, if they can. I will finally stop establishing more proofs for a matter of such convincing clarity as the development of the planetary structure out of the forces of nature. If people are in a position to remain unmoved in the midst of so many convincing details, then they must either lie far too deep in the bonds of prejudice or be entirely incapable of rising above the jumble of received opinions to the observation of the purest truth of all. Meanwhile, we can believe that nobody except the very foolish, on whose approval we may not count, can deny the correctness of this theory, if the harmonies which the planetary structure has in all its links to the benefits of reasoning creatures did not appear to have something more than general natural laws as its basis. We believe correctly that skilful arrangements which point to a worthy purpose must have as their originator a Wise Intelligence, and we will become completely satisfied when we consider that, since the natures of things acknowledge no other original source than just this, their fundamental and universal arrangements must have a natural inclination to proper and really mutual harmonious consequences. We will thus not allow ourselves to feel strange if we become aware of the arrangements of the planetary structure rich in mutual advantages for creatures and attribute these to a natural consequence arising out of the general laws of nature. For what issues from these is not the effect of blind accident or of unreasoning necessity. It is, in the last analysis, based upon the Highest Wisdom from which the universal arrangements derive their harmony. One conclusion is entirely correct: If, in the arrangement of the world, order and beauty shine forth, then a God exists. But another is no less well established: If this order could have emerged from the general natural laws, then all of nature is necessarily the effect of the Highest Wisdom.

If people nevertheless let themselves at their own discretion acknowledge the immediate application of the Divine Wisdom in all the ordering of nature, which includes in itself harmony and beneficial purposes, while they do not credit the development out of general laws of motion with any harmonious consequences, then I would like to advise them in their contemplation of the planetary structure to direct their eyes not to a single celestial body but to the totality, in order to tear themselves for once away from this delusion. If the steep inclination of the Earth's axis in relation to the plane of its annual orbit is to be a proof of the immediate hand of God because of the well loved changes in the seasons, then people should insist on this relationship in connection with the other celestial bodies. Then they will become aware that it is different in each one and that in this difference there are even some planets that do not have this feature at all, as, for example, Jupiter, whose axis is perpendicular to the plane of its orbit, and Mars, whose axis is almost perpendicular. Both of these enjoy no difference in the seasons and are, nonetheless, as much works of the Highest Wisdom as the others are. The moon satellites of Saturn, Jupiter, and the Earth would seem to be special configurations of the Highest Being, if the free departure from this purpose throughout the entire planetary system did not illustrate that nature produced these arrangements without being disturbed by an extraordinary constraint in its free actions. Jupiter has four moons, Saturn five, the Earth one, and the other planets none at all, although it immediately seems that the other planets were in greater need of moons than the former group because of their longer nights. If we admire the proportional equilibrium of the projectile force impressed on the planets with the centripetal force at their distance as the reason why they run almost in circles around the sun and are adapted to be residences for reasoning creatures because of the uniformity in the heat distributed in this way and look upon that as the immediate finger of the Almighty, then we will be led back at once to the general laws of nature, when we consider that this planetary arrangement loses itself gradually with all grades of diminution in the depths of the heavens and that even the Highest Wisdom, which derived satisfaction from the regularity of planetary motion, did not exclude the deficiency with which the system ends, since it runs out in complete

irregularity and disorder. Regardless of the fact that it is essentially established for perfection and order, nature includes in itself in the range of its multiplicity all possible changes, even deficiency and deviation. Just this unlimited fecundity of nature has produced the inhabited celestial globes, as well as the comets, the useful mountains and the harmful cliffs, the habitable landscapes and barren deserts, the virtues and vices.

PART THREE

Which contains in it an attempt, based on natural analogies, to establish a comparison between the inhabitants of different planets.

He, who through vast immensity can pierce,
See worlds on worlds compose one universe,
Observe how system into system runs,
What other planets circle other suns,
What varied Being peoples every star,
May tell why Heaven has made us as we are.
(Pope)[45][*]

APPENDIX

In my view it is a disgrace to the nature of philosophy when we use it to maintain with a kind of flippancy free-wheeling witty displays having some apparent truth, unless we are immediately willing to explain that we are doing this only as an amusement.[46*] Thus, in the present essay I will not introduce any propositions except those which can really expand our understanding and which are at the same time so plausibly established that we can scarcely deny their validity.

It may appear that in this sort of project the freedom to be poetical has no real limits, that in judging the make-up of those who live in distant worlds we could allow unbridled fantasy much more free rein than a painter in an illustration of the flora and fauna of undiscovered lands, and that these very ideas could not be proved right or wrong. Nevertheless, we must admit that the distances of the celestial bodies from the sun involve certain relationships which bring with them a vital influence on the different characteristics of the thinking natures found on these very bodies. Their way of working and suffering is associated with the composition of the material to which they are bound and depends upon the quantity of impressions which the world arouses in them, according to the relationship of their living environment with the centre of the power of attraction and heat.

I am of the opinion that it is not particularly necessary to assert that all planets must be inhabited. However, at the same time it would be absurd to deny this claim with respect to all or even to most of them. Given the richness of nature, where worlds and systems are only sunny dust specks compared to the totality of creation, there could, in fact, also be deserted and uninhabited regions without the slightest function in nature's purpose, namely, the contemplation by sensible beings. It would be conceded, even if one wished to consider things on the basis of God's wisdom, that sandy and uninhabited deserts make up large stretches of the earth's surface and that there are in the earth's oceans abandoned islands where no human being is found. Meanwhile, a planet is far less in relation to the totality of creation than is a desert or an island in relation to the earth's surface.

Perhaps all the celestial bodies have not yet completely developed. Hundreds and maybe thousands of years are necessary for a large celestial body to reach a stable material condition. Jupiter still appears to be in this state of disharmony. The remarkable changes in its form at different times have already led astronomers for a long time to assume that the planet must be experiencing large upheavals and is a long way from having a calm outer surface, a condition which must pertain for a planet to be inhabited. If Jupiter is uninhabited and even if it is never to have any inhabitants, would that not be an infinitely small natural expenditure compared to the immeasurable size of the total creation? And if nature were carefully to display all her richness in every point of space, would that not be much more a sign of nature's poverty than of her abundance?

But it is more satisfying for us still to assume that if Jupiter is uninhabited right now, nonetheless the planet will be inhabited in the future, when it has had time to develop completely. Our Earth perhaps existed for a thousand years or more before it was in a condition to be able to support human beings, animals, and plants. The fact that a planet reaches this complete state only after a few thousand years does nothing to detract from the reason for its existence. For this very reason the planet will be around for a longer time in the future in its state of complete development, once it has attained it. For there is a certain natural principle that everything which has a beginning gets steadily closer to its dissolution and that much closer to destruction the further it is from its origin.

One can only approve of the satirical portrayal by that witty person from the Hague who, after quoting the general news from the scientific world, could humorously present the imaginary picture of the necessary habitation of all planets. "Those creatures who live in the forests of a beggar's head," he says,

“had for a long time thought of their dwelling place as an immeasurably large ball and themselves as the masterworks of creation. Then one of them, whom Heaven had endowed with a more refined soul, a small Fontenelle of his species, unexpectedly learned about a nobleman’s head. Immediately he called all the witty creatures of his district together and told them with delight: ‘We are not the only living beings in all nature. Look here at this new land. More lice live here.’”47 If the final part of this conclusion provokes laughter, that happens not because it is far removed from the way human beings judge things, but because that very same mistake, which among human beings has basically a similar cause, seems more excusable in our case.

Let us judge in an unprejudiced manner. This insect, which in its way of living as well as in its lack of worth expresses very well the condition of most human beings, can be used for such a comparison with good results. Since, according to the louse’s imagination, nature is endlessly well suited to its existence, it considers irrelevant all the rest of creation which does not have a precise goal related to its species as the central point of nature’s purposes. The human being, who similarly stands infinitely far from the highest stages of being, is sufficiently bold to flatter himself with the same imaginative picture of his existence as essential. The limitlessness of creation contains within itself, with equal necessity, all natures which its superbly fecund richness produces. From the most refined classes of thinking beings right down to the most despicable insect, no link is irrelevant to nature. And not a single one can fail to appear without in the process fracturing the beauty of the whole, which consists in the interrelatedness. Meanwhile, everything is determined by universal laws which nature effects through the combination of forces originally planted in it. Because nature’s process produces only what is appropriate and ordered, no particular purpose is permitted to disturb and break her results. In its initial development a planet’s creation was only an infinitely small consequence of nature’s fertility, and it would now be somewhat absurd that nature’s well-grounded laws should defer to the specific purposes of this atom. If the composition of a celestial body establishes natural barriers against its becoming inhabited, then it will not have inhabitants, even though in and of itself the planet would be more beautiful if it had its own population. The excellence of creation loses nothing in such a case, for among all large quantities the infinite is the one which is not diminished by the subtraction of a finite part. It would be as if one wished to complain that the space between Jupiter and Mars is unnecessarily empty and that there are comets which are not populated. In fact, however, that insect may appear as unworthy to us as we wish, but to nature it is certainly more appropriate to maintaining its entire class than a small number of more excellent creatures, of which there would nevertheless be infinitely many, even if one region or locale should lack them. Because nature is endlessly fertile in producing both species, in their preservation and their destruction we really see both equally abandoned disinterestedly to the universal laws. Indeed, has the possessor of those inhabited forests on the beggar’s head ever created greater disasters among the races of this colony than the son of Philip brought about among the race of his fellow citizens, when his wicked genius gave him the idea that the world was created only for his sake?48*

However, most of the planets are certainly inhabited, and those that are not will be in the future. Now, what sort of interconnections will be brought about among the different types of these inhabitants through the relationship between their place in the cosmic structure and the central point from which the warmth which gives life to everything extends outwards? For it is certain that, with the materials of these celestial bodies this heat will bring with it certain relationships in their compositions proportional to the distance from the centre. In this comparison, the human being, who is, among all sensible beings, the one we know most clearly, although at the same time his inner composition is still an unexplored problem, must serve as the foundation and common reference point. We do not wish here to comment on his moral characteristics or even on the physical arrangement of his structure. We want only to explore how the capacity to think sensibly and the movement of his body, which obeys that, suffer restrictions because of the material composition to which he is linked, proportional to the distance from the sun. Regardless of the infinite

distance encountered between the power of thought and the movement of matter, between the reasoning spirit and the body, it is nevertheless certain that a human being, who receives all his ideas and conceptions from impressions which the universe awakens in his soul by means of the body, both with respect to their clarity and to the skill of combining and comparing them, which we call the capacity for thought, is totally dependent on the composition of this material stuff to which the Creator has bound him.

The human being is created to take in the impressions and emotions which the world is to arouse in him through that very body, which is the perceptible part of his being. The body's material serves not only to impress on the imperceptible spirit which lives inside him the first ideas of the external world but also is indispensable in its inner working for repeating these impressions and linking them together, in short, for thinking.[49*] As a person's body grows, his intellectual capabilities also proportionally attain the appropriate stage of full development and first acquire a staid and soberly mature capacity when the fibres of his corporeal machine have gained the strength and endurance which mark the completion of their development. Those capabilities develop early enough within him, thanks to which he can cope sufficiently with the necessities of life to which he is bound by dependence on external things. Some people's development remains at this level. The ability to combine abstract ideas and, through a free use of one's understanding, to gain control over passionate tendencies comes late. Some never reach this state during their entire lives. However, in all people this ability is weak; it serves the more primitive forces which it should nonetheless govern. In the control of these lower forces consists the good quality of a person's nature. When we consider the life of most people, it seems that this creature has been created to absorb liquids, like a plant, to grow, to propagate the species, and finally to grow old and die. Among all living things, human beings are the poorest at realizing the purpose of their existence, because they exhaust their excellent capabilities in those pursuits which other creatures, with far less capability, nonetheless attain more confidently and conveniently. The human being would even be the creature most worthy of contempt among all of them, at least from the point of view of true wisdom, if the hope for the future did not elevate him and if the time for a full development of the powers closed up inside him did not lie in store.

When we look for the cause of the obstacles which keep human nature so debased, we find it in the coarseness of the material stuff in which his spiritual component is buried, in the stiffness of the fibres and the sluggishness and immobility of the fluids which should obey the movements of his spirit. The cerebral nerves and fluids provide him only crude and unclear ideas, and because he cannot offset the provocation of sensory stimulations in the inner workings of his thought process by means of sufficiently powerful ideas, he is taken over by his passions and dulled and disturbed by the turmoil of elements which maintain his machine. The attempts of reason to stand up against this and to drive away the confusion with light from the power of judgment are like moments of sunshine when thick clouds constantly interrupt and darken their serenity.

This coarseness in the stuff and fabric of the constitution of human nature is the cause of that lethargy which keeps the soul's capabilities continually weak and powerless. Coping with reflections and ideas clarified by reason is an exhausting condition. The soul cannot be placed in it without resistance. And because of a natural tendency the physical machine soon falls out of that state back into a condition of suffering, since sensory stimulations have a determining influence on and govern all its behaviour.

This lethargy in his power to think, a consequence of the dependence on a crude and awkward material, is the source not only of vice but also of error. The soul is held back because of the difficulty involved in the effort to scatter the clouds of confused notions and to distinguish universal knowledge, which arises from comparing ideas, from sense impressions, and prefers to bestow a quick approval on and is content with the possession of an opinion which the sluggishness of its nature and the resistance of the material scarcely allow it to see in perspective.

In this dependency, the spiritual capabilities disappear at the same time as the vitality of the body.

When, on account of the weakened circulation of the fluids, extreme old age keeps warm in the body only thick juices, when the flexibility of the fibres and the agility in all movements decrease, then the powers of the spirit congeal in a similar fatigue. Rapidity of thought, clarity of ideas, liveliness of wit, and the capacity of memory grow feeble and cold. The ideas which, through long experience, have become ingrained still compensate to some extent for the departure of these powers, and the understanding would betray its incapacity even more clearly, if the intensity of passions, which require its rein, did not decline at the same time and even earlier.

From all this it is clear that the powers of the human soul are limited and hemmed in by the obstacles of a coarse material stuff to which they are most intimately tied. But there is still something all the more worth remarking: the fact that this specific composition of the stuff has an essential relationship to the degree of influence with which the sun enlivens it and makes carrying out the animal functions efficient, an influence proportional to its distance away. This necessary connection with the fire which spreads out from the mid-point of the planetary system so as to maintain the required motion in the material stuff is the basis for an analogy which will be firmly established here between the different inhabitants of the planets. Thanks to this relationship, every single class of these inhabitants is bound by the necessity of its nature to the place which has been allocated to it in the universe.

The inhabitants of Earth and Venus would not be able to exchange their living environments without the mutual destruction of both. The material out of which the inhabitants of Earth are made is proportional to the degree of heat for their distance from the sun. Thus, it is too light and volatile for an even greater heat, and in a hotter sphere it would suffer from violent movements and a breakdown of its nature, arising from the scattering and drying up of the fluids and a violent tension in its elastic fibres. The inhabitants of Venus, whose cruder structure and sluggishness in the elements of their formation require a stronger solar influence, would in a cooler celestial region freeze and die from a lack of vitality. In the same way, the body of an inhabitant of Jupiter would have to consist of far lighter and more volatile material, so that the very small motion which the sun can induce at this distance away could move these machines just as powerfully as it does in the lower regions. I summarize all this in one general idea: *the material stuff out of which the inhabitants of different planets, including even the animals and plants, are made must, in general, be of a lighter and finer type, and the elasticity of the fibres as well as the advantageous construction of their design must be more perfect in proportion to their distance away from the sun.*

This relationship is so natural and well grounded that not only do the fundamental motives of higher purpose, which in the study of nature are normally considered merely weak reasons, lead to it, but also at the same time the proportions of the specific composition of the materials making up the planets confirm it. These are derived from Newton’s calculations as well as from the basic principles of cosmogony, which endorse the same principle according to which the material stuff out of which the celestial bodies are built is always of a lighter type in the more distant ones than in those closer to the sun. This point must necessarily bring with it a similar relationship for the creatures which develop and maintain themselves on them.

We have established a comparison between the material composition which sensible creatures on the planets essentially have in common. Thus, following the introduction of this concept, it is easy to consider that these relationships will also lead to a result which, so far as their spiritual capacities are concerned, has a necessary dependence on the material of the machine which they inhabit. Thus, we can conclude with more than probable assurance *that the excellence of thinking natures, the speed of their imaginations, the clarity and vivacity of their ideas, which come to them from external stimuli, together with the ability to combine ideas, and finally, too, the rapidity in actual performance, in short, the entire extent of their perfection, is governed by a particular rule according to which these characteristics will always be more excellent and more complete in proportion to the distance of their dwelling places from the sun.*

Since this relationship is so plausible that it is almost a demonstrated certainty, we have an open field for pleasant speculations arising from the comparison of the characteristics of these different inhabitants. Human nature, which in the scale of being holds, as it were, the middle rung, is located between the two absolute outer limits of perfection, equidistant from both. If the idea of the most sublime classes of sensible creatures living on Jupiter or Saturn provokes the jealousy of human beings and discourages them with the knowledge of their own humble position, a glance at the lower stages brings content and calms them again. The beings on the planets Venus and Mercury are reduced far below the perfection of human nature. What a view worthy of our astonishment! On one side we saw thinking creatures among whom a Greenlander or a Hottentot would be a Newton; on the other side we saw people who would admire Newton as if he were an ape.

> Superior beings, when of late they saw
> A moral Man unfold all Nature's law,
> Admir'd such wisdom in an earthly shape,
> *And shew'd a NEWTON as we shew an Ape*.
>
> (Pope)[50][*]

What an advance in knowledge will the insight of those blissful beings of the highest celestial spheres not attain! What beautiful results will this illumination of knowledge not have for their moral constitution! When intellectual insights have the appropriate level of perfection and clarity, they have in themselves far more vital charms than the attractions of sense and are able to govern these successfully and tread them underfoot. How beautifully will the very Godhead, who pictures Himself in all creatures, present His own portrait in these thinking beings; like a sea unmoved by storms of passion, they will calmly receive and shine back His image! We will not extrapolate these assumptions beyond the limits prescribed for a physical treatise; only we do once again take note of the above mentioned analogy *that the perfection of the spiritual as well as the material worlds in the planets from Mercury right up to Saturn, or perhaps beyond Saturn (insofar as there are still other planets), grows and advances in an appropriate sequence of stages proportional to their distance from the sun*.

Since this principle flows, in part, naturally from the consequences of the physical interrelationship between the dwelling places and the centre of the system, it is, to that extent, appropriately acceptable. On the other hand, a real look at the most excellent habitations prepared for the superb perfection of these natures in the higher regions confirms this rule so clearly that it should almost demand complete assent. The active speed associated with the merits of a lofty nature is better fitted to the rapidly changing time periods of the higher spheres than the slowness of lethargic and more imperfect creatures.

Telescopes teach us that the changes in day and night on Jupiter occur in ten hours. What would an inhabitant of Earth really do with this division of time, if he were placed on this planet? The ten hours would scarcely be sufficient for the rest this crude machine requires to recuperate in sleep. What would the preparation for going through waking up, getting dressed, and the time taken up with eating demand as a share of the available time? And how would a creature whose activities occur so slowly not be rendered confused and incapable of anything effective when his five hours of business would be suddenly interrupted by an intervening period of darkness of exactly the same duration? However, if Jupiter is inhabited by more perfect beings who combine more elastic forces and a greater agility in practice with a more refined development, then we can believe that these five hours are for them exactly equivalent to and more than the twelve hours of the day for the humble class of human beings. We know temporal demands are somewhat relative. This cannot be known and understood except from a comparison of the size of the task which is to be performed and the quickness with which it is carried out. Thus, the very same time which for one type of creature is, as it were, merely an instant can for another creature be a

long period in which a large sequence of changes develops because of its speed and efficiency. According to plausible calculation of the axial rotation of Saturn, which we have dealt with above, the planet has a very much shorter division of day and night. It therefore allows us to assume even more advantageous capabilities in the nature of its inhabitants.

Finally, everything comes together to confirm the proposed principle. Nature has visibly distributed her goods as richly as possible to the far regions of the world. The moons, which compensate the active beings of these blissful regions for the loss of daylight with a sufficient substitute, are placed in that area in the greatest number, and nature appears to have taken care to make them effective with its full assistance, so that there is be scarcely any time when the moons are prevented from using it. So far as moons are concerned, Jupiter has an obvious advantage over all the lower planets, and Saturn once again has the advantage over Jupiter. The arrangement whereby Saturn has the beautiful and useful ring going around it probably creates even greater advantages for its composition. By contrast, the lower planets, for whom this advantageous feature would be a useless waste and whose class approaches much more closely the borders of irrationality, either do not share such an advantage at all or only very little.

However (and here I anticipate an objection which could destroy all the harmony I have mentioned) we cannot consider the greater distance from the sun, this source of light and life, as nothing but a drawback for which the spaciousness of the dwelling places in the further planets would serve as only a partially useful remedy, making the objection that in fact the higher planets have a less advantageous situation in the cosmic structure, a position which would be injurious to the perfection of those abodes, because they receive a weaker influence from the sun. For we know that the effects of light and heat are determined, not by their absolute intensity, but by the capacity of the material stuff which absorbs them and, to a greater or lesser extent, resists their impetus and that, therefore, the very same distance at which we could designate a moderate climate for a coarser type of material would destroy more subtle liquids and would be a damaging intensity for them. Thus, only a more refined material stuff composed of more mobile elements is appropriate to make the distances of Jupiter or Saturn from the sun a fortunate location.

Finally, because of a physical connection, the excellence of the natures in these higher regions of the heavens seems to be connected with an ability to last which is appropriate to it. Decay and death can afflict these excellent beings less than they do our low natures. Exactly the same torpor in the material and coarseness of the stuff, the specific principle in the degradation in the lower echelons, are the cause of the tendency which they have to decay. When the juices which nourish the animal or human being and make it grow, as they are assimilated among the small fibres and increase its bulk, can no longer expand the spatial dimensions of their vessels and canals, when growth is already complete, then these nourishing liquids which add to the body's mass must, through the mechanical impulse which is used to feed the animal, constrict and block up the hollow sections of their vessels and destroy the structure of the entire machine with a gradually increasing paralysis. We can believe that, although mortality also eats away at the most perfect beings, nevertheless there is an advantage in the refined quality of the material stuff, in the elasticity of the vessels, and in the lightness and efficacy of the fluids which make up those more perfect entities living in the distant planets. This benefit checks for a much longer time the frailty which results from the inertia of a coarse material and gives these creatures a durability whose length is proportional to their perfection. Thus, the fragility of human life is appropriately linked to human baseness.

I cannot leave these observations without anticipating a doubt about it, which could naturally arise from a comparison of these opinions with our previous principles. In dealing with the dwelling places in the planetary structure, we have acknowledged the wisdom of God in the number of satellites which illuminate the planets with the most distant orbits, in the velocity of their axial rotation, and in the composition of their material stuff, which is proportional to the effects of the sun. This Divine Wisdom has organized everything so beneficially for the advantage of sensible beings who inhabit the planets. But

how would we now reconcile the concept of intentionality with a mechanical theory, so that what the Highest Wisdom itself devised is assigned to raw material stuff and the rule of providence is turned over to nature left to act on its own? Is the first not rather a confession that the organizing of the cosmic structure is not developed through the general laws of the latter?

We will soon dispose of this doubt if we only think back to what was cited previously in a similar case. Must not the mechanism of all natural movements have an essential tendency towards only such consequences as those which really coincide with the project of the Highest Reason in the full context of interrelationships? How can they have erratic inclinations and an independent scattering originally, when all their characteristics, from which these consequences develop, are themselves regulated by the eternal idea of the Divine Understanding, in which all things must necessarily interconnect with each other and fit together? When we think correctly, how can we justify the kind of judgment where we see nature as a rebellious subject, which can be kept on a regular track and in communal harmony only through some kind of compulsion which sets limits to her free conduct, unless we maintain something to the effect that nature is a self-sufficient principle, whose characteristics acknowledge no cause and which God seeks to force according to His purposeful plan, to the extent that this is possible? The closer we come to getting to know nature, the more we will realize that the universal ways in which things are made are not strange and separate from each other. We will be sufficiently convinced that they have essential connections, through which they are coordinated, to support each other in providing a more perfect state, in the reciprocal effects of the elements on the beauty of material things and at the same time for the benefit of the spiritual realm and that, in general, the single natures of things in the field of universal truths already make up amongst themselves, so to speak, a system, in which one is related to another. We will also immediately realize that the connection between them in their common origin is unique to them and that from this they, as a totality, have created their fundamental properties.

And now to apply this repeated observation to the proposed goal: the very same universal laws of motion which have allocated to the highest planets a location far from the mid-point of the power of attraction and inertia in the planetary system, have at the same time in this way set them in the most advantageous condition to develop themselves as far as possible from the point where they are connected to the coarse material and, indeed, with greater freedom. However, these laws have also simultaneously set the distant planets in a rule-bound relationship to the influence of the heat which, in accordance with the same law, extends out from this mid-point. Now, it is these very requirements which have removed obstructions from the development of the cosmic bodies in these distant regions and made the production of movements, which is dependent upon this development, faster and, in brief, created a more properly established system. Since finally the spiritual beings necessarily depend upon the material stuff to which they are personally bound, it is no wonder that the perfection of nature is shaped by both points into a single coordinated system of causes and on the same foundations. In a more precise view, this harmony is also not something sudden or unanticipated. Because through a similar principle the latter beings have been infused into the universal constitution of matter, the spiritual world is more perfect in the distant spheres for exactly the same reasons that the physical world is.

Thus, everything in the total extent of nature holds together in an uninterrupted series of stages through the eternal harmony which makes all the steps related to each other. The perfections of God have clearly revealed themselves at our levels and are no less beautiful in the lowest classes than in the more lofty ones.

> Vast Chain of Being! Which from God began,
> Natures ethereal, human, angel, man,
> Beast, bird, fish, insect, what no eye can see,
> No glass can reach! From Infinite to thee,

From thee to nothing.

(Pope)[51] *

We have continued the earlier conjectures, being faithful to the main idea of physical relationships. This has kept them on the path of a reasonable credibility. Should we permit ourselves one more digression from this track into the field of fantasy? Who indicates to us the border where grounded probability stops and arbitrary fictions begin? Who is so bold as to dare an answer to the question whether sin exercises its sway also in the other spheres of the cosmic structure or whether virtue alone has established her control there?

The stars perhaps enthrone the exalted soul
As here vice rules, there virtue has control.

(von Haller)

Does not a certain middle position between wisdom and irrationality belong to the unfortunate capacity to sin? Who knows whether the inhabitants of those distant celestial bodies are not too refined and too wise to allow themselves to fall into the foolishness inherent in sin; whereas, the others who live in the lower planets adhere too firmly to material stuff and are provided with far too little spiritual capacity to have to drag the responsibility for their actions before the judgment seat of justice? With this in mind, would the Earth and perhaps even Mars (so that the painful consolation of having fellow sufferers in misfortune would not be taken from us) be alone in the dangerous middle path, where the experience of sensual charms has a powerful ability to divert from the ruling mastery of the spirit. The spirit, however, cannot deny its ability to resist, unless its inertia prefers instead to allow itself to be carried away by these charms. Thus, here is the dangerous transition point between weakness and the capacity to resist, for the very same advantages which raise the spirit above the lower classes, set it up at a height from which it can again sink down infinitely deeper under them. In fact, both planets, Earth and Mars, are the most central rungs of the planetary system, and for their inhabitants we can assume perhaps with some probability a physical condition as well as a moral constitution half way between the two end points. But I prefer to leave this thought to those who find in themselves more reassurance in dealing with unprovable knowledge and more motivation to set down an answer.

CONCLUSION

We do not really know what the human being truly is today, although our awareness and understanding should instruct us in this matter. How much less would we be able to guess what a human being is to become in future! However, the curiosity of the human soul grasps with great eagerness for this far distant subject and strives to put some light on such unilluminated knowledge.

Is the everlasting soul for the full eternity of its future existence, which the grave itself does not destroy but only changes, always to remain fixed at this point of the cosmos, on our Earth? Is it never to share a closer look at the rest of creation's miracles? Who knows whether it is not determined that in future the soul will get to know at close quarters those distant spheres of the cosmic structure and the excellence of their dwelling places, which already attract its curiosity from far away? Perhaps that is why some spheres of the planetary system are already developing, in order to prepare for us in other heavens new places to live after the completion of the time prescribed for our stay here on Earth. Who knows whether those satellites do not circle around Jupiter so as to provide light for us in the future?

It is permissible and appropriate to entertain ourselves with ideas of this kind. But no one will ground future hope on such uncertain imaginary pictures. When vanity has demanded its share of human nature, then the immortal spirit will, with a swift leap, raise itself up above everything finite and further develop its existence in a new relationship with the totality of nature, which arises out of closer ties with the Highest Being. From then on, this lofty nature, which in itself contains the source of blissful happiness, will no longer be scattered among external objects in order to seek out a calming effect among them. The collective essence of creatures, which has a necessary harmony with the pleasure of the Highest Original Being, must also have this harmony for its own pleasure and will light upon it only in perpetual contentment.

In fact, when we have completely filled our dispositions with such observations and with what has been brought out previously, then the sight of a starry heaven on a clear night gives a kind of pleasure which only noble souls experience. In the universal stillness of nature and the tranquillity of the mind, the immortal soul's hidden capacity to know speaks an unnamable language and provides inchoate ideas which are certainly felt but are incapable of being described. If among thinking creatures of this planet there are malicious beings who, regardless of all incitements which such a great subject can offer, are nevertheless in the condition of being stuck firmly in the service of vanity, how unfortunate this sphere is that it could produce such miserable creatures! But, on the other hand, how fortunate this sphere is that a way lies open, under conditions which are the worthiest of all to accept, to reach a blissful happiness and nobility, something infinitely far above the advantages which the most beneficial of all nature's arrangements in all planetary bodies can attain!

ENDNOTES

[1] *[Translator's Note]*: Epicurus (341 BC-270 BC), Greek philosopher, founder of the school of Epicureanism, who taught that natural phenomena are based on the motions and interactions of atoms in empty space.

[2] *[Translator's Note]*: Lucretius (99 BC-55 BC) Roman philosopher, author of *On the Nature of Things*, which presented the philosophical thinking of Epicurus and attempted to combat superstition; Leucippus (c. 450 BC), Greek philosopher who promoted the idea that everything is made up of various indivisible elements called atoms; Democritus (460 BC-370 BC), Greek philosopher, who taught that all matter is made up of indivisible atoms.

[3] *[Translator's Note]*: Rene Descartes (1596-1650), extremely important French philosopher who helped lay the foundations of modern science. As Jaki points out () Descartes was sufficiently worried about what happened to Galileo to curtail his writings on mechanical theory.

[4] *[Kant's Note]*: Part Section 88.

[Translator's Note]: Jaki indicates () that Kant is quoting from *An Universal History from the Earliest Time to the Present . . .*, by George Sale and others (London 1736) and that the italics were added by Kant.

[5] *[Translator's Note]*: Thomas Wright (1711-1786), an English astronomer. Kant appears to have read a summary of Wright's book.

[6] *[Translator's Note]*: James Bradley (1692-1762), professor of Astronomy at Oxford and Astronomer Royal. Kant offers the quotation in German.

[7] *[Translator's Note]*: Tycho Brahe (1546-1601), Danish astronomer famous for his accurate celestial observations made without a telescope; John Flamsteed (1646-1719), first Astronomer Royal.

[8] *[Kant's Note]*: Because I do not have available the treatise mentioned above I will here include what is relevant to this matter in a quotation from the *Ouvrages diverses* of M. de Maupertuis in *Actis Erud*. 1745: The first phenomena are those bright stars in the heavens which are called nebulous stars and which are considered a dense crowd of small fixed stars. But the astronomers, with the help of excellent telescopes, saw them only as large oval areas which were somewhat more luminous than the other part of the heavens. Huygens first came across one in Orion. In the *Anglical*. *Trans*. Halley recalls six such small

areas: 1. in the sword of Orion, 2. in Sagittarius, 3. in the Centaur, 4. in front of the right foot of Antinous, 5. in Hercules, 6. in the girdle of Andromeda. Observing through an 8-foot reflecting telescope, people saw that only one fourth part of these can be considered a collection of stars. The remainder displayed only small white areas without significant difference, other than the fact that one is more circular in shape, another, by contrast, is more elongated. It also seems that in the first group the small stars visible through the telescope could not cause the white glow. Halley believes that from this appearance we can explain just what we meet at the start of the Mosaic creation story, namely, that light was created before the sun. Derham compares them to openings through which shines another immeasurable region and perhaps the fire of heaven. He maintains he has been able to observe that the stars seen near these small regions would be much closer to us than these bright stars. To this the author adds a catalogue of the nebulous stars taken from Hevelius. He thinks of these phenomena as huge bright masses, which through a powerful rotating motion have been flattened. If they were to have the same power of illumination as the remaining stars, the material which makes them up would have to have a massive size, so that when they are seen from a much greater distance than that of the stars, they could still appear through the telescope with a distinct shape and size. However, if they were approximately the same size as the rest of the fixed stars, they would have to be not only much closer to us, but also at the same time have a much weaker light, because at such a close distance and with such a discernible size they nevertheless display such a pale glow. It would be worth the trouble to discover their parallax, to the extent that they have one. For those who say they have no parallax perhaps came to that conclusion about all of them from only some of them. The small stars which we come across in the middle of these limited areas, as in Orion (or even more beautifully in the area in front of the right foot of Antinous, which looks just like a fixed star surrounded with a mist) would, if they were closer to us, be seen either as a sort of projection onto the area or would appear through that mass of stars, exactly as they do through the tail of a comet.

[Translator's Note]: Pierre Louis Moreau de Maupertuis, French mathematician, astronomer, and philosopher, who wrote extensively on the stars and the solar system; Edmond Halley (1656-1742), English astronomer and mathematician and Astronomer Royal; William Derham (1657-1735), English clergyman and natural philosopher, who investigated astronomy to defend religious doctrine; Johannes Hevelius (1611-1687), Polish astronomer, whose a catalogue of stars was published in 1690.

[9] *[Kant's Note]*: See Gellert's fable , Hans Nord.

[Translator's Note] Hans Nord was a fictional confidence trickster who collected money for a public display only to abscond with the cash.

[10] *[Translator's Note]*: The quotation comes from Alexander Pope, *Essay on Man*, Epistle 1. Kant offers the quotation in German.

[11] *[Kant's Note]*: This short introduction, perhaps unnecessary for most readers, I wanted to set down first for those who are in some way insufficiently knowledgeable about Newtonian principles as a preparation to understand the following theory.

[Translator's Note]: As Hastie's footnote at this point reminds the reader, Uranus was discovered in 1781, Neptune in 1846, the moons of Mars in 1877, all subsequent to the time of Kant's essay.

[12] *[Translator's Note]*: Johannes Kepler (1571-1630), German mathematician and astronomer who established the mathematic laws for planetary motion.

[13] *[Translator's Note]*: Christiaan Huygens (1629-1695) Dutch mathematician and astronomer, who discovered one of Saturn's moons and wrote about Saturn's ring.

[14] *[Kant's Note]*: Especially at those accumulations of stars which occur in great numbers together in a small area, as, for example, the seven stars *[the Pleiades]* which perhaps among themselves make up a small system in the midst of the greater one.

[15] *[Kant's Note]*: De La Hire observes in the *Memoires* of the Paris Academy for the year 1693, that he has confirmed from his own observations as well as from a comparison of them with those of Ricciolus a significant change in the positions of the stars in the Pleiades. [*Translator's Note*: Philippe de la Hire (1640-1718), French mathematician and astronomer; Baptista Ricciolus (1598-1671), Italian astronomer.

[16] *Treatise on the Shape of the Stars.*

[17] *[Translator's Note]*: *Asterotheology* was written by the English cleric William Derham (1657-1735).

[18] *[Translator's Note]*: Kant's text reads "inverse relationship" (*Gegenhaltung*). This seems a careless error, since from the sentence it is clear that the relationship is a direct proportion rather than an inverse one.

[19] *[Translator's Note]*: Kant's text has "decrease" (*Abnahme*) rather than "increase." Here again (as in the previous note) there seems to be a careless error in the wording describing the relationship of distance from the sun and eccentricity.

[20] *[Translator's Note]*: Alexander Pope, *Essay on Man*, Epistle III. Kant quotes the German version.

[21] *[Kant's Note]*: I am not investigating here whether this space can, strictly speaking, be called empty. For at this point it is sufficient to observe that all the material which one might come across in this space is much too incapable of exercising an influence with respect to the masses in motion which are the concern here.

[22] *[Kant's Note]*: The start of the self-developing planets is not to be looked for only in the Newtonian power of attraction. In the case of a small particle of such exceptional fineness, this force would be just

too slow and weak. We would rather say that in this space the first development happens through the collision of some elements which unite through the normal laws of combination, until those clusters which develop out of the process gradually grow sufficiently large that the Newtonian power of attraction becomes capable of constantly increasing the size of the cluster through its effect at a distance.

[23] *[Kant's Note]*: This measured circular movement is essentially relevant only to the planets near the sun. For where great distances are concerned, where only the furthest planets or even the comets have developed, it is easy to assume that because the sinking movement of the basic material there is much weaker and the spatial expanse where they are scattered is also larger, the elements in and of themselves already deviate from circular movement and thus must be the cause of the bodies which develop from them.

[24] *[Kant's Note]*: For the particles from the regions near the sun, which have a larger orbital velocity than is required for circular movement in the place where they collect together on the planet offset the deficiency in velocity of the particles from a longer distance away from the sun, which are incorporated into the very same body, so as to run in a circular orbit at the distance of the planet from the sun.

[25] *[Translator's Note]*: Jaki points out () that Kant is referring to an English billion, that is, 1012, rather than to a North American billion, 109.

[26] *[Translator's Note]*: Kant's original text states 277.5 times greater than the Earth, a figure, which, as Jaki notes, indicates Kant's carelessness in checking his manuscript.

[27] *[Translator's Note]*: Georges-Louis Leclerc, Comte de Buffon (1707-1788), one of France's best known, greatest, and most influential natural scientists in the eighteenth century.

[28] *[Translator's Note]*: Jaki observes () that Kant seems to overlook that the word comet comes from the Greek *kome*, meaning *hair*, a clear reference to the tail of the comet, its best-known distinguishing feature.

[29] *[Kant's Note]*: These are the Northern Lights.

[30] *[Translator's Note]*: The ecliptic is the large circle described by the sun's apparent movement during the year. As Jaki notes (), the common plane of reference, which is perpendicular to the sun's axial rotation, makes an angle of about 7 degrees with the ecliptic].

[31] *[Kant's Note]*: Or, what is more probable, with its comet-like nature, which still has its inherent eccentricity, before the lightest material of its outer layer has been completely scattered, the planet had an extended a comet-like atmosphere.

[32] *[Translator's Note]*: the "difference in the diameters" Kant refers to is the difference between the diameter at the equator and the diameter at the poles. If the latter is smaller than the former, then the planet will resemble a squashed sphere.

[33] *[Kant's Note]*: For, according to the Newtonian laws of attraction, a body located inside a sphere will be attracted only by that part of the ball which can be drawn in a sphere around it with a radius equal to the distance which that body stands from the centre. The concentric part located beyond this distance, because of the equilibrium of its forces of attraction, which cancel each other out, has no effect on this, not moving the part either towards or away from the centre.

[34] *[Translator's Note]*: Jean Dominique Cassini (1625-1712), a prominent French astronomer; James Pound, an English cleric and member of the Royal Society.

[35] *[Kant's Note]*: After I set down this remark, I found in the *Reports* of the Royal Academy of Sciences in Paris for the year 1705, in a discussion by M. Cassini of Saturn's satellites and its ring (on page 571 of the second part in the von Steinwehr translation) a confirmation of this conjecture, which leaves hardly a doubt any more about its validity. M Cassini presents an idea which could have been to some extent a small approximation of the truth which we have produced, although at the same time that is inherently unlikely, namely, that perhaps this ring might be a swarm of small satellites, which from Saturn appear just as the Milky Way does from the Earth. This idea can stand if we take for these small satellites the vapour particles which move around the planet with exactly the same motion. Then he goes on to say the following: "This idea was confirmed by the observations which people have made in the years when Saturn's ring appeared wider and more open. For people saw the width of the ring divided into two parts by a dark elliptical line. The part closest to the sphere was brighter than the part furthest away. This line marked, so to speak, a small intervening space between the two parts, just as the width of the space between the sphere and the ring is shown by the greatest darkness between the two."

[36] *[Translator's Note]*: Jean Jacques de Mairan (1678-1771), French scientist and author of a book on the Aurora Borealis. The phrase *figura lenticulari*, Jaki notes, means *in the shape of a lentil*.

[37] *[Kant's Note]*: The idea of an infinite extension of the world has opponents among those who know something about metaphysics and has recently found one in Mr. M. Weitenkampf. If, because of the alleged impossibility of a crowd without number and limits, these gentlemen cannot feel comfortable with this idea, then for the time being I wish merely to ask whether the future consequence of eternity will not contain with it a real infinity of multiple options and changes and whether this endless sequence is not entirely present once and for all in the Divine Understanding. Now, if it was possible that God can effectively create the idea of infinity, which to His mind actually presents everything at once in a successive series, why should He not be able to present the idea of another infinity in a spatially united interconnection and thus make the extent of the world limitless? Since people will seek out an answer to this question, I will avail myself of the opportunity which will present itself to remove the alleged difficulty through an explanation taken from the nature of numbers, where we can perceive with a more precise consideration the following still as a question in need of discussion: whether something which a power accompanied by the Highest Wisdom has produced to reveal itself, is related as a differential

amount to something it could have produced.

[Translator's Note]: Johann Weitenkampf (1726-1758), German theologian who defended the idea of a finite universe.

[38] *[Translator's Note]*: This quotation, like the later ones from von Haller, is from the poem "Unvollkommene Ode über die Ewigkeit" by Albrecht von Haller (1708-1777), a German physiologist and poet.

[39] *[Translator's Note]*: The quotation comes from Alexander Pope's *Essay on Man*, Epistle I. Kant quotes the German and comments in the bracket that it comes from Brocke's translation.

[40] *[Translator's Note]*: Joseph Addison (1672-1719) in *Spectator* 453. Kant quotes the German and notes in the bracket that the translation is by Gottsched.

[41] *[Translator's Note]*: Stephen Hales (1677-1761), an English natural scientist who in 1727 published an analysis of the air.

[42] *[Kant's Note]*: I ascribe to the sun, not without reason, all the inequalities of the firm lands, the mountains and valleys, which we come across on our Earth and on other world bodies. The development of a planetary sphere which changes from a volatile condition into a firm one necessarily brings about such inequalities on the outer surface. When the outer surface solidifies while in the volatile interior parts of such masses the materials are still sinking down to the mid-point in accordance with their gravitational pull, then the particles of the elements of elastic air or fire, intermingled with these materials, are forced out and accumulate under the outer layer which has meanwhile solidified. Under this, they produce large and, in proportion to the sun's cluster, gigantic cavities. The outermost layer just mentioned finally falls into these cavities with various folding patterns and in this way creates, not only elevated regions and mountains, but also valleys and flood beds for more seas of fire.

[43] *[Kant's Note]*: I have a conjecture according to which it strikes me as very probable that Sirius or the Dog Star is the central body in that system of stars making up the Milky Way and occupies the central point towards which all of them are related. If we consider this system according to the design in the first part of this treatise, as a teeming mass of suns which have accumulated on a common plane and which are scattered on all sides of its middle point and yet make a certain, so to speak, circular space, which because of the slight deviations of it from the interrelated plane extends out somewhat in width on both sides, then the sun which is similarly located near this plane will view the appearance of this circularly shaped zone with a shimmering white light as widest on that side where the sun is located nearest to the outermost edge of the system. For it is easy to assume that it is not positioned exactly at the central point. Now, the band of the Milky Way is widest in the part between the sign of the Swan and the sign of the Archer. Thus, this will be the side where the location of our sun is closest to the outermost periphery of the circular system. And in this section we will consider the place where the constellations of the Eagle and the Fox stand with that of the Goose, to be the particular location closest to them all, because there in

the intervening space, where the Milky Way divides, the greatest visible scattering of stars shines out. If we then draw a line approximately from the place near the tail of the Eagle through the middle of the plane of the Milky Way right to the spot on the opposite side, this line must meet the mid-point of the system. And in fact it does meet Sirius with great precision. Sirius is the brightest star in the entire heavens. Because of the happy and harmonious combination of this and its preponderant shape, Sirius appears to merit being considered that central body itself. According to this idea, Sirius would appear directly in the band of the Milky Way, if the location of our sun, which, with respect to the tail of the Eagle, deviates somewhat from its plane, did not cause the visual displacement of the mid-point toward the other side of such a zone.

[44] *[Translator's Note]*: Newton had declared that his laws could not explain the development of the planetary system and that it had been given its present structure by God. In other words, he had denied that his system was capable of determining a mechanical history for the development of the present structure of celestial bodies.

[45] *[Translator's Note]*: The quotation, which Kant gives in German, comes from Alexander Pope's *Essay on Man*, Epistle I.

[46] *[Translator's Note]*: Kant's text has "if" rather than "unless," which seems clearly wrong in the context of the entire sentence.

[47] *[Translator's Note]*: Bernard le Bovier de Fontenelle (1657-1757), French writer.

[48] *[Translator's Note]*: The "son of Philip" referred to is Alexander the Great.

[49] *[Kant's Note]*: Psychological principles have established that, thanks to the present arrangement by which creation has made soul and body mutually interdependent, not only does the soul have to arrive at all ideas of the universe through the association with and the influence of the body but the practice of its power of thinking also depends upon the body's condition, and it borrows the essential capability for thought with the body's help.

[50] *[Translator's Note]*: The quotation comes from Alexander Pope, *Essay on Man*, Epistle II. Kant quotes the German and adds the italics to the last line.

[51] *[Translator's Note]*: the quotation comes from Alexander Pope, *Essay on Man,* Epistle I. Kant quotes the German version.

DREAMS OF A SPIRIT-SEER

Translated by Emanuel F. Goerwitz

CONTENTS

TRANSLATOR’S NOTE
THE EDITOR’S PREFACE.

INTRODUCTION.
I. PROFESSOR VAIHINGER ON KANT’S DOCTRINE OF THE TWO WORLDS AND ITS RELATION TO SWEDENBORG.
END FORMATTED TEXT
A PREFACE

PART FIRST, WHICH IS DOGMATIC.
CHAPTER FIRST.
SECOND CHAPTER.
THIRD CHAPTER.
FOURTH CHAPTER.

PART SECOND, WHICH IS HISTORICAL.
CHAPTER FIRST.
SECOND CHAPTER.
THIRD CHAPTER.

TRANSLATOR'S NOTE

The difficulties which Kant's style presents to the translator into English need not be dwelt upon with those who are familiar with his works. My main endeavour has been to produce a readable translation. I have, therefore, laid stress on the faithful and lucid representation of the author's thought, while the preservation of the periodic constructions of the original was of secondary interest. I am, however, conscious that I have not in all places succeeded in sailing with even keel between the extremes of strictly literal translation and paraphrase.

Emanuel F. Goerwitz.

Cambridge, Mass., U.S.A.,

July, *1899*.

THE EDITOR'S PREFACE.

Kant's "Dreams of a Spirit-Seer, illustrated by those of Metaphysics," was published in the year 1766. His mental attitude at the time has been well described by his latest biographer and critic, M. Kronenberg: *Kant; Sein Leben, and Seine Lehre: München: Beck:* 1897. 8vo. VII., 312. The writer says in regard to the alleged scepticism of Kant about the year 1764: "All around the metaphysicians were still directing their telescopes to the farthest ends of the universe: Kant, on the contrary, having long returned from this high-strung flight, was making himself comfortably at home on earth." (.) Of the "Dreams of a Spirit-Seer" he says: —

"Between the visions of Swedenborg and those of the metaphysicians of his time, Kant drew a surprising parallel. Swedenborg believed himself to be as familiarly acquainted with the beyond as with his own house. Was not the case the same with the philosophers? Kant believed himself to be in a position to explain these delusions, the one by the other, and so to get rid of both.

"So entirely did Kant look down upon Swedenborg and his contemporaries the metaphysicians that he merely played with them, handling them now with serious irony, now with sly humour, sometimes pouring upon them his gallish scorn and dealing them the sharpest blows of his cynical wit. Such a tone is only assumed by one who sees his subject far beneath him. So did Kant hold himself in regard to the metaphysicians, to general philosophical knowledge, yea even to knowledge itself as a whole." (p, 163).

This judgment may be compared with Kuno Fischer: *Geschichte der neu. Phil., Bd.* III., : 2nd Ed., 1869, for remarkable agreements.

That the "Dreams of a Spirit-Seer" was a humorous critique aimed chiefly at the philosophers of his day, using Swedenborg as a convenient because non-combative and comparatively unknown mark for his blows, is now generally conceded. But the century and a half that have elapsed since that time have brought Swedenborg out of his obscurity into light, and his real relation to Kant and the latter's great indebtedness to him is now first seriously arousing the attention of the students of German philosophy. See especially the notices by Professor Vaihinger, of the University of Halle, in his *Commentar zur Kritik d. R. V.*, Vol. II., p, 345, 431, 512, 513, Stuttgart, 1893; and in *Kant Studien*, Vol. I: II., on Kant and Swedenborg: also Heinze's "Observations on Kant's Lectures on Metaphysics" in *Abhandlungen der Sächsischen Gesellschaft der Wissenschaften*. Leipzig, 1894: P. von Linds *Kants Mystische Weltanschauung, ein Wahn der Modernen Mystik;* Munich 1892: Du Prel's Essay on *Kant's Mystical View of the World*, in his edition of Kant's *Lectures on Psychology*, Leipzig, 1809; and *Der Angebliche Mysticismus Kants:* Robert Hoar, Brugg, 1895.

In these investigations it comes to light that not only did Kant find in Swedenborg a system of spiritual philosophy so parallel to that of the philosophers in reasonableness that the validity of the one could be measured by that of the other, but that the very system finally followed by Kant himself when he came, later in life, as a lecturer in the University on Psychology and Metaphysics, to enter upon the domain of these inquiries, was largely identical with that of the "Dreams" he had once affected to be amused at. The fair and rational vision of a *mundus intelligibilis* avowedly erected on the testimony of Swedenborg, in Chapter II. of the First Part of the treatise here published, he amuses himself with tearing down by the negative criticism of Chapter III., little forseeing that in four years' time, for his inaugural dissertation of 1770, he would be choosing no other theme than that of the same vision he had thus destroyed that namely of a *mundus intelligibilis et mundus sensibilis*,and that all through his subsequent teaching and writing, including the *Critique* and the *Religion i. d. Gr.*, he would be finding the basis of his positive idealism only in those principles of the *Arcana* he had once affected to despise. Will not this circumstance account for the instruction given by Kant to his editor Tieftrunk (see Kant's Werke: Edition Hartenstein: Bd. VIII.,

812). “I assent with pleasure to your proposal for collecting and editing my minor writings. Only I wish you would not include writings earlier than 1770. In this case a German translation of my Inaugural Dissertation *De Mundi Sensibilis atque Intelligibilis Forma et Principiis* might form the beginning.” Thus omitting the “Dreams.”

In view of these investigations the importance of the *Traüme* as a potent factor in Kant’s development is so manifest as to make a longer delay in its translation into English inexcusable.

At the same time the growing appreciation among students of the profound philosophic principles which underlie the teachings of Swedenborg make the occasion of this publication an opportune one for placing side by side with the leading affirmations made by Kant in the Dissertation and his University Lectures, a citation of those passages in Swedenborg by which they were evidently suggested or with which they stand in interesting relation.

In this way the “Seer,” however it may fare with the “Metaphysicians” in Kant’s hands, will at least be allowed to speak for himself, and the reader may form his judgments at first hand. To the student of modern philosophical development it will not be time lost to witness here, where it has been least suspected, the first decided and controlling influence of Swedenborg’s spiritual philosophy upon modern idealistic thought.

To aid the reader in arriving at a truer understanding and appreciation of these “Dreams” and of their import in Kant’s entire system I have translated and brought together the recent utterances of German and other philosophers on the subject of Swedenborg’s real influence upon Kant, as shown especially in the latter’s *Lectures on Psychology* and *Lectures on Metaphysics*.

FRANK SEWALL.

Washington, D.C., U.S.A., December, 1899.

INTRODUCTION.

RECENT GERMAN DISCUSSION

OF THE

RELATION OF KANT TO SWEDENBORG.

INCLUDING NOTES FROM

Professor VAIHINGER, *Commentar zu Kants Kritik der Reinen Vernunft:* Vol. II.

The *Kant-Studien*, edited by Professor VAIHINGER at the University of Halle:

The *Archiv für Geschichte der Philosophie*. Berlin: 1895.

Professor Heinze of Leipzig in *Abhandlungen der Sächsischen Gesellschaft der Wissenschaften*, Leipzig, 1894.

P. von Lind: *Kants Mystische Weltanschauung:* Munich: 1892.

Carl du Prel: *Kants Vorlesungen über Psychologie:* 1889.

I. PROFESSOR VAIHINGER ON KANT'S DOCTRINE OF THE TWO WORLDS AND ITS RELATION TO SWEDENBORG.

In his Commentary on "Kant's Transcendental Æsthetic, Lecture i. on Space," where the problem is under discussion whether space be (i.) purely Objective and *a posteriori* (Newton), or (ii.) purely subjective and *a priori* (Kant), or (iii.) according to Treudelenburg's "Third Possibility," at once Objective and Subjective (Leibnitz), Professor Vaihinger introduces a note on Lambert's suggestion. "Our space is a simulacrum of true space" (Lambert's *Recension*, 1773, on *Herz Betrachtungen*, Allg. Deut. Bibli. 20, 228), and quotes Lambert's letter to Kant, 1770:

"I thought that the simulacrum (appearance) of Time and Space in the Thought World could easily be brought into contemplation with your sublime theory." Also Mendelssohn in his letter to Kant, Dec. 23, 1770, regarding time says:

"Time is, according to Leibnitz, a phenomenon, and has, like all phenomena, *something objective and something subjective*."

Kant has, moreover, touched upon the problem in the Dissertation (*i.e.*, the Inaugural Dissertation on the Two Worlds: 1770). He asks outright in § 16:

quonam pricipio ipsa haec relatio omnium substantiarum nitatur, quae intuitive spectato vocatur spatium?

To what seems to us *spatium* there corresponds then an *ipsa substantiarum relatio*. He answers this *subtilis quaestio* thus: that the connection of all appearances in space is a reflection (Gegenbild) of the connection of all substances in the primal Being, "*ideoque spatium, quod est conditio universalis et necessaria compraesentiae omnium sensitive cognita, dici potest omnipraesentia (sic) phenomenon (Scholion 22)*." "Therefore Space, which is the universal and necessary condition of the united presence of all things, sensitively known, may be called omnipresence as phenomenon, or the phenomenal omnipresence . . . ." Still Kant is unwilling to enter farther upon such mystic surmises (*indagationas mysticas*), which, he says, suggest Malebranche, but which more truly recall Swedenborg, and he very distinctly asserts further on (§ 27) that "it is impossible for the human intellect to know in *substantiis immaterialibus* these *relationes externas* which correspond to Space as the condition of the relation of material but only apparent (erscheinende) things. Kant therefore recognizes relations of the *things in themselves* which correspond to Space, but regards them as unknowable. On the other hand, Lambert's suggestions hold good still and with all the more force: That to reason by analogy — at least to a certain extent — from the spatial relations of appearances to the true relations of things in themselves is not

only allowable but required."* (Vaihinger: Kant Commentar: ii., .)

The Doctrine of the Reason as taught by Swedenborg and its bearing on our knowledge of reality may in general be seen from the following extracts from the "Arcana," and other works:

"Three things constitute the external man: the rational, the scientific, and the external sensuous. The rational is interior, and is that through which the interior man is conjoined with the external; in itself it is nothing unless affection flows into it and makes it active; and it thence becomes such as is the affection. When the affection of good inflows, this becomes in the rational the affection of truth; the contrary when the affection of evil inflows." (Swedenborg's Arcana Coelestia, 1589.)

"What goes on in the internal man cannot be apprehended by the man himself because it is above the rational from which he thinks. To the inmost or internal man is subject the rational faculty or principle which appears as if belonging to man. Into this there inflow through the internal man the celestial things of love and of faith; and through this rational down into the scientific things which belong to the external man. But the things which flow in are received according to the state of each." (Ibid., 1941.)

"Man is born into nothing rational, but only into the faculty of receiving it, and as he learns and imbues all things so he becomes rational. This is done by the way of the body. But there is something constantly flowing in from the interior which receives the things thus entering [through the bodily senses] and disposes them into order. Hence is their order and the relationships among them, from which it is evident that the rational faculty of man is from divine celestial good as its father." (Ibid., 2557.)

"The things of reason illustrated by the divine are appearances of truth. All appearances [phenomena] of truth in which is the divine are of the rational faculty, insomuch that rational truths and appearances of truth are the same, whereas scientific things belong to the natural plane. Rational truths can never be and come forth except from an inflowing of the divine into the rational faculty of man; and through the things of reason into the scientific things which belong to the natural plane of the mind. The things that then

take place in the rational appear in the natural plane as an image of many things together in a mirror." (Ibid., 3368.)

"Rational things, or what is the same, appearances of truth, that is, spiritual truths, are not knowledges [acquired by the senses, F. S.] but are in knowledges; for they are of the rational or internal man. For knowledges being of the natural man are vessels which receive rational things." (Ibid., 3391.)

"When man is in the world his rational is distinct from his natural [plane of thought]; insomuch that he can be withdrawn from external sensuous things and in some degree from interior sensuous things and be in his rational, thus in spiritual thought." (Ibid., 3498.)

"It is not he who can ratiocinate from scientific facts who enjoys the rational faculty. A fatuous lumen produces this skill. But he enjoys the rational who can see clearly that good is good and truth truth; consequently that evil is evil and falsity falsity. Thus the scientific [sensuous] knowledges are means for perfecting the rational faculty and also for destroying it; and those who by means of scientific knowledges have destroyed their rational faculty are more stupid than those versed in no knowledges." (Ibid., 4156.)

"The faculty of thinking rationally regarded in itself, is not of man, but of Cod with him. Upon this depends human reason in

general." (I

ivine Love and Wisdom, 23.)

ON THE RELATION OF MAN TO OTHER THINKING BEINGS.

From Professor Vaihinger's Kant Commentar. Vol. II.

"Kant delights in the assertion that we are imprisoned by the senses, i.e., by the limitations of sensuous appearances . . . 'The highest Being will surely not be subject to all these appearances which sense unavoidably imposes on those intelligences derived by us through experience.' (A. 640). 'All Nature exists only for us . . .' This Kant formulates expressly as the result of the Esthetic in the Prolegomena, 36: 'How is nature possible in material relation, that is, viewed as the concept of appearances? how are Space, Time, and what fill these as objects of sensation possible? The answer is: By means of the peculiar quality of our sensuous faculty? (unserer Sinnlichkeit): according to which our Sense in a way of its own is moved by objects which in themselves are not known to it and are altogether different from these appearances.' The appearance of Space answers therefore only for this empirical nature and for us as empirical subjects: it is not valid either for all objects in themselves, nor for all subjects ..." * .

On Time and Space in the Spiritual World, see Swedenborg in Divine Love and Wisdom, as follows:

The above reference of Kant to "other thinking beings" is not, as has been so generally supposed, a mere critical suggestion, but is made in thorough earnest. The existence and nature of the "Spirit World" was from the beginning an interesting problem with Kant. In the Natural History of the Heavens, R. VI., 1 79, and especially 206, "On the Inhabitants of the Stars," Kant sets forth his theories about the "various classes of intelligent beings," the "kinds of thinking natures," and

"In the spiritual world the progressions of life appear to be in time; but since state there determines time, time is only an appearance. Time in the spiritual world is nothing but the quality of state. Times ate not there constant as in the natural world, but change according to the state of life, having relation especially to changes of wisdom. Time there is one with thought from affection. (70-74.)

"But time and space as fixed or measured by material standards are proper to nature, and as such belong only to a limited world, and cannot be applied to infinite being. Time and space belong to nature, just as finiteness or limitation belong to a created world. For nothing which is proper to nature can be predicated of the Divine, and space and time are proper to nature. Space in nature is measurable, and so is time. Nature derives this measurement from the apparent revolution and annual motion of the sun of this world. But in the spiritual world it is different. (73.)

"Times which are proper to nature in its world are in the spiritual world pure states which appear progressive, because angels and spirits are finite; from which it may be seen that in God they are not progressive, because He is Infinite, and infinite things in Him are One; and hence it follows that the Divine in all time is apart from time. (75.)

Schopenhauer in his essay, "Versuch ueber Geisterseher and was damit zusammenhaengt," in the volume entitled "Parerga and Paralipomena," Vol. I., p, 328, calls attention to an existing order of things:

"Entirely distinct from that of nature where the purely formed

on the various "dwelling-places" of these "intelligent creatures." He speaks at length about the dependence of the "spiritual faculties" of the various Planet-inhabitants on the grosser or finer, heavier or lighter, matter as determined by the "distance of these abodes from the sun ..." The inhabitants of Jupiter or Saturn belong to the "most exalted class of intelligent creatures. These at least have a different Time-idea from ours; they are not subject to death in the same degree that we are ..." Man occupies a middle ground between these m<5st excellent and the more imperfect grades of

laws of nature do not apply, hence where time and space do not separate individuals any more, and where separation and isolation resulting from time and space do not offer obstacles to influence of will or to communication of thought. . . . Here, be it said, that tfie true idea of actio in distans is that the space between the worker and the worked upon, whether full or empty, has no influence at all on the working; it is the same whether the distance be an inch or a "billion of Uranus orbits." (.)

We commonly imagine that the reality of a spiritual world is overthrown when we have shown that such a world is only subjectively conditioned. But what weight can that argument have with one who knows from Kant's doctrine how strong a share of subjective conditions is involved in the appearance [to our senses] of the corporeal world; how for instance this world with the space in which it stands, the time in which it moves, and the causality in which the being of matter consists, according to its whole form therefore, is only a form of brain-functioning, according as the impressions are awakened by shock on the nerves of the sense organ." (.)

And this shock, which it is the main purpose of Schopenhauer in this essay to prove, may really occur from internal as from external causes. And therefore, as he says, "there remains left only the question as to the Ding an sick."

11

"thinking natures."* These thoughts, to which by Kant "probability" is frankly attributed, are carried out at length in the "Dreams of a Spirit-seer, &c.," in the half serious, half ironical style which characterises this remarkable work. (Du Prel makes another application of this thought: The Planet-dwellers; 1880, p-175.) See Fortschr. d. Met. Ros. I., 497: "We could imagine an immediate representation of an object, not through the conditions of sense, but by the understanding. But we have no tangible idea of such knowledge. Still, it is necessary for us to think of such in order not to subject all beings capable in intelligence to only our way of seeing things. For it may be that some world-beings might behold the same objects under another form. It can also be that this form is, and of necessity must be, the same in all world-beings, although we do not understand this necessity." Kant refers to this last possibility also later in his Note II. to the second edition of the ^Esthetic, but remarks that this extension of the Space* Compare Swedenborg's De Telluribus, &c.: "Earths in the Universe and their Inhabitants, &c.: also their Spirits and Angels: from what has been heard and seen ..." This work appeared in sections inserted in successive volumes of the Arcana from the year 1749 to 1756, and was published in a volume in London in 1758. Kant's Theory of the Heavens appeared in 1755. Swedenborg also treats of the inhabitants of Jupiter and Saturn as described by the spirits from those planets in the spiritual world. He, too, treats of their character in relation to their planetary conditions, but describes them mainly as to their spiritual place or function in relation to the Maximus Homo or entire order and form of the heavenly society.

12

view to "all finite thinking beings" would not change its subjectivity.

Kant declares very distinctly in the Grundl. z. Met. d. Sitten: 3, Abschnitt, Ros. VIII., 84: "that the world of sense may be very different according to the difference of sense perception in various world beholders, while the world of understanding which lies at its foundation remains always the same." Kant has therefore adhered in all earnest, even in his "critical" period, to this idea conceived at an earlier time. Vaihinger: Kant Commentar II., p-346.

In a chapter devoted to a discussion of the Origin of Kanfs Doctrine of Space and Time, especially as to whether Kant's attitude in the year 1770 as represented by the Dissertation on the Two Worlds was wholly the result of his own thinking or caused partly by Leibnitz' Nouveaux Essais, with its clearly

marked distinction between the mundus sensibilis and the mundus intelligibilis, as well as by other external influences, Prof. Vaihinger, in a footnote remarks as follows:

"Laas calls attention to the influence of Euler, whose 'Letters to a German Princess,' 1769, Kant quotes very favourably in the Dissertation 27, 30. The same author, in Anschluss an Diihring, Krit. Gesch. d. Phil., 396, finds in Kant's dissertation Swedenborgian influences, a view at first surprising but not to be dismissed too abruptly. Attention has been already called to this subject (referring to the passages above quoted from

p, 344). We only need to recall that in the 'Dreams' I. 2 and II. 2 Swedenborg's theory of the 'Two Worlds' is thoroughly discussed, and that Swedenborg, who regarded the sensuous world in space as only a 'Phaenomen' of the unspatial spiritual world, applied precisely the same terms to both worlds which Kant has used: mundus intelligibilis et sensibilis. Compare also Kant's Vorl. ueber Met. herausg. v. Poelitz (1821), S. 257. The same passages have led also Riehl, Krit. I., 229, to accept Swedenborg's influence upon Kant. Compare my review of the edition of Kanfs Vorlesungen iiber Psychologie: mit einer Einleitung: 'Kant's mystische Weltanschauung,' by Du Prel (1889), in Arch. f. Gesch. d. Phil. IV., 721 ff.* If the last author considerably

Says Kant, as quoted by Du Prel:

"The thoughts of Swedenborg are in this connection (that is, with regard to the two worlds) very sublime. He says the spiritual world constitutes an especially real universe; this is the intelligible world, mundus intelligibilis, which must be distinguished from the sensible world, mundus sensibilis."

"Through Kant's 'Lectures on Psychology,' his 'Dreams of a Spirit-Seer' are placed in an altogether new light. One might suppose that this work was so clearly written that an erroneous interpretation of it would be an impossibility, but the aversion of our century to mystic thinking has brought about a misconception o/ the 'Dreams.' It has been interpreted as a daring venture of Kant's genius in making sport of superstition; the accent has been laid on Kant's negations, and his affirmative utterances have been overlooked. The 'Lectures on Psychology' now show, however, that these utterances were very seriously intended; for the affirmative portions of the 'Dreams' agree very thoroughly with the lengthier exposition of the 'Psychology,' and the wavering

exaggerates the connection of Kant with Swedenborg, still we are not to fall into the other error of denying altogether a positive relation of Kant to Swedenborg which shows itself occasionally even in the period of the 'Critique,' as for example Critique of Pure Reason: A. 394: A. 808: B. 836 (idea of the Corpus mysticum of rational beings). Critique of the Practical Reason, I. 2, 7 (Ros. VIII., 242; Hart V., 112)." Vaihinger: Kant Commentar II., .

Finally, in a chapter of General Observations, the author compares Kant's intuitus originarius with Swedenborg's "pneumatische Anschauung" or "Soulvision":

"As B. Erdmann (Reflex II., 313) rightly remarks,

attitude of Kant is here no longer perceptible." (Du Prel Introduction to Kant's "Lectures on Psychology," pp. vii., viii.)

"The faculty ascribed to Swedenborg answers completely to Kant's conception of a being inhabiting two worlds at the same time." (Du Prel, Ibid., p. xxiv.)

That Kant at the time of the letter to Fraeulein von Knobloch felt the deepest interest in Swedenborg is freely admitted by Robert Hoar in his Inaugural Discussion, entitled Der Angebliche Mysticismus Kanfs.

Brugg: 1895.

"So soon as Swedenborg's 'Arcana Coelestia' was printed, for whose publication he had been eagerly waiting, he bought the volumes at seven pounds sterling, and this at a time when Kant, the privat-docent, was anything but well off, and when that amount of money meant more than it does now. That he also studied other works of Swedenborg besides the 'Arcana,' appears from a letter of Hamann to Scheffner, Nov. 10, 1784, where he mentions Swedenborg and Kant: 'As our Kant at that time prescribed to himself all the works of the Dreamer, so I had the patience to wade through the whole set of thick Quartos."

15

the acceptance of this 'soul-vision' stands in manifest connection with the 'philosophic invention' of a mundus intelligibilis with its 'spiritual' constitution. The spiritual world is visible only to the spiritual sight. Man does not possess this; only God does. But that man may come to possess this vision which is for a time denied him, Kant does not deny. Indeed, the immortality of man consists in just this possession, in the change from the sensuous spatial vision into the timeless and spaceless spiritual vision: and this is itself 'the other world.' The other world is therefore not another place, but only another view of even this world. This hypothesis appears in the 'Dreams;' also in the period between 1770 and 1780 in the 'Lectures on Metaphysics,' ; and even in the Critique of Pure Reason, A. 393; especially in the Methodenkhre, A. 779, where Kant admits of our accepting such a "transcendental hypothesis," yea, approves of it. He proposes, indeed, in the same line of thought, the following hypothesis: 'That this life is nothing more than the mere appearance, i.e., the sensuous semblance of the pure spiritual life, and the whole sense world is but a picture which hovers before our present modes of knowing, and, like a dream, has no reality in itself; and that, if we should know and see things and ourselves as they really are, we should see ourselves in a world of spiritual natures.' That 'world of spiritual natures' constitutes then that timeless 'corpus mysticum of rational beings' (A. 808, B. 836). Of this corpus mysticum Kant

16

has already spoken in the 'Dreams,' where he mentions the 'spiritual body' and the 'society of spirits' (Ros. VII., A. 96).* These expressions of Kant offered at

On the change from the natural to the spiritual world Swedenborg says:

"MAN AFTER DEATH IS IN ALL SENSE, MEMORY, THOUGHT, AND AFFECTION, IN WHICH HE WAS IN THE WORLD, AND LEAVES NOTHING EXCEPT HIS EARTHLY BODY.

"That man when he passes out of the natural world into the spiritual, as is the case when he dies, carries with him all things that are his, or which belong to him as a man, except his earthly body, has been testified to me by manifold experience; for man when he enters the spiritual world, or the life after death, is in a body as in the world; to appearance there is no difference, since he does not perceive nor see any difference. But his body is then spiritual, and thus separated or purified from earthly things, and when what is spiritual touches and sees what is spiritual, it is just as when what is natural touches and sees what is natural: hence a man, when he has become a spirit, does not know otherwise than that he is in his body in which he was in the world, and thus does not know that he has deceased. A man-spirit also enjoys every external and internal sense which he enjoyed in the world; he sees as before, he hears and speaks as before, he also smells and tastes, and when he is touched, he feels the touch as before; he also longs, desires, craves, thinks, reflects, is affected, loves, wills, as before; and he who is delighted with studies, reads and writes as before. In a word, when a man passes from one life into the other, or from one world into the other, it is as if he passed from one place into another; and he carries with him all things which he possessed in himself as a man, so that it cannot be said that the man after death, which is only the death of

the earthly body, has lost anything of himself. He also carries with him the natural memory, for he retains all things whatsoever which he has in the world heard, seen, read, learned, and thought, from earliest infancy even to the end of life; the natural objects, however, which are in the memory, because they cannot be reproduced in the spiritual -world, are

once a welcome meeting ground to the 'mystics,' from Jung-Stilling down to Du Prel. Schopenhauer has also turned Kant's transcendental idealism to the support of mysticism as occasion has offered; but especially was Jung-Stilling an admirer of the Esthetic, because he traced through its involved argumentation the direct influence of Swedenborg. The latter's ideas Kant calls "very sublime." (Metaphysik, Ed. Poelitz, ; compare Du Prel, Kant's Vorlesungeniiber Psychologic, 1889; comp. Riehl, Krit. I., 229).

Swedenborg says: The Spiritual World is a very real

quiescent, as is the case with a man when he does not think from them; but still they are reproduced when it pleases the Lord. 1 such is the state of man after death, the sensual man cannot at all believe, because he does not comprehend it; for the sensual man cannot think otherwise than naturally, even about spiritual things

"But still the difference between the life of man in the spintu world and his life in the natural world, is great, as well with respect to the external senses and their affections, as with respect to the internal senses and their affections. Those who are in heaven perceive by the senses, that is, they see and hear, much more exquisitely, and also think more wisely, than when they were in th world; for they see from the light of heaven, which exceeds by many degrees the light of the world; and they hear by a spiritua atmosphere, which likewise by many degrees surpasses that of earth The difference of these external senses is as the difference between sunshine and the obscurity of a mist, in the world and as the difference between the light at mid-day and the shade a evening; for the light of heaven, because it is divine truth, gives to the sight of the angels to perceive and distinguish things tl most minute. Their external sight also corresponds to the inter sight or to the understanding; for with angels one sight flows in the other, so that they act as one; hence they have so great acu ness .From "Heaven and Hell," Nos. 461, 4 6z

universe. It is the mundus intelligibilis which must be distinguished from this mundo sensibili. He says that all spiritual natures are connected with one another, &c. Even now our souls stand in this connection and society and, indeed, in this very world where we are; only we do not here see this association, because here we enjoy only the sensuous vision. But although we cannot see it, we are nevertheless now in this spiritual society. If this hindrance to our spiritual vision were once removed, we should see ourselves in the midst of this spiritual society, and this is the 'other world,' which is not a world of other things, but of the same things seen differently by us."

"Whether these words date from 1788 or from 1774 (Erdmann, Phil. Mon. XIX., 129, properly chooses the latter), they admit perhaps of the conclusion that Kant found himself in sympathy with Swedenborg in this contrast between the sensuous and the intelligible worlds, so that the Dissertation of 1770, and with this the Esthetic, do stand, in however loose, still, a very positive relation to the Dreams of 1766, and so with Swedenborg himself. But the wildly fermenting must of the Swedenborgian Mysticism becomes with Kant clarified and settled into the noble, mild, and yet strong wine of criticism."

To this paragraph Prof. Vaihinger adds this footnote:

"Notwithstanding, or rather for this very reason, would it be entirely unjust to classify Kant among the

‘mystics’ in the modern sense. Even though certain

Swedenborgian conceptions had, to some degree, entered into his position of 1770, which we have admitted to be entirely possible, still, even in 1770 Kant had declined to enter further upon such indagationes mysticas. As completely as Kant from the middle of the year 1770 set himself to the working out of the germs of his Criticism, i.e, his critical doctrine of experience, as this is developed in the Analytic, just so completely must henceforth all serious contemplation of Swedenborg’s phantasies be given up. That he had, for a time, lent an ear to these phantasies served henceforth as a warning against any attacks from Swedenborg’s delusion. If he speaks in the Critique of Pure Reason of the corpus mysticum, still this is not mysticism, for the grossly dogmatic teaching of Swedenborg becomes changed in Kant to merely “a bare but still practical idea.” If a somewhat drastic comparison may be allowed, one might say: as little as the various tarproducts are tar itself, so little are these ‘ideas’ of criticism to be identified with dogmas of mysticism. Kant’s world of experience, governed, as it is, by the ‘analogies of experience,’ excludes all invasion of the regular system of nature by incontrollable ‘spirits’; and the whole system of modern mysticism, so far as he holds fast to his fundamental principles, Kant is ‘bound to forcibly reject.’” Vaihinger, Kant Commentar, vol. II., p, 513.

II.

OBSERVATIONS BY THE PRESENT EDITOR.

With these sober and rational conclusions of Professor Vaihinger regarding Kant’s relation to existing “mysticism,” meaning, as he doubtless does, modern “spiritism,” every one will concur, and none more readily and heartily than the followers and admirers of Swedenborg.* He more impressively and more effectually than any subsequent writer has warned his readers against the delusions and snares of the so-called modern “medium” and the mis-named “spiritual” seance. We would only call attention here to the misapprehension to which the concluding note of Professor Vaihinger might give rise, namely, that, because Kant rejects the absurdities of modern spiritism, therefore we are to cancel from his system all influences from Swedenborg’s teaching. As matter of fact, a student equally conversant with both systems those of Kant and Swedenborg would see in the reserve of Kant over against Swedenborg’s “revelations from things seen and heard” the only attitude possible to a critical student of the powers of pure reason to evolve knowledge a priori or from itself. The great mission of Kant was to establish just

See Note 37: to of the “Dreams.”

this negative or neutral ability of the reason. It can neither create a knowledge of the spiritual world, nor can it deny the possibility of such a world. It can affirm indeed the rationality of such a conception, but the reality of it does not come within its domain as pure reason. It is interesting to note all through Kant’s “critical” period this forced attitude of neutrality as long as the inquiry is simply and solely as to the power of the reason as such to create a knowledge of things transcending experience. He is strictly and manfully consistent with himself in rejecting as conclusions of pure reason any experiences of an objective world experimentally observed, whether on this material plane of existence or any other. To refuse to deny the possibility of other planes of existence and other modes of knowing than we now experience, is as far as he will go. As for admitting the direct communication of “spirits,” or of the seer himself whose system of the two worlds he has so carefully studied, as elements of purely rational knowledge, this was of course out of the question. The nearest approach to the break down of the barrier

between Kant's "pure reason" and Swedenborg's knowledge ex visis et auditis in mundo spirituali, is in the ^Esthetic with its doctrine of the subjective origin of Time and Space. Here of course Kant throws down all his defences against whatever charge of idealism or spiritualism. The question is no longer, can an "intelligible world" exist? or, are there existences other than that of which we become aware through the

22

senses of this body? Since the spatial extent and the endurance, or what we would call the "reality," of even this sensuous world is seen, in the ^Esthetic, not to exist in the world itself but in something more real, of which we are in some secondary sense subjectively the agents the real question remaining is, granting that many such worlds may exist and with them the various modes of cognition, what connection of these worlds and their mutual relation or their internal order shall we regard as consistent with the demands of pure reason? And here it is that Kant's recognition of Swedenborg's system of the two worlds and their correspondence as "sublime" finds its real and only important significance. Neither of the two great system builders asks the support of the other. Their mutual testimony, while of use for illustration, would be only a source of weakness if accepted in a constructive sense. If Swedenborg has given future spiritual philosophy the legend seen in one of his symbolic visions: nunc licet intellectualiter in t 'rare in mysteria fidei, he would resent any trifling with that fair instrument, the intellect, through a bias of whatever kind, spiritual or anti-spiritual. Kant was equally consistent in saying to spirits and to spirit-seers: My mission is neither to confirm nor reject your messages, it is to define the limits of the intellectual judgment itself, and to keep the mind a clear and perfect instrument for the disposing of all subjects that are brought for its reception and determination. As Kant was necessarily critical, this being the

23

office of the pure reason itself, so was Swedenborg dogmatical, this being the office of experience. But the dogmas of Swedenborg's experience lie, unlike other dogmas, according to Swedenborg's repeated asseverations, subject always to the verdicts of "sound reason," and the soundest reason in Kant is, as we see, that wherein his fundamental principles are identical with those of Swedenborg.

Professor Vaihinger's simile of the fermenting must and clarified wine is too happy a one to be rejected altogether, even if the application be somewhat faulty. Not alone with Swedenborg, but with all investigators, including especially a man like Kant, the crude facts of experience are what truly constitute the fermenting "must," so long as they have not, by reduction and clarifaction from error, become settled into the wine of a thoroughly rational, harmonious, and consistent system. The process of the reduction of experimental knowledge into rational intelligence is what is constantly going on. But it would be a mistake to conceive of Swedenborg as merely the collector of crude experiences, however truly his visa et audita may impress a hasty reader as such: his knowledges are also elsewhere in his own works reduced to the "wine" of a system as profound, as clear, and as steady as that of any of his contemporaries. That so able a judge as Professor Vaihinger should find them in the clear and vigorous depth of Kant's best reasoning, is only another tribute to their universal and enduring value. FRANK SEWALL.

III.

Professor Vaihinger, in the Archiv fur Geschicte der Philosophic, 1895, Berlin, calls attention to the work of P. von Lind: Kants Mystische Weltanschauung, ein Wahn der Modernen Mystik: Munich, 1892, in which

the author criticises Du Prel's favourable view of Kant's so-called mystic tendency, and remarks that:

Lind has correctly pointed out that Du Prel has interpreted the Trdume too favourably for Swedenborg, but still he fails to recognise that Kant must have had a strong sympathy for the metaphysical hypotheses which he brings forward to explain Svvedenborg's phantasies.

The well-known place in which Kant calls certain views of Swedenborg (regarding the two worlds to which we belong) "sublime," Lind endeavours in vain to interpret ironically. I called Du Prel's attention to this passage, which occasioned his new edition of the Kantian "Lecture on Psychologic." The passage also, Heinze admits, points out an inner principielle relation between the doctrines of both, which Kant discovered; indeed he took perhaps this doctrine of two -worlds from Swedenborg direct. But only the doctrine! Not Swedenborg's pretended empirical proofs, which Kant has always discarded as phantasies. (Compare my Index of Du Prel's edition in Archiv. IV., 722, and also my Extracts in Commentary, II. 5126). But Du Prel is in error, in that from that agreement in single points of theory he concluded that Kant would give up his opposition to the Praxis in view of the facts of modern spiritism. Lind has done valuable service in showing that Kant knew very familiarly this pretended material of facts, and always rejected it with the same determination. Lind has shown this by many extracts from Kant's works, especially from the Anthropology. On the other hand Lind goes far beyond the mark when he seeks to

dispute away the "transcendental subject" of Kant, whose relationship to the spiritual Ego of Swedenborg is unmistakable. . . . This is not affected either by Von Land's further explanation in Hallier's Recension of his article in the Altpr. Manuscript XXIX., 449f, on these questions. Compare also the favourable comment on Von Lind's article by Guttler, in the Zeitschr. f. Philos., Bd. 104, S. 146-152, and also the there cited article in the Zeitschrift, "Sphinx," 1892 and 1893.

The well-known testimony of Kant in Jachmann, that he "has nothing to do with mysticism," refers only to the practices (of spiritism), and to the Mysticism of the Feelings; it does not apply to the rational belief of Kant in the "corpus mysticum of the intelligible world."

IV.

Together with the German critics above cited, President Schurman, of Cornell University, in the Philosophical Review for March, 1898, also makes note of the inevitable return of Kant's mind to those ideas of the corpus mysticum, and of a mundus intelligibilis, which he tries in vain in his work on Swedenborg to laugh away.

Professor Schurman says:

"The disparity between the reach and the grasp of his thought engendered in him a bitterness of spirit, the pathos of which is unknown to the mere sceptic. Hence the still sad music which he that hath an ear may hear beneath the banter and the persiflage of Swedenborg and Metaphysics.

"In the 'Dreams of a Spirit-Seer,' we have the critical part of the 'Right Method in Metaphysics.' Here Swedenborg serves as a whipping post for the Metaphysicians whom Kant scourges most unmercifully. Knowledge of the supra-sensible is put on the same level with arts of necromancy. In the one case it is a dream of sense; in the other a dream of reason in both an illusion, (.)

"But though Kant, in virtue of the divorce between the theoretical and practical element of his thought, gibed at the metaphysical proof of those dear interests, which his heart was still open to shelter, it required some effort to overcome the rationalizing aspirations of early years, and the struggle occasionally found vent in a bitterness of feeling like the hatred of a deserted friend or the despair of a rejected lover."

No better illustration of this return of Kant's mind to the spiritual realities so vividly impressed upon him by

Swedenborg could be desired than that which is afforded in the following extracts from Heinze's "Observations on Kant's Lectures in Metaphysics," which fully bear out all that Professor Vaihinger has asserted as to the deep hold that Swedenborg's doctrine of the two worlds had taken on Kant's mind. I have translated them from the Abhandlungen der Sachsischen Gesellschaft der Wissenschaften: Leipzig, 1894.

V.

EXTRACTS FROM PROFESSOR HEINZE'S

"OBSERVATIONS ON KANT'S LECTURES ON METAPHYSICS."

As to the state of the soul after death Kant will say nothing with assurance, since the limits of our "reason" stop here. Nevertheless he speaks -with more certainty than one -would expect from this precaution!

After death the soul possesses self-consciousness, otherwise it would be the subject of spiritual death, which has already been disproved. With this self-consciousness necessarily remains personality and the consciousness of personal identity. This and the self-consciousness rest upon the inner sense which remains without body, and thus the personality remains.

But if the body is a hindrance to life and yet the future life be the perfect life, then it must be purely spiritual; the soul cannot therefore resume its body. If we ask as to the future place of the soul we are not to think of the separation of the soul from the body as a change of place, since the soul has no determined place in a corporeal world, and, in general, occupies no place, but is in the spiritual world and in communion with spirits.

If the soul is in the society of good and holy beings then it finds itself in heaven; if with the evil, then in hell. Thus the soul does not enter into hell if it has lived wickedly, but it will only now find itself in the society of evil spirits, and this is called being in hell; and so conversely with heaven.*

Similarly in the "Religion within the Bounds of the Pure

Swedenborg, in "Heaven and Hell," says "That the Lord casts no one into hell, but evil spirits cast themselves in," &c. (545.)

Reason," Kant shows heaven to be the Seat of Righteousness, that is, the association with all the good. The Resurrection and Ascension of Christ signify, "when regarded as ideas of reason," the beginning of the new life, and the entrance into the above named association. (Religion within the Bounds of the Pure Reason, .)

It is remarkable how Kant proceeds further to describe without any hesitation the condition of the soul after death, in that it exchanges its sensuous vision which it enjoyed during life, with the spiritual vision, and that this is the other world! (Politz, .)

As regards the objects of that world they remain the same; they are not different in substance but only changed in being seen spirittially!

Erdmann in his Reflexionen, No. 1277, remarks on this passage:

"The other world will not present other objects, but only the same objects seen (intellectually, that is) in their relations to ourselves; and the knowledge of things through the divine vision, and at the same time

the feeling of blessedness through this, is no longer the world but is heaven."*

When one comes into the other world he does not come into connection with other things, as if with another planet, but one remains in this world, only having a different vision. The other world is heaven for me if I have lived a righteous life and enter into the society of such righteous spirits, and therewith enjoy spiritual vision. It is true this view of the other world cannot be demonstrated, but it is a necessary hypothesis of reason (which can be maintained against its opponents). t

Kant here becomes so enthusiastic as to call "very sublime" the thought of Swedenborg about the spiritual world, which according to him [Swedenborg] is a very real universe even though in the work "The Dream of a Visionary," &c., he had called Swedenborg

This reflection of Erdmann is evidently an attempt on the part of the modern decadent philosophy to adapt Kant's truly splendid conception to the materialism of modern thought in explaining away a real life after death and reducing heaven to a certain state of mind in this world. F. S.

t Wanting in Politz.

the Arch-fanatic and enthusiast and had remarked of his great work that it consists of "eight volumes full of nonsense."

That Kant here uses the word sublime in an ironic sense, as Lind tries to show in his work on "Kant's Mystic View of the World," no one can admit, since Kant's view, as here presented, bears at least a resemblance to the idea of Swedenborg. Nor is there anything contradictory in the fact that Kant finds something inconsistent in Swedenborg's doctrine of one's being able to see in a certain manner the society of departed spirits with which one's own soul, which is not yet departed, stands associated as a spirit. Naturally; since the soul in this world has only sensuous vision and cannot at the same time have spiritual vision, one cannot be wholly in this and in the other world at the same time. (Heinze, .)

This inclination of Kant to Swedenborg at the time of these lectures (1775-1780) is not so surprising, since in his "Inaugural Dissertation" Kant himself clearly distinguished between the two worlds, the mimdiis sensibilis and the tnundus intelligibilis, and in this it is probable that he was influenced by Swedenborg.

Kant differs distinctly from Swedenborg in that he does not believe in the possibility of the association of any soul which is still bound to the body with absent souls; as he also rejects the idea that souls which spiritually are already in the other world appear in visible acts in this visible world. If we accept this, then there is no more use of reason in this world at all, for then the spirits can be made to account for many transactions.

It is of this kind of vision or representation that Kant speaks in his earlier* and his later works. His utterances in the "Critique" leave the impression that he has not entirely rid himself of these ideas of the Lectures.

In the "Paralogism of the Pure Reason" (, German edition), he says: "The idea that the thinking subject could have thought before connection with the body, would be thus expressed: 'Before the beginning of the kind of sensation wherein something appears to us in space, the same transcendent objects which in our present state appear as bodies may have been seen in an entirely different way!'

"The idea that the soul also after the body's death could still

"Dreams," &c., S. 27.

think, would take this form: 'If the kind of sensation whereby transcendental objects and those at present

entirely unknown appear as a material world should cease, still all vision would not thereby cease, and it would be quite possible that even the same unknown objects should continue, although not indeed under the aspects of bodies, but still continue to be knowable to the thinking subject.'"

It is true he speaks altogether in the critical manner regarding these views, insisting that dogmatically nothing can be adduced either for or against them.

[Compare "Lecture on the Philosophy of Religious Doctrine," : "Of this immediate vision of the understanding have we as yet no notion: but whether the departed soul, as intelligence, instead of the sensuous vision, may not obtain some such vision, wherein, in the Ideas of God, he may behold the things in themselves, cannot be denied, neither can it be proved."]

Something similar, and reminding one of the Lectures, but still of Swedenborg, we find in the section (of the "Paralogisms of the Pure Reason ") on the description of the Pure Reason in regard to Hypothesis. There we read () that, "one may use as a weapon against materialism the argument that the separation from the body is the end of our sense knowledge and the beginning of our intellectual knowledge. The body helps the sensual and animal part, but hinders the spiritual part of our nature. And against other criticisms of the doctrine of Immortality one may adduce the transcendental hypothesis:

"All life is essentially only intellectual and not subject to time changes, neither beginning with birth nor ending with death. This world's life is only an appearance, a sensuous image of the pure spiritual life, and the whole world of sense only a picture swimming before our present knowing faculty like a dream, and having no reality in itself. For if -we should see things and ourselves as they are -we would see ourselves in a -world of spiritual natures with which our entire real relation neither began at birth nor ended with the body's death."

One sees here Kant's strong inclination to these views and how easy it is to establish them by his distinguishing of the appearance from the thing in itself, and on his acceptance of a world of rational beings {mundus intelligibilis') as a kingdom of ends to be thought f

as under its own ruler and as necessary to the moral conception of the world, even if at the time of the "Critique" he is afraid to insist on these views dogmatically.

If we add to this the idea of the corpus mysticum of rational beings in the sense-world that it "consists in the free will of these rational beings under moral laws, this being in perfect systematic unity with the freedom of themselves and of each other,"* we cannot wonder that both in modern and earlier times the "mystics" have claimed Kant as being of their number, even if we can in no case admit that modern spiritism has any claim on him.

Jachmann has reported Kant as denying totally that his words have any mystic sense, or that he is in any way a friend to mysticism. It all depends on what is meant by the mystic. Truly the whole idea of freedom is with Kant a mystic one. Where he differs from mysticism is seen from the Lectures (Politz, 101), where he says: "If one supposes there are thinking beings of whom one can have intellectual vision, that is mysticism, so long- as the vision remains only sensual."

From Heinze's "Observations on the Lectures of 1790 91, on Rational Psychology," we quote:

When Kant says of the virtuous man "he is in heaven," but cannot see himself there and only infers this from reason, the statement resembles the thought of Swedenborg which Kant communicated in his earlier lectures, but without clearly designating it as his (Swedenborg's).

Now our souls are all as spirits, associated in this union and society, even in this world; only here we do not see ourselves as being in this society, because here we have only our sensuous vision; but although we do not see ourselves in this society (of spirits), we are nevertheless in it. If a man has lived righteously in the world, and his will has been well disposed, and he has endeavoured to obey the moral

law, he is in this world already in the society of all well-disposed and righteous souls, whether they be in India or in Arabia, only he does not see himself to be in this

Compare passages from the "Ecstatic Journey of a Dreamer through the Spiritual World" in the "Dreams," etc.

society until he is freed from the sensuous vision. In the same way the wicked is in the society of the wicked, (.)

The following is an extract from the Lectures themselves:

Life reveals nothing but appearances; "another world" means nothing more than "another way of seeing things." The Dinge an sick selbst are unknown to us here; whether in another world we shall come to know them we do not know. (Beilage III., Heinze, .)

What is very remarkable is the theory last advanced by Du Prel, which is noticed by Professor Vaihinger in the Kant-Studien, Vol. I., 1896-97, , under the heading, "Kant and Swedenborg: Dr. Carl Du Prel." Du Prel is here said to attribute the spirit- vision described in the letter of Kant to Fraiilein von Knobloch, to Swedenborg's "Clairvoyance brought about by Mono-ideism":

This appears to Du Prel as the most probable explanation, and not the intromission of Swedenborg into the spiritual world, which to Kant seemed even more plausible because it corroborated his own philosophic views regarding the double nature of man.

It is strange to find the discussion of the German metaphysicians resulting in the bringing forward of Kant as a witness to the rationality of Swedenborg's claims to spirit vision! It might seem almost to be the long-delayed retribution for Kant's scornful treatment of them in the "Dreams of a Spirit-Seer, illustrated by those of Metaphysics."

FRANK SEWALL.

A PREFACE

which promises very little for the discussion.

The land of shadows is the paradise of dreamers. Here they find an unlimited country where they may build their houses *ad libitum*. Hypochondriac vapours, nursery tales, and monastic miracles, provide them with ample building material. Their ground plans are sketched by the philosophers, who keep on changing or rejecting them, as is their wont. Holy Rome alone possesses in this land profitable provinces; the two crowns of the invisible kingdom support the third, which is the frail diadem of earthly sovereignty; and the keys which open the gates of the other world open at the same time, sympathetically, the money chests of the present. Such jurisdiction of the spirit world, when policy furnishes the proofs for its claims, is far above all feeble objections of the learned, and its use, or abuse, is already too venerable to feel the need of being exposed to their depraved scrutiny. But the common tales which are so strongly believed by some, while disputed by others, who have as little foundation for their opinion, why do they still float about for no visible reason, and yet unrefuted, and creep even into systems of doctrine, although they do not have in their favour that most convincing of proofs, the proof derived from utility (*argumentum ab utili*)? What philosopher has not at one time or another cut the queerest figure imaginable, between the affirmations of a reasonable and firmly convinced eye-witness, and the inner resistance of insurmountable doubt? Shall he wholly deny the truth of all the apparitions they tell about? What reasons can he quote to disprove them?

Shall he, on the other hand, admit even one of these stories? How important would be such an avowal, and what astonishing consequences we should see before us, if we could suppose even one such occurence to be proved? A third way out, perhaps, is possible, namely, not to trouble one’s self with such impertinent or idle questions, and to hold on to the *useful*. But because this plan is reasonable, therefore profound scholars have at all times, by a majority of votes, rejected it!

Since it is just as much a silly prejudice to believe without reason *nothing* of the many things that are told with an appearance of truth, as to believe without examination *everything* that common report says, the author of this book has been led away partly by the latter prejudice, in trying to escape the former. He confesses, with a certain humiliation, that he has been naive enough to trace the truth of some of the stories of the kind mentioned. He found — as usual where it is not our business to search — he found nothing. This is indeed by itself a sufficient reason for writing a book; but add to this what has many a time wrung books from modest authors, the impetuous appeals from known and unknown friends. Moreover, he had bought a big work, and, what is worse, had read it, and this labour was not to be thrown away. Thence originated the present treatise, which, we flatter ourselves, will fully satisfy the reader; for the main part he will not understand, another part he will not believe, and the rest he will laugh at.

PART FIRST, WHICH IS DOGMATIC.

CHAPTER FIRST.

A COMPLICATED METAPHYSICAL KNOT WHICH CAN BE UNTIED OR CUT ACCORDING TO CHOICE.

If we put all together, that the school-boy rehearses, that the crowd relates, and that the philosopher demonstrates about spirits, this would seem to constitute no small part of our knowledge. Nevertheless, I dare assert that all these smatterers could be placed in a most awkward embarrassment, if it should occur to somebody to insist upon the question, just what kind of a thing that is about which these people think they understand so much. The methodical talk of learned institutions is often simply an agreement to beg a question which is difficult to solve, by the variable meaning of words. For we seldom hear at academies the comfortable and ofttimes reasonable "I do not know." Certain newer philosophers, as they like to be called, overcome this question easily. A spirit, they say, is a being possessed of reason. Then it is no miracle to see spirits; for he who sees men, sees beings possessing reason. But, they continue, this being in man, possessing reason, is only a part of man, and this part, the animating part, is a spirit. Very well then. Before you prove that only a spiritual being can have reason, take care that first of all I understand what kind of conception I must have of a spiritual being. Self-deception in this matter, while large enough to be seen with eyes half-open, is moreover of very evident origin. For, later on and in old age, we are sure to know nothing of that which was very well known to us at an early date, as children, and the man of thoroughness finally becomes at best a sophist in regard to his youthful delusions.

Thus I do not know if there are spirits, yea, what is more, I do not even know what the word "spirit" signifies. But, as I have often used it myself, and have heard others using it, something must be understood by it, be this something mere fancy or reality. To evolve this hidden meaning, I will compare my badly understood conception of it with sundry cases of application, and, by observing with which it conforms, and to which it is opposed, I hope to unfold its hidden sense.

Take, for example, the space of a cubic foot, and suppose something filling this space, i.e., resisting the intrusion of any other thing. Then nobody would call the substance occupying that space "spiritual." It evidently would be called material, because it is expanded, impenetrable, and, like everything corporeal, subject to divisibility and to the laws of impact. Thus far we are still on the smooth track of other philosophers. But imagine a simple being, and impart to it at the same time reason. Would that, then, comprise the meaning of "spirit?" To discover this, I will leave to the aforesaid simple being reason as an inner quality, and will consider that being only in its external relations. And now I ask, if I want to place this simple substance in that space of one cubic foot, which is full of matter, would a single element have to make room for it, so that the spirit might enter? You think yes? Very well, then this supposed space would have to lose a second elementary particle — were it to take in a second spirit, and thus, if you keep on, a cubic foot of space would be filled with spirits whose mass exists just as well by impenetrability, as if it was full of matter, and, just like the latter, must be subject to the laws of impact. But substances of this kind, although they might contain the power of reason, would not differ at all from the elements of matter of which also we know only the powers which they exert externally by their very existence, and do not at all know what might belong to their interior qualities. Thus it is beyond doubt that simple substances of that kind, of which masses could be accumulated, would not be called spiritual beings. You will, therefore, be able to retain the conception of a spirit only if you imagine beings who can be present even in a space filled with matter, thus beings who do not possess the quality of impenetrability, and who never form a solid whole, no matter how many you unite. Simple beings of this kind would be called immaterial beings, and, if they have reason, spirits. But simple substances which, if combined, result in an *expanded*

and impenetrable whole, would be called material units, and their whole, matter. Either the name of a spirit is a mere word without any meaning, or, its significance is of the nature described.

From the explanation of what a spirit consists in, it is a long step indeed to the proposition that such natures are real, yea, even possible. We find in the works of philosophers many good and reliable proofs that everything which thinks must be simple; and that every substance which thinks according to reason, must be a unit of nature; and that the undivisible Ego could not be divided among many connected things which make up a whole. My soul, therefore, must be a simple substance. But this proof leaves still undecided, whether the soul be of the nature of such things as, united in space, form an expanded and impenetrable whole; whether, therefore, it be material, or whether it be immaterial, and, consequently, a spirit; and, what is more, whether such beings as are called spirits, are possible.

At this point I cannot but recommend caution against rash conclusions which enter most easily into the deepest and obscurest questions. For that which belongs to the common conceptions of experience is commonly regarded as if the reason why it existed was also comprehended. But of that which differs from experience, and cannot be made comprehensible by any experience, not even by analogy, we of course can form no conception, and, therefore, are apt to reject it immediately as impossible. All matter offers resistance in the space in which it is present, and on that account is called impenetrable. That this is so, experience teaches us, and the abstraction of this experience produces in us the general conception of matter. But this resistance which something makes in the space in which it is present, is in that manner indeed *recognized*, but not yet *conceived*. For this resistance, as everything that counteracts an action, is true force, and, as its direction is opposed to the prolonged lines of *approach*, it is a force of *repulsion* which must be attributed to matter and, therefore, to its elements. Every reasonable man will readily concede that here human intelligence has reached its limit. For while, by experience alone, we can perceive that things of this world which we call "material" possess such a force, we can never conceive of the reason why they exist.2 Now, if I suppose other substances being present in space with other forces than that *propelling* force which has for its consequence impenetrability, then, of course, I cannot think in the concrete of their activity, because it has no analogy with my conceptions from experience. And if, in addition, I take away from those substances the quality to *fill* the space in which they are present, I miss a conception which makes thinkable the things which come within the range of my senses; thence, necessarily, they must become in a way unthinkable. But this cannot be said to be a recognized impossibility, for the very reason that the *possibility of the existence of its opposite remains also unintelligible*, although its reality comes within the range of my senses.

The possibility of the existence of immaterial beings can, therefore, be supposed without fear of its being disproved, but also without hope of proving it by reason. Such spiritual natures would be present in space in such a manner that it would still be penetrable for corporeal beings. For by their presence they *operate* in space, but do not *fill* it, i.e., they cause no resistance, which is the basis of solidity.3 If such a simple spiritual substance be supposed, — notwithstanding its indivisibility, — it can be said that the space where it is immediately present is not a point, but itself a space. For, calling in the aid of analogy, even the simple elements of the body must occupy there a space which is a proportionate part of its whole extension, inasmuch as points are not parts but limits of space. Thus space is filled by means of an active force — repulsion. But the fact that it is being filled is apparent only by a greater activity of its components. The way, therefore, in which it is being filled — by accumulating individual elements — does not at all conflict with its simple nature, although the possibility of this cannot be pointed out more clearly, for this can never be done with first causes and effects. In the same way I shall meet with at least no demonstrable impossibility, although the thing itself remains incomprehensible, if I state that a spiritual substance, although it is simple, still can occupy a space, i.e., can immediately be active in it without *filling* it, which means without offering resistance to material substances in it.4 Such an immaterial substance also could not be said to possess expansion, any more than the units of matter. For only that

which, existing separate and for itself alone, occupies a space, possesses extent; but the substances which are elements of matter occupy space only by the exterior effect which they have upon others. But for themselves alone, where no other things can be thought of as being in connection with them, and as they contain in themselves nothing which could exist separately, they contain no space. This applies to corporeal elements. The same would apply also to spiritual natures. The limits of extent are determined by the figure of a thing. Consequently, we cannot think of the figures of spiritual natures. These are reasons for the supposed possibility of the existence of immaterial beings in the universe, but they can be comprehended with difficulty. He who is in possession of means which can lead more easily to this intelligence, should not deny instruction to one eager to learn, before whose eyes, in the progress of research, Alps often rise where others see before them a level and comfortable footpath on which they walk forward, or think they do so.

Suppose now that it had been proved that the soul of man is a spirit (although it may be seen from the preceding that this, as yet, has *not* been proved), then the next question which might be raised is — Where is the place of this human soul in the corporeal world? I would answer, that body the changes of which are *my* changes, is *my* body, and its place is, at the same time, my place. If the question be continued, where then is your (your soul's) place in that *body*? then I might suspect that there is a catch in the question. For it is easily observed that it presupposes something which is not known by experience, but rests, perhaps, in imaginary conclusions, namely, that my thinking Ego is in a place which differs from the places of other parts of that body which belongs to me. Nobody, however, is conscious of occupying a separate place in his body, but only of that place which he occupies as man in regard to the world around him. I would, therefore, keep to common experience, and would say, provisionally, where I sense, there I *am*.5 I am just as immediately in the tips of my fingers, as in my head. It is myself who suffers in the heel and whose heart beats in affection. I feel the most painful impression when my corn torments me, not in a cerebral nerve, but at the end of my toes. No experience teaches me to believe some parts of my sensation to be removed from myself, to shut up my Ego into a microscopically small place in my brain from whence it may move the levers of my body-machine, and cause me to be thereby affected. Thus I should demand a strong proof to make inconsistent what the schoolmasters say: *my soul is as a whole in my whole body, and wholly in each part*. Common sense often perceives a truth before comprehending the reasons with which to prove or explain it. I should not be entirely disconcerted by the objection, that thus I am believing that the soul possesses extension and is diffused through the whole body, just as it is pictured for children in the "orbis pictus." For I would remove this obstacle by saying: the fact that the soul is present in the whole body goes only to prove the extent of its sphere of exterior activity, but not a multiplicity of its inner parts and thus no extension or figure, for these exist only in a being which occupies a space set apart for itself, i.e., if the being contains parts which exist outside of each other. Finally, I should either claim to know this little of the spiritual quality of my soul, or, if that should not be conceded, I should be satisfied that I know nothing about it.

If one would insist upon showing how incomprehensible, or, what amounts to the same for the most people, how impossible these thoughts are, I would admit even that; and then I would sit down at the feet of the wise to hear them talk as follows: The soul of man has its seat in the brain, and its abode there is indescribably small; there it exercises its sensitive faculty, as the spider in the centre of its web. The nerves of the brain push or shake it, and cause thereby that not this immediate impression, but the one which is made upon quite remote parts of the body, is represented as an object which is present outside of the brain. From this seat it moves the ropes and levers of the whole machinery, causing arbitrary movements at will. Such propositions can be proved only very superficially or not at all, and as the nature of the soul is, indeed, not well enough known, they can be just as weakly combatted. And so I do not care to join in that kind of learned dispute, in which both parties usually have most to say about that of which they know nothing. But I will follow only the conclusions to which a doctrine of this nature must lead me.

In the first instance, according to the propositions so much recommended to me, my soul does not differ from any element of matter in the way in which it is present in space. Further, the power of reasoning is an internal quality which I could not perceive anyhow, although it might be found in all these elements. From these considerations no valid reason can be brought forward, why my soul should not be one of the substances of which matter consists, nor why its peculiar manifestations should not originate in the place which it occupies in such an ingenious machine as the human body, where the combination of nerves favours the inner faculty of thinking and of will-power. In that case, however, there would remain no peculiar characteristic of the soul by which it could be surely recognized and distinguished from crude elementary matter, and the jocose suggestion of Leibnitz would not be laughable any more, that in our coffee we swallow, perhaps, atoms which are to become human souls. But in such a case would not this thinking Ego be subjected to the common fate of material natures, and, as it was drawn out of the chaos of all elements to vivify an animal machine, why should it not, after this casual combination has ceased, return in future to its origin? It is at times necessary to frighten the thinker who is on the wrong path, by the consequences, so that he may pay more attention to the principles by which he has been led off as in a dream.

I confess that I am very much inclined to assert the existence of immaterial natures in the world, and to put my soul itself into that class of beings. But then, how mysterious does the communion of soul and body become?8 But, at the same time, how natural that it is incomprehensible, inasmuch as our conceptions of external actions are derived from those of matter, and are always connected with the conditions of impact and pressure, which do not exist in this case. For how could an immaterial being be such an obstruction so that matter in its motion could collide with it, a spirit; and how could corporeal things act upon an unknown being which does not oppose them with impenetrability, and which does not hinder them in any way from being at the same time present in the space in which it is itself? It seems that a spiritual essence is inmostly present in matter, and that it does not act upon those forces which determine the mutual relations of elements, but upon the inner principle of their state. For every substance, even a simple element of matter, must have an inner activity as the reason for its external efficiency, although I cannot specify in what it consists. 9

But what is the necessity which causes a spirit and a body to form a unit; and, again, what is the cause which breaks up this unit in case of certain disturbances? These are questions which, among various others, are above my intelligence.10 And although I have as a rule hardly the daring to measure my power of reasoning with the secrets of nature, I should, nevertheless, have sufficient confidence not to be afraid, in such a case, of putting any opponent to the test, if it were my nature to be inclined to fight, nor of attempting to refute him by contrary reasons, which with scholars means nothing else but the art of convincing another that he does not know.

SECOND CHAPTER.

A FRAGMENT OF SECRET PHILOSOPHY AIMING TO ESTABLISH COMMUNION WITH THE SPIRIT-WORLD.

Gross reason which cleaves to the bodily senses has, I trust, by this time become so accustomed to higher and abstract conceptions that now it can see spiritual figures, devoid of corporeal clothing, in that dusk in which the faint light of metaphysics renders visible the kingdom of shadows. We will venture therefore upon the dangerous road, since we have endured such laborious preparation for it.

Ibant sub nocte per umbras
Perque domos Ditis vacuas et inania regna.
Virgil.

The characteristics of the dead matter which fills the universe are stability and inertia; it further possesses solidity, expansion, and form, and its manifestations, resulting from all these three causes, admit of *physical* explanations, which, at the same time, are mathematical, and, collectively, are called mechanical. But let us direct our attention to the kind of beings which contain the cause of *life* in the universe — those which therefore neither add to the mass and extent of lifeless matter, nor are influenced by it according to the laws of contact and collision, but which rather, by inner activity, move themselves and dead matter as well — and we shall find ourselves convinced, if not with the distinctness of demonstration, still with the presentiment of well applied reason, that immaterial beings exist. Their peculiar laws of operation we may call "spiritual," or, in so far as bodies are the medium of their operation in the material world, "organic." As these immaterial beings are self-active principles, consequently, substances and natures existing by themselves, the conclusion which suggests itself first is, that, immediately united with each other, they might form, perhaps, a great whole which might be called the immaterial world (mundus intelligibilis). For what reason could render the assertion probable that such beings of similar nature could communicate only by means of other beings (corporeal) of dissimilar nature? This latter supposition would really be much more mysterious than the first.

This *immaterial world*, therefore, can be regarded as a whole existing by itself, and its parts, as being in mutual conjunction and intercourse without the instrumentality of anything corporeal. The relation by means of things corporeal is consequently to be regarded as accidental; it can belong only to a few; yea, where we meet with it, it does not hinder even those very immaterial beings, while acting upon one another through matter, from standing also in their special universal relationship, so that at any time they may exercise upon one another mutual influences by virtue of the laws of their immaterial existence. Their relation by means of matter is thus accidental, and is due to a special divine institution, while their direct relation is natural and insoluble.11

By combining in this way all principles of life in the whole of nature, as so many 'incorporeal substances, communicating with each other, partly also united with matter, we conceive of the immaterial world as a great whole, an immeasurable but unknown gradation of beings and active natures by which alone the dead matter of the corporeal world is endued with life. But to which members of nature life is extended, and which those degrees of it are which are next to utter lifelessness, can, perhaps, never be made out with certainty.12 Hylozoism imputes life to everything; materialism, carefully considered, kills everything. Maupertuis attributed to the organic particles of the nutriment of all animals the lowest degree of life, other philosophers see in them nothing else but dead masses which serve only to augment the

lever-apparatus of animal machines.13 The undoubted characteristic of life in that which appeals to our external senses is, I may say, the free movement which shows that it is arbitrary, but the conclusion is not certain that, wherever this characteristic is not found, there is no degree of life.14 Boerhave says somewhere: The animal is a plant which has its roots in the stomach (inside). Another might, perhaps, play without censure with these conceptions by saying: The plant is an animal which has its stomach in the root (outside). The plants, therefore, may lack the organs of arbitrary movement, and thus the external characteristics of life. These are necessary to the animals, because a being which has the instruments of nourishment inside must be able to move about according to its needs; but a being where these are outside and planted in the nourishing element, is already sufficiently maintained by external forces. Such a being contains indeed a principle of inner life in the fact of vegetation, yet it does not need an organic apparatus for external free activity. I do not propose to use any of these considerations as evidence, for, aside from the fact that I could say very little in favour of such conjectures, they have the ridicule of fashion against them, as being dusty antiquated fancies. The ancients, namely, thought that they could assume three kinds of life, the vegetable, the animal, and the reasonable. In uniting in man the three immaterial principles of those kinds of life, they very likely erred; but so far as they distributed the three principles among the three kinds of growing beings which propagate their kind, they indeed said something undemonstrable, but not, on that account, unreasonable, especially not in the judgment of one who considers the close relation of the polyps and other zoophytes with the plants, or who takes into account the special life belonging to the separated parts of some animals, irritability — that quality of the fibres of an animal body and of some plants, so well demonstrated, and, at the same time, so inexplicable. But, after all, the appeal to immaterial principles is a subterfuge of bad philosophy. Explanations of that kind should be avoided as much as possible, so that those causes of the world's phenomena which rest on the laws of motion of matter alone, and which solely and alone are capable of being conceived, may be recognized in their full extent.15 Nevertheless, I am convinced that Stahl, who likes to explain animal processes organically, is often nearer to the truth than Hofmann, Boerhave, and others, who leave immaterial forces out of their plan and keep to mechanical reasons. Yet these follow thereby a more philosophical method, which sometimes perhaps fails, but oftener proves right, and which alone can be applied to advantage in science. For the influence of beings of incorporeal nature can only be said to exist, but it can never be shown how it proceeds, nor how far its efficiency extends.16

The immaterial then would primarily comprise all created intelligences. Some of these are combined with matter, thus forming a person, and some not. It further comprises the sensating subjects in all kinds of animals, and finally all the principles of life wherever in nature they may be found, although such life may not make itself evident by the external characteristics of arbitrary movement. All these immaterial natures, I say, whether they exercise their influences in the corporeal world or not, and all the rational beings who are, accidentally, in an animal state, here on earth or on other terrestrial bodies, while they may be vivifying gross matter now or in future, or may have done so in the past, nevertheless form, according to these conceptions, a communion in conformity with their nature.17 And this communion would not rest upon the conditions by which the relations of bodies are limited, but distance in space and time,18 which forms in the visible world the great cleft severing all communion, would disappear. We should, therefore, have to regard the human soul as being conjoined in its present life with two worlds at the same time, of which it clearly perceives only the material world, in so far as it is conjoined with a body, and thus forms a personal unit.19 But as a member of the spiritual world it receives and gives out the pure influences of immaterial natures, so that, as soon as the accidental conjunction has ceased, only that communion remains which at all times it has with spiritual natures. 20

It begins to be a real trouble for me, always to use the cautious language of reason. Why should I, too, not be allowed to talk in academical style? This exempts the writer as well as the reader from thinking, which, after all, sooner or later must lead only to annoying indecision. Thus "it is as good as

demonstrated," or, to be explicit, "it could easily be proved," or still better, "it will be proved" I don't know where or when, that the human soul also in this life forms an indissoluble communion with all immaterial natures of the spirit-world, that, alternately, it acts upon and receives impressions from that world of which nevertheless it is not conscious while it is still man and as long as everything is in proper condition.23 On the other hand it is probable that the spiritual natures on their side can have no immediate conscious sensation of the corporeal world,24 because they are not conjoined with any part of matter which could make them aware of their place in the material world-whole, nor have they elaborate organs for entering into the mutual relations of beings of spacial extent. But they can, probably, flow into the souls of men as into beings of their own nature, and it is likely that they are actually at all times in mutual intercourse with them, yet, in such a way that those conceptions which the soul entertains as a being dependent on the corporeal world cannot be communicated to the other purely spiritual beings; nor can .the conceptions of these latter, being conceptions of immaterial things, be transferred into the consciousness of men, at least not as long as these conceptions preserve their peculiar quality, for the components of the two sets of ideas are of different kind.

It would be beautiful if such a systematic constitution of the spirit-world, as we conceive it, could be determined, or only with some probability supposed, not merely from the conception of spiritual being in general, which is altogether too hypothetical, but from an actual and universally conceded observation. Therefore I venture upon the indulgence of the reader and insert here an attempt at something of this kind which, although somewhat out of my way, and far enough removed from evidence, still seems to give occasion for not unpleasant surmises.

Among the forces which move the human heart, some of the most powerful seem to lie outside of it. They consequently are not mere means to selfishness and private interest, which would be an aim lying inside of man himself, but they incline our emotions to place the focus in which they combine, outside of us, in other rational beings. Thence arises a struggle between two forces, the proprium which refers everything to itself, and the public spirit by which the mind is driven or drawn towards others outside of itself.25 I do not dwell upon that instinct which causes us to depend so much and so universally upon the judgment of others, to consider outside approbation or applause requisite to a good opinion of ourselves. Sometimes a mistaken conception of honour comes up in this matter, but nevertheless there is even in the most unselfish and open natures a secret leaning to compare with the judgment of others what we have by ourselves recognized to be good and true, so as to make both concordant; on the other hand there is an inclination to stop, so to speak, each human soul on its way to knowledge, when it seems to go another path than that upon which we have entered. All this comes, perhaps, from our perception of the dependence of our own judgment upon the common sense of man, and it becomes a reason for ascribing to the whole of thinking beings a sort of unity of reason.

But I pass over this otherwise not unimportant consideration, and, for the present, take up another which, as far as our purpose is concerned, is more obvious and pertinent. When we consider our needs in relation to our environment, we cannot do it without experiencing a certain sensation of restraint and limitation which lets us know that a foreign will, as it were, is active in us, and that our own liking is subject to the condition of external consent. A secret power compels us to adapt our intentions to the welfare of others, or to this foreign will, although this is often done unwillingly, and conflicts strongly with our selfish inclination. The point to which the lines of direction of our impulses converge, is thus not only in ourselves, but there are besides powers moving us in the will of others outside of ourselves. Hence arise the moral impulses which often carry us away to the discomfiture of selfishness, the strong law of duty, and the weaker one of benevolence. Both of these wring from us many a sacrifice, and although selfish inclinations now and then preponderate over both, these still never fail to assert their reality in human nature. Thus we recognize that, in our most secret motives, we are dependent upon the

rule of the will of all, and thence arises in the community of all thinking beings a moral unity, and a systematic constitution according to purely spiritual laws.26 If we want to call the fact that we feel forced to adapt our will to the will of all, *the sense of morality*, we thereby describe only a manifestation of that which actually takes place in us, without settling upon its causes. Thus Newton called the established law that all particles of matter have the tendency to approach each other, *gravitation*, because he did not want to have his mathematical demonstrations mixed up with possible philosophical disputes over the causes of gravitation. Nevertheless, he did not hesitate to treat gravitation as the true effect of a general interaction of matter, and therefore gave to it also the name of *attraction*.27 Should it not be possible to conceive the phenomenon of moral impulses in the mutual relations of thinking creatures as the consequence of an actual force, consisting in the fact that spiritual natures flow into each other? The sense of morality then would be the sensation of this dependence of the individual will upon the will of all, and would be a consequence of the natural and universal interaction whereby the immaterial world attains its unity, namely, by conforming itself to a system of spiritual perfection, according to the laws of this sense of morality, which would constitute its mode of cohesion. If we grant to these thoughts so much probability as to make it worth while to measure them by their consequences, we shall be drawn by their charm, perhaps unconsciously, into being partial to them. For in this case there seem to disappear most of the irregularities which otherwise, owing to the contradiction between the moral and physical relations of men here on earth, strike us as being so strange. The moral quality of our actions can, according to the order of nature, never be fully worked out in the bodily life of men, but it can be so worked out in the spirit-world, according to spiritual laws.28 The true purposes, the secret motives of many endeavours, fruitless by impotency, the victory over self, or the occasional hidden treachery in apparently good actions, are mostly lost as to their physical effect in the bodily state, but in the immaterial world they would have to be regarded as fruitful causes, and, consequently, according to spiritual laws and on account of the connection between the individual will and the will of all, they would mutually produce and receive effects appropriate to the moral quality of free will. For just because the morality of an action concerns the inner state of the spirit, it naturally can only in the immediate communion of spirits have, an effect adequate to its full morality. Thus it would happen that man’s soul would already in this life have to take its place among the spiritual substances of the universe according to its moral state, just as, according to the laws of motion, the matter of the universe arranges itself into an order conformable to its material forces. When finally through death the communion of the soul with the body-world is abolished, life in the other world would be only a natural continuation of such connections as were formed with it already in this life, and all the consequences of the morality exercised here we would find there in the effects which a being standing in indissoluble communion with the whole spirit-world would have already achieved, according to spiritual laws.30 Present and future would be, as it were, out of one piece and constitute a continuous whole, even according to the order of nature. This latter circumstance is of especial importance. For in a speculation based merely upon reasoning there is a great difficulty if, in removing the inconvenience which follows from the incomplete harmony of morality and its consequences in this world, we have to resort to an extraordinary idea of the divine will. For, though our judgment of it might, according to our conceptions, be probable, a strong suspicion would remain that the weak conceptions of our understanding were applied to the Highest perhaps very erroneously. For it is incumbent upon man to judge of the divine will only from the harmony which he actually perceives in the world, or which, by the rule of analogy, according to the order of nature,31 he may suppose to be in it; he is not entitled to imagine new and arbitrary arrangements in the present or future world, according to some scheme of his own wisdom which he prescribes to the divine will.

We now turn our consideration again into the former path, and approach the aim which we have set before ourselves. If the facts of the spirit-world be such as we have stated, and the share of our soul in it

be truly pictured in the sketch just made, then scarcely anything appears more strange than that communion with spirits is not quite a common and ordinary thing; and what is extraordinary about it is rather the scarcity of apparitions than their possibility. This difficulty is tolerably easy to remove and already has been partly removed. For the conception which the soul of man has of itself as of a spirit, which, moreover, it has obtained through contemplation of the immaterial, i.e., by observing itself in its relation to beings of similar nature, this conception is entirely different from that where its consciousness conceives itself as a man, by means of an image originated in the impression of corporeal organs and conceived of in relation to none but corporeal things. It is, therefore, indeed one subject, which is thus at the same time a member of the visible and of the invisible world, but not one and the same person; for, on account of their different quality, the conceptions of the one world are not ideas associated with those of the other world, thus, what I think as spirit, is not remembered by me as man, and, conversely, my state as man does not at all enter into the conception of myself as a spirit. Moreover, my ideas of the spirit-world may be ever so clear and perspicuous, still that would not suffice to make me, as a man, conscious of that world; and so, however clear an idea one may, by reasoning, derive of himself, i.e., of his soul, as a spirit, still, this idea is with no man an object of actual sight and experience.

This difference, however, in the nature of spiritual ideas and those belonging to the body-life of man must not be considered so great an obstacle as to remove all possibility of becoming, sometimes, conscious of the influences of the spirit-world even in this life. For spiritual ideas can pass over into the personal consciousness of man, indeed, not immediately, but still in such a way that, according to the law of the association of ideas, they stir up those pictures which are related to them and awake analogous ideas of our senses. These, it is true, would not be spiritual conceptions themselves, but yet their symbols.32 For, after all, it is one and the same substance which is a member both of this world and the other, and both kinds of ideas belong to the same subject and are connected with each other. How this is possible can be made intelligible by considering how our higher conceptions of reason, which approach the spiritual pretty closely, ordinarily assume, as it were, a bodily garment to make themselves clear.33 Thence it is that the moral qualities of deity are represented by the ideas of anger, jealousy, mercifulness, revenge,34 &c.; for the same reason poets personify the virtues, vices, and other qualities of human nature, though this is done in such a way that the true idea of the meaning shines through; in the same way the geometrician represents time by a line, although time and space have comformity only by relation and therefore agree, indeed, according to analogy, but never according to quality. This is the reason why the idea of divine eternity assumes even with philosophers the appearance of infinite time,35 be they never so careful not to mix them up; and one great cause why mathematicians are generally loath to admit the monads of Leibnitz may be that they cannot help but imagine these monads as little masses. Thus it is not improbable that spiritual sensations can pass over into consciousness if they act upon correlated ideas of the senses. In such a way ideas which are communicated by spiritual influx, would clothe themselves with the signs of that language which man uses for his other purposes. Thus the sensation of the presence of a spirit becomes converted into the picture of the human figure; the order and beauty of the immaterial world into fantasies which, under other circumstances, give pleasure to our senses in this life,36 &c.

Nevertheless this kind of apparition cannot be a common and ordinary thing but can occur only with persons whose organs have an unusual sensitiveness for intensifying, by harmonious motion, according to the inner state of the soul, the pictures of the imagination, to a higher degree than is usually the case, and should be the case, with healthy persons. Such abnormal persons would be confronted, in certain moments, with the appearance of many objects as if they were outside of themselves. They would think that spiritual natures present with them were affecting their bodily senses, while yet this is only a delusion of the imagination, occurring, however, in such a way that its cause is a true spiritual influence, not, indeed, perceivable immediately, but revealing itself to consciousness by correlated pictures of the imagination which assume the appearance of sensations.

Conceptions derived from education and all sorts of fancies that have crept into the mind would exercise their influence here, where delusion is mingled with truth, a real spiritual sensation being, indeed, the foundation, but converted into phantoms of sensuous things. It will further be admitted that the power to thus develop the impressions of the spirit-world into the clear perception of this world can hardly be of any use, because in such a process the spiritual sensation becomes necessarily so closely interwoven with the fancies of the imagination that it cannot be possible to distinguish the truth from the gross surrounding delusions. Such a state would likewise indicate a disease, because it presupposes an altered balance of the nerves, which are put into unnatural motion merely by the activity of purely spiritual sensations of the soul. Finally, it would not be at all strange to find the spirit-seer to be at the same time a dreamer, at least in regard to the mental pictures which he makes of his visions; because ideas, unknown to him by their very nature and incompatible with those of his bodily state, crowd in and drag into external sensation badly adjusted pictures, creating thereby wild chimeras and curiously distorted figures, which float in trailing garments before the senses, deceiving them in spite of the fact that such chimeras may be based upon a true spiritual influence.37

Now we need no longer be at a loss to give apparently rational causes for the stories about apparitions which so often cross the path of philosophers, as well as to account for all sorts of influences from spirits of which the rumour goes here and there.38 Departed souls and pure spirits can indeed never be present to our external senses, nor communicate with matter in any other way than by acting upon the spirit of man, who belongs with them to one great republic. The spirits must act in such a way that the ideas which they call up in man's mind clothe themselves in corresponding pictures according to the law of imagination, thus causing any objects which fit into the picture to appear as if they were outside of him. This deception can affect any one of the senses, and, however mixed it may be with incongruous fancies, it should not keep one from supposing spiritual influences in it. I should encroach upon the penetration of the reader if I should stop to apply this mode of explanation. For metaphysical hypotheses are possessed of such an immense flexibility that one must be very awkward not to be able to adapt this one to any story he hears even before investigating its truthfulness, which is in many cases impossible, and in still more is impolite to the narrator.

But if we balance against each other the advantages and disadvantages which might accrue to a person organized not only for the visible world, but also, to a certain degree, for the invisible (if ever there was such a person), such a gift would seem to be like that with which Juno honoured Teiresias, making him blind so that she might impart to him the gift of prophesying. For, judging from the propositions above made, the knowledge of the other world can be obtained here only by losing some of that intelligence which is necessary for this present world. I am not sure if even certain philosophers can be freed entirely from such a hard condition, when they turn their metaphysical telescopes upon such far-off regions and tell us of miraculous things. At least I do not grudge them their discoveries. But I am afraid that some man of sound sense but little polish might intimate to them what the coachman answered to Tycho Brahe, when, one night, the latter suggested to the man he might drive the shortest way by directing his course according to the stars: "My dear master, you may be an expert as to the sky, but here on earth you are a fool."39

THIRD CHAPTER.

ANTIKABALA. A FRAGMENT OF COMMON PHILOSOPHY AIMING TO ABOLISH COMMUNION WITH THE SPIRIT-WORLD.

Aristotle says, somewhere, “When we are awake, we have a common world, but when we dream, everybody is his own.” It seems to me that it ought to be possible to reverse this latter proposition and say, if, among different human beings, every one has his own world, it may be supposed that they dream. With this understanding we will view the various imaginary worlds of these air-architects which each one inhabits quietly to the exclusion of others. Behold, for example, him who inhabits the Order of Things as it was framed by Wolf out of but little building material obtained from experience, but many conceptions gotten on the sly. Or we will view those who inhabit the world produced by Crusius out of nothing, by means of a few magical sayings about the thinkable and the unthinkable. And, as we find that their visions are contradictory, we will patiently wait until the gentlemen have finished dreaming. For if, at some time, by the will of God, they wake up, i.e., open their eyes to such a view as does not exclude conformity with other people’s common sense, then none of them will see anything that does not appear evident and certain in the light of their proofs to others also, and the philosophers will then inhabit a common world, of the kind which mathematicians have already occupied for a long time. And this event cannot be delayed much longer, if certain signs and predictions, which for some time have appeared over the horizon of science, can be trusted.

Reason-dreamers have a certain relation with sensation-dreamers, among whom are usually counted those who occasionally deal with spirits. The reason is that they too, like the former, see something which no other healthy man sees, and have a communication of their own with beings which reveal themselves to nobody else, however keen the others’ senses may be. If one supposes that the above-named apparitions rest upon mere fancies, the term “dreams” then becomes appropriate to them in so far as both are self-created pictures which nevertheless deceive the senses as if they were true objects. But if one imagines both kinds of deception to be so similar in their origin that the source of the one will be found sufficient for the other, he is greatly deceived. The man who, while awake, becomes so absorbed in the fancies and chimeras created by his ever active imagination as to pay little attention to the sensations of the senses with which he is mostly concerned at that moment, is justly called a waking dreamer. For the sensations of the senses need decrease only a little more in their intensity, and he will be asleep, and his chimeras will then be true dreams. The reason why they are no dreams while the dreamer pursues them awake, is, because he then perceives the dreams as in himself, but other objects as outside of himself; consequently he considers the dreams as effects of his own activity, but the perception of objects as part of .his received impressions from the outside. For in this situation everything depends upon the relation which man assumes the objects to have to himself as a man, and, consequently, also to his body. Thus, the same pictures can indeed occupy him very much in his waking state, but they cannot deceive him, however clear they may be. For although he has then, too, in his brain a fictitious impression of himself and his body, which he puts in relation to his fantastic pictures, nevertheless the real sensation of his body, by means of the external senses, establishes a contrast with those chimeras, or distinction from them, which goes to show the ones as self-created, the other as perceived.40 If he falls asleep, the idea of his body derived from impressions disappears, and only the fictitious idea remains. In relation to this latter idea, the other chimeras are now assumed to be outside of himself, and they are found to deceive the dreamer as long as he sleeps, because there is no sensation present which would furnish a basis for a comparison of the two whereby the original could be distinguished from the phantasm, i.e., the outside from the inside.

The spirit-seers, therefore, are entirely different from waking dreamers not only in degree, but in kind. For while they are waking, and often while they are experiencing other sensations with great vividness, the spirit-seers place some imagined things among the external objects which they really perceive. The only question is, how it is possible that they place the phantoms of their imagination outside of themselves, and even put them in relation to their body, which they sense through their external senses. The great clearness of the fantasy cannot be the cause, for the point at issue is, the place where an object is put; and, therefore, I demand that it be shown how the soul places such an image as it should perceive to be contained in itself, into an entirely different relation, namely, into a place outside of itself and among those objects which are offered to its real perception. I shall not be satisfied with the quotation of other cases which bear some resemblance with this deception, such as perhaps occur in the state of fever; for be the deceived well or sick, we do not want to know *if* such a thing happens also elsewhere, but *how* this deception is possible.

We find, however, in using our external senses, that besides the clearness with which the objects are seen, we perceive at the same time their location, perhaps not always with the same accuracy, still as a necessary condition of sensation, without which it would be impossible to perceive things as being outside of ourselves.41 Here it becomes quite probable that our soul locates the perceived object at that point where the different lines, indicating the direction of the impression, meet. That is why we see a radiating point at the meeting-place of those lines which we draw from the eye back in the direction of the rays. This point, which we call the point of vision, is, in its effect, the scattering point, but, in the way it is perceived, it is the point which collects the lines of direction determining the sensation (focus imaginarius). Thus we locate a visible object even with one eye alone; in the same way as, by means of a concave mirror, the image of an object is seen in the air just in that spot where the rays radiating from one point of the object meet before entering the eye.

The same theory, perhaps, can be applied to the impressions of sound, because its shocks, too, are transmitted in straight lines. Then we should say that the sensation of sound is accompanied by the perception of a focus imaginarius, and that this is placed in that point where the straight lines meet which are drawn to the outside from the vibrating nerve-structure inside of the brain. For the place and distance of a sounding object is perceived to some extent, even if the sound is low and comes from the back, and although the lines drawn from such a position do not strike the opening of the ear, but other places of the head. This makes one believe that the soul continues the lines of vibration externally in imagination, and places the sounding object in their meeting -point.42 The same can, in my opinion, be predicated of the other three senses, differing from sight and hearing in this respect that the object of sensation is in immediate contact with the organs of these other senses, and the lines indicating the place of the organic stimulus find in the organs themselves their meeting-point.

In applying this to the pictures of imagination, permit me to take as basis the hypothesis of Cartesius, approved of by most of the philosophers after him, that all representations of the imagination are accompanied by certain movements in the nerve-tissue or nerve-spirit of the brain, which movements are called “ideae materiales”; i.e., these representations are, perhaps, accompanied by the concussion or vibration of the fine element secreted by these nerve-tissues. This vibration is similar to the movements which the sense-impression might produce, and of which the nerve-vibration is a copy. But now I must ask that if it be granted that the principal difference between the nerve-movements in fantasies, and in sensations, consists in the fact that, with fantasies, the lines indicating the direction, of the movement meet inside of the brain, while in sensation they meet outside; then, since the focus imaginarius in which the objects are perceived in the clear sensations of the waking state is placed outside of myself, but the focus imaginarius of the fantasies entertained during the same state is placed inside of myself, I cannot fail, as long as I am awake, to distinguish from the sense-impressions these imaginations as fantasies.

If so much is admitted, it seems to me that I can adduce some reasonable cause for that kind of mind-

disturbance called insanity, and, in its higher degree, trance. The peculiarity of this disease is that the confused individual places mere objects of his imagination outside of himself, and considers them to be real and present objects. Now I have stated that, according to the common order of things, the lines indicating the direction of the movement, and accompanying the fantasies in the brain as their material auxiliaries, must meet inside the brain, and that, consequently, the location of the picture in the subject's consciousness in the waking state must be placed inside of himself. If, therefore, I suppose that, by any accident or disease, certain organs of the brain are distorted or thrown out of their equilibrium in such a manner that the nerve movements, vibrating harmoniously with certain fantasies, occur according to such lines of direction as, continued, would meet outside of the brain, then the focus imaginarius would be placed outside of the thinking subject, and the image produced by mere imagination would be perceived as an object present to the external senses. Though such a phantom be only weak at the beginning, the consternation at the appearance of a thing which ought not to be there according to the natural order of things, will soon arouse attention, and will give to the phantom sensation such a vividness that the deluded person cannot doubt its reality. This delusion can affect any one of the external senses, for of each we have copied images in imagination, and the contortion of nerve-tissue can cause the focus imaginarius to be placed in that spot, whence the organic impression of a really existing bodily object would come. It is not astonishing, then, if the visionary believes to see or hear many a thing which nobody perceives besides him, or if these fancies appear to him and disappear suddenly, or if they beguile the sense of vision, for example, and can be apprehended by no other sense (if they cannot be felt, for instance), and thus seem to him intangible. The common ghost-stories depend so much on such indications as these that they easily justify the suspicion of hailing from such a source, In the same way the current conception of spiritual beings which we evolved out of common phraseology, is very much of the nature of this delusion, and does not belie its origin, since the quality of an intangible presence in space is said to constitute the essential characteristic of this conception.

It is further very probable that the idea of spectres, imbibed from education, furnishes the head of a diseased person with materials for deluding apparitions, and that a brain free from all such prejudices would not so soon hatch out phantasms of this kind, even though some aberration might befall it. Furthermore, as the disease of the visionary concerns not so much the reason, as a deception of the senses, it will be easily recognized that the unfortunate subject cannot remove the delusion by any reasoning; for a true or apparent impression of the senses precedes all the judgments of the reason, and carries with it immediate evidence, far excelling all other persuasion.43

The consequence resulting from all these considerations is in so far inconvenient, as it renders entirely superfluous the deep conjectures of the preceding chapter; and the reader, though he was ready to receive with some approval its idealistic notions, will nevertheless prefer that conception which allows of more comfort and brevity in judging, and which promises to find the more general approval. For, aside from the fact that it seems to conform more with a reasonable frame of mind to find the means of explanation in the material furnished by experience, than to lose one's self in the dizzy conceptions of a reason, partly inventing, partly jumping at conclusions, there is always found, in such speculations, occasion for scoffing, than which, whether justifiable or not, there is no stronger means of keeping back idle investigation. For it creates at once grave suspicion for one to attempt seriously to expound the fancies of a visionary, and the kind of philosophy which is found in such bad company is open to question. It is true, I have, in the preceding, not contested the insanity of such apparitions. Rather, while I have not made insanity to be the cause of an imagined communion with spirits, I have yet connected the two by considering insanity as the natural consequence of such communion. But what foolishness is there which could not be harmonized with a bottomless philosophy? Therefore, I do not at all blame the reader, if, instead of regarding the spirit-seers as half-dwellers in another world, he, without further ceremony, despatches them as candidates for the hospital, and thereby spares himself any further investigation. But,

if everything then is to be treated on such a basis, the manner of handling such adepts of the spirit-world must be very different from that based upon the ideas given above; and if, formerly, it was found necessary at times to burn some of them, it now will suffice to give them a purgative. Indeed, from this point of view, there was no need of going so far back as to metaphysics, for hunting up secrets in the deluded brain of dreamers. The keen Hudibras could alone have solved for us the riddle, for he thinks that visions and holy inspirations are simply caused by a disordered stomach.

FOURTH CHAPTER.

THEORETICAL CONCLUSION FROM THE WHOLE OF THE CONSIDERATIONS OF THE FIRST PART.

The inaccuracy of scales used for commercial measurements, according to civil law, is discovered, if we let the merchandise and the weights exchange pans. So the partiality of the scales of reason is revealed by the same trick, without which, in philosophical judgments, no harmonious result can be obtained from the compared weighings. I have purified my soul from prejudices, I have destroyed any blind affection which ever crept in to procure in me an entrance for much fancied knowledge. I now have nothing at heart; nothing is venerable to me but what enters by the path of sincerity into a quiet mind open to all reasons — be thereby my former judgment confirmed or abolished, be I convinced or left in doubt. Wherever I meet with something instructive, I appropriate it. The judgment of him who refutes my reasons, is my judgment, after I first have weighed it against the scale of self-love, and, afterwards, in that scale against my presumed reasons, and have found it to have a higher intrinsic value. Formerly, I viewed human common sense only from the standpoint of my own; now I put myself into the position of a foreign reason outside of myself, and observe my judgments, together with their most secret causes, from the point of view of others. It is true, the comparison of both observations results in pronounced parallaxes, but it is the only means of preventing the optical delusion, and of putting conceptions in regard to the power of knowledge in human nature into their true places. You may say that this is very serious talk in connection with so trifling a problem as that under consideration, which deserves to be called a plaything rather than a serious occupation, and you are not exactly wrong in thus judging. But although one ought not to make a great ado about a small matter, yet one may perhaps be allowed to make use of such occasions; and unnecessary circumspection in small matters may furnish useful example in important matters. I find no attachment nor any other inclination to have crept in before examination, so as to deprive my mind of a readiness to be guided by any kind of reason *pro* or *con*, except one. The scale of reason after all is not quite impartial, and one of its arms, bearing the inscription, “Hope of the Future,” has a constructive advantage, causing even those light reasons which fall into its scale to outweigh the speculations of greater weight on the other side. This is the only inaccuracy which I cannot easily remove, and. which, in fact, I never want to remove. I confess that all stories about apparitions of departed souls or about influences from spirits, and all theories about the presumptive nature of spirits and their connection with us, seem to have appreciable weight only in the scale of hope,44 while in the scale of speculation they seem to consist of nothing but air. If the answer to the problem in question were not in sympathy with a prior inclination, what reasonable man would be doubtful as to whether it were more plausible to assume the existence of a kind of beings which have no similarity whatever with anything taught him by his senses, or to attribute certain alleged experiences to a kind of self-deception and invention which, under certain circumstances, is by no means uncommon.

In fact this seems to be in general the main reason for crediting the ghost-stories so widely accepted. Even the first delusions about presumed apparitions of deceased people have probably arisen from the fond hope that we still exist in some way after death. And then, at the time of the shadows of night, this illusion has probably deluded the senses, and created out of doubtful forms phantoms corresponding to preconceived ideas. From these, finally, the philosophers have taken occasion to devise the rational idea of spirits, and to bring it into a system. You probably will recognise also in my own assumed doctrine of the communion of spirits this trend to which people commonly incline. For its propositions evidently unite only to give an idea how man’s spirit leaves this world, i.e., of the state after death. But how it enters, i.e.,

of procreation and propagation, I make no mention. Nay, I do not even mention how it is present in this world, i.e., how an immaterial nature can be in an immaterial body and act by means of it.45 The very good reason for all this is that I do not understand a single thing about the whole matter, and, consequently, might as well have been content to remain just as ignorant as before in regard to the future state, had not the partiality of a pet notion recommended the reasons which offered themselves, however weak they were.

The same ignorance makes me so bold as to absolutely deny the truth of the various ghost stories, and yet with the common, although queer, reservation that while I doubt any one of them, still I have a certain faith in the whole of them taken together. The reader is free to judge as far as I am concerned. The scales are tipped far enough on the side containing the reasons of the second chapter to make me serious and undecided ‘when listening to the many strange tales of this kind. But, as reasons to justify one’s self are never lacking when the mind is prejudiced, I do not want to bother the reader with any further defence of such a way of thinking.

As I am now at the conclusion of the theory of spirits, I am bold enough to say that this study, if properly used by the reader, exhausts all philosophical knowledge about such beings, and that in future, perhaps, many things may be thought about it, but never more known. This assumption sounds rather vainglorious. For of such multifariousness are the problems offered by nature, in its smallest parts, to a reason so limited as the human, that there is certainly no object of nature known to the senses, be it only a drop of water or a grain of sand, which ever could be said to be exhausted by observation or reason. But the case is entirely different with the philosophical conception of spiritual beings. It may be complete, but in the negative sense, by fixing with assurance the limits of our knowledge, and convincing us that all that is granted to us is to know the diverse manifestations of life in nature and its laws; but that the principle of this life, i.e., the unknown and only assumed spiritual nature, can never be thought of in a positive way, because for this purpose no data can be found in the whole of our sensations; that therefore we have to resort to negations for the sake of thinking something so entirely different from everything sensuous; but that the possibility of such negations rests likewise neither upon experience nor upon conclusions, but upon invention, to which a reason deprived of all other expedients finally resorts. With this understanding pneumatology may be called a doctrinal conception of man’s necessary ignorance in regard to a supposed kind of beings, and as such it can easily be adequate to its task.

And now I lay aside this whole matter of spirits, a remote part of metaphysics, since I have finished and am done with it.47 In future it does not concern me any more. By thus making the plan of my investigation more concentrated, and sparing myself some entirely useless inquiries, I hope to be able to apply to better advantage my small reasoning power upon other subjects. It is generally vain to try to extend the little strength one has over a wide range of undertakings. It is therefore a matter of policy, in this as other cases, to fit the pattern of one’s plans to one’s powers, and if one cannot obtain the great, to restrict one’s self to the mediocre.

PART SECOND, WHICH IS HISTORICAL.

CHAPTER FIRST.

A STORY, THE TRUTH OF WHICH THE READER IS RECOMMENDED TO INVESTIGATE AS HE LIKES.

Sit mihi fas audita loqui. — Virgil.

Philosophy, which on account of its self-conceit exposes itself to all sorts of empty questions, finds itself often in awkward embarrassment in view of certain stories, parts of which it cannot *doubt* without suffering for it, nor *believe* without being laughed at. Both difficulties we find to a certain degree united in the current accounts of spirit visions, the first in listening to him who avouches their truth, the second in communicating them to others. In fact, there is no reproach more bitter to the philosopher than that of credulity, and of yielding to common fancies. And as those who know how to appear wise with little effort sneer at all those things which equalise, so to speak, the wise and the ignorant, in being incomprehensible to both of them, it is not astonishing that the apparitions, so frequently asserted, are finding wide acceptance, and yet, before the public, are either denied or hushed up. You may depend upon this much: an Academy of Sciences will never make this matter its prize question. Not that its members are entirely free from any belief in the opinion referred to, but because policy rightly shuts out questions raised either by presumption or vain curiosity. Thus stories of this kind will have at any time only secret believers, while publicly they are rejected by the prevalent fashion of disbelief.

Meanwhile, as this whole question seems to me to be neither important enough nor well enough studied out to be finally pronounced upon, I do not hesitate to relate here some information of the kind mentioned, and to submit it with absolute indifference to the kind or unkind judgment of the reader.

There lives at Stockholm a certain Mr. Swedenborg, a gentleman of comfortable means and independent position. His whole occupation for more than twenty years is, as he himself says, to be in closest intercourse with spirits and deceased souls; to receive news from the other world, and, in exchange, give those who are there tidings from the present; to write big volumes about his discoveries; and to travel at times to London to look after their publication. He is not especially reticent about his secrets, talks freely about them with everybody, seems to be entirely convinced of his pretensions, and all this without any apparent deceit or charlatanry. Just as he, if we may believe him, is the Arch-Spiritseer among all the spiritseers, he certainly is also the Arch-Dreamer among all the dreamers, whether we judge him by the description of those who know him, or by his works. But this will not hinder those who, otherwise, are favourable to influences from spirits, from supposing that there is some truth back of such phantasms. Still, as the credentials of all plenipotentiaries from the other world consist in the proofs48 which, by certain tests, they give of their calling in the present world, I must quote from what is spread abroad to authenticate the extraordinary capacities of the above-mentioned gentleman at least that which, with most people, still finds some credit.

Towards the end of the year 1761, Mr. Swedenborg was called to a princess, whose great intelligence and insight ought to render deception of such a nature impossible. The call was occasioned by the common report about the pretended visions of this man. After some questions which were intended to amuse her with his illusions, the princess dismissed him, after having charged him with a secret mission concerning his communication with spirits. Several days afterwards, Mr. Swedenborg appeared with an answer which was of such a nature as to create in the princess, according to her own confession, the liveliest astonishment, for the answer was true, and at the same time, could not have been given to him by any living human being. This story is drawn from the report sent by an ambassador at the court there, who

was present at that time, to another foreign ambassador in Copenhagen; it exactly agreed also with all that special inquiry has been able to learn.

The following stories have no other proof than common report, which is rather doubtful evidence. Madame Marteville, the widow of a Dutch envoy at the Swedish court, was reminded by a goldsmith to pay some arrears due on a silver-service furnished her. The lady, knowing the economy of her deceased husband, was convinced that this debt must have been settled already in his lifetime, but she found no proof whatever among the papers he left. Woman is especially prone to credit the stories of soothsaying, interpretation of dreams, and similar wonderful things. The widow discovered therefore her trouble to Mr. Swedenborg, requesting him to procure from her husband in the other world information about the real facts of the claim — if it were true, as people said of him, that he had intercourse with deceased people. Mr. Swedenborg promised to do it, and, a few days afterwards, reported to the lady in her house, that he had obtained the desired information, and that the requisite receipts were in a hidden partition of a closet which he showed to her, and which, in her opinion, had been entirely emptied. A search was made at once, according to his description, and, together with the secret Dutch correspondence, the receipts were found, making void all claims.

The third story is of a kind of which it must be very easy to completely prove either the truth or the untruth. It was, if I am rightly informed, towards the end of the year 1759, when one afternoon Mr. Swedenborg, coming from England, landed in Gothenburg. The same evening he was invited to meet some company at the house of a resident merchant. After being present a short while he proclaimed, with evident consternation, the news that, just at that moment, a terrible fire was raging in Stockholm, in the Sudermalm. After the lapse of several hours, during which he had from time to time left the company, he reported to them that the fire was checked, and how far it had spread. This wonderful news was noised abroad the same evening, and the next morning was all over the town. Not until two days after did the first report from Stockholm arrive in Gothenburg. It agreed entirely, it is said, with Swedenborg's visions.49

It will probably be asked what on earth could have moved me to engage in such a contemptible business as that of circulating stories to which a rational man hesitates patiently to listen; nay, that I should even make them the subject of a philosophical investigation. But as the philosophy which we prefixed was equally a tale from the Utopia of metaphysics, I do not see anything unseemly in letting both appear together. Anyhow, why should it be more creditable to be deceived by blind confidence in the pretences of reason than by incautious belief in misleading stories?

The borders of folly and wisdom are marked so indistinctly that one can hardly walk long in the one region without making at times a little digression into the other. But so far as that sense of honour is concerned, which may sometimes be persuaded even against resisting reason, it seems to be a remnant of the old ancestral loyalty which, to be sure, does not exactly fit in with the present state of things, and therefore often becomes folly, yet, on that account, is not to be considered the natural heirloom of stupidity. I leave it, therefore, to the discretion of the reader to reduce the queer story with which I am meddling, — a doubtful mixture of reason and credulity, — into its components, and to make out what are the proportions of both ingredients in my mind. For, seeing that the main point in such a criticism is to preserve proper decorum, I am sufficiently guarded against ridicule by the fact that with this folly, if you want to call it by that name, I am in quite good and numerous company, and this, as Fontenelle believes, is alone sufficient at least to prevent one's being regarded as unwise. For it always has been, and, probably, always will be the case, that certain nonsensical things are accepted even by rational men, just because they are generally talked about. To that class belong sympathetic healings, the wand, forebodings, the effect of the imagination of pregnant women, the influences of the changing moon upon animals and plants, &c. Yea, a short time ago, the common peasantry made scholars pay them handsomely for so habitually ridiculing their credulity. For, by a good deal of hearsay from children and women, a great many intelligent men were finally persuaded to take a common wolf to be a hyena, although any rational man

can easily see that an African beast would not disport itself in the woods of France. The weakness of man's reason, together with his curiosity, brings it about that, in the beginning, truth and deceit are snatched up promiscuously. But, gradually, the ideas are purified; a small part remains, the rest is thrown away as offal.

He to whom these ghost stories seem to be of importance, if he has money enough and nothing better to do, may, at any rate, make a journey for the sake of more accurate information, just as Artemidor travelled in Asia Minor to satisfy himself about the interpretation of dreams. Posterity of the same turn of mind will be very grateful to him for making it impossible for a second Philostratus to rise after many years, and make out of our Swedenborg a new Apollonius of Tyana, when the hearsay shall have matured to positive proof, and the inconvenient, though highly necessary, examination of eye-witnesses will have become impossible.

SECOND CHAPTER.

A DREAMER'S ECSTATIC JOURNEY THROUGH THE WORLD OF SPIRITS.

Somnia, terrores magicos, miracula, sagas,
Nocturnos lemures, portentaque Thessala.

Horace.

I cannot take it as in any way amiss in the cautious reader, if, during the development of this work, he should have grown doubtful about the manner of proceeding adopted by the author. For, as I treated the dogmatic part before the historic, and thus set reasons before experience, I gave cause for the suspicion of underhand-dealing, by having the whole thing before my mind from the start, and then feigning to know nothing but abstract considerations, so that I might finally surprise the reader who is expecting no such thing, by a pleasing confirmation from experience. In fact, this is a trick which philosophers have used at several times with very good success. To wit, all knowledge has two ends of which you can take hold, the one *a priori*, the other *a posteriori*. It is true, several modern scientists have pretended that one must, of necessity, begin at the latter. They think they can catch the eel of science at the tail, by first procuring enough knowledges from experience, and then ascending gradually to general and higher conceptions. But although this may not be unwise, it is not nearly learned enough, nor philosophical. For in this manner one soon arrives at a why which cannot be answered, and that is just as creditable for a philosopher as it is for a merchant to pleasantly ask one to come some other time when a bill of exchange is presented to him for payment. To avoid this inconvenience acute men have begun at the opposite farthest border, the outmost point of metaphysics. But a new difficulty is here incurred, of beginning I don't know where, and of coming I don't know whither; also that the reasoning, when continued, does not seem to fall in with experience; yea, it seems as if the atoms of Epicurus, after having fallen and fallen from eternity, might sooner meet by chance some time and form a world, than that common ideas will meet and exemplify these abstract principles. When the philosopher thus clearly saw that his reasons on the one hand and actual experience or report on the other might, like two parallel lines, run alongside each other into infinity without ever meeting, he agreed with others, as by mutual consent, that each should take the starting-point in his own way; each then should guide the reason not by the straight line of logic, but by giving to the lines of evidence an imperceptible twist, and so, by stealthily squinting in the direction of certain experiences or testimonies, each one should bring the reason to the point of proving just what, unsuspected by the trustful pupil, he all the time had in mind as the experience to be rationally proved. Add to this that they call this road the road *a priori*, although they have imperceptibly directed it to the point *a posteriori*, by following a road already staked out. They do not tell you that, of course, because it is only fair for the initiated not to betray the tricks of the profession. With this ingenious method several men of merit have caught even secrets of religion by pure reasoning; just as a novelist makes the heroine flee into remote countries that there, by a lucky adventure, she haply may meet her lover; "et fugit ad salices, et se cupit ante videri." (Virgil). With such celebrated predecessors, I need not have been ashamed even if I really had made use of the same trick to help my work to a good ending. But I earnestly beg of the reader not to believe such a thing of me. Anyhow, of what use would it be to me now when I can deceive nobody any more, having given away the secret? Moreover, I undergo this misfortune, that the testimony which I have stumbled upon, and which resembles so uncommonly the philosophical creation of my own brain, looks desperately misshapen and foolish, so that I must rather expect the reader to consider

my reasons as absurd on account of their relation to such confirmations, than that he will consider these latter reasonable on account of my reasons. I therefore declare without more ado that in regard to the alleged examples I mean no joke, and I declare once for all, that either one has to suppose more intelligence and truth to be in Swedenborg's works than a first glance will reveal, or that it is only chance when he coincides with my system; as poets sometimes, when they are raving, are believed to prophesy, or at least profess that they do, when, now and then, events bear them out.

I come to the point, the works of my hero. If many authors who are now forgotten, or, at least, in future will be without fame, deserve no small credit because, in the composition of big works, they took no heed of the expenditure of their reason, Mr. Swedenborg doubtless should carry highest honours among them all. For, surely, his bottle in the lunar world is quite full, and is inferior to none among all those which Ariosto has seen there, filled with the reason that was lost here, and which the owners one day will have to seek again; so utterly empty of the last drop of reason is his big work.50 Nevertheless, such a wonderful agreement we find there with what reason can obtain on the same subject by the most subtle investigations, that the reader will pardon me if I discover here that rare play of imagination which so many other collectors have found in the plays of nature, when, for example, in spotted marble they make out the Holy Family, or in stalactite formations they make out monks, baptismal fonts, and church organs, or even as the banterer Liscow discovered on the frosted window-pane the number of the beast and the triple crown, all of which nobody else sees but he whose head is filled with it beforehand.

The big work of this author comprises eight volumes quarto full of nonsense. He puts them before the world as a new revelation under the title of "Arcana Coelestia," and applies therein his visions mostly to the discovery of the hidden sense in the first books of Moses, and to a similiar mode of explanation of the whole of Scripture. All these fantastic interpretations do not concern me here, but, whoever desires it, may look up Dr. Ernesti's Theological Library, Volume first, for some information about them. Only the "audita and visa," i.e., what he professes to have seen with his own eyes and heard with his own ears, we will extract, principally from the appendices to his chapters, because they are the foundation of all the other fancies, and are also pretty well in the same line with the adventure which, in the foregoing, we have undertaken in the balloon of metaphysics. The author's style is plain. His stories and their arrangement seem really to be based upon fanatic observation, and afford little reason to suspect that fancies of a wrongly speculating reason have moved him to invent them, and use them for deception. In so far they are of some importance, and are really more deserving of being presented in a condensed form than many a plaything of brainless reasoners which swells our quarterlies. For a systematic delusion of the senses is a much more remarkable phenomenon than the deception of reason, the causes of which are well enough known, and which mostly could be prevented by an effort to guide the powers of mind, and to restrain somewhat an empty inquisitiveness. The delusion of the senses, on the other hand, concerns the first foundation of all judgments, against the perversion of which the rules of logic have little power. I distinguish, therefore, with our author, between delusions and the deductions thence, and pass over his incorrect reasonings, the consequences of his not stopping at his visions, — just as we often have to separate in a philosopher that which he observes from what he reasons, and just as even seeming experiences are, for the most part, more instructive than seeming reasons. While thus robbing the reader of some of the moments which otherwise he might have put to the study of the exhaustive discussion of the matter, without, however, being much more benefited, I have taken care, nevertheless, of his sensitive taste by leaving out many of the wild chimeras of the book, and reducing its quintessence to a few drops. I expect for that just as much gratefulness from the reader, as a certain patient believed he owed to his doctors because they made him eat only the bark of cinchona, while they might easily have compelled him to eat the whole tree.

Mr. Swedenborg divides his visions into three kinds. In the first kind he is liberated from the body, in a state mediate between sleeping and waking, in which he has seen, heard, even felt spirits. This he has

experienced only three or four times. The second is being led away by the spirit, when he may be out walking on the street without losing himself, while at the same time his spirit is in entirely different regions and sees clearly elsewhere houses, men, forests, &c., and this perhaps for several hours, until he suddenly becomes aware again of his real place. That happened to him two or three times. The third kind of visions is what is usual with him, those which he has daily while wide awake; and from these visions his stories are taken.

All men, according to his testimony, are in equally close conjunction with the spirit-world; most men, however, do not perceive it, the difference between himself and others consisting only in the fact that *his interiors are opened*, a gift of which he always speaks with reverence (datum mihi est ex divina Domini misericordia). It may be seen from the context that this gift is supposed to consist in the faculty of becoming conscious of the obscure ideas which one's soul receives by its continual connection with the spirit-world. He distinguishes therefore in man the outer and the inner memory. The former he has as a person belonging to the visible world. On this fact also the distinction between the outer and inner man is founded; his own privilege consists in seeing himself already in this life as a person in the company of spirits, and in being recognised by them as man.51 In this inner memory everything is preserved which has disappeared out of the outer, — nothing of all the perceptions of a man is ever lost. After death the remembrance of everything that ever entered his soul, also of what was formerly hidden to himself, forms the complete book of his life.52

The presence of spirits, it is true, affects only his inner sense. But this makes them appear to him as being outside of himself, and in the form of the human figure. The language of spirits is an immediate communication of ideas, but it is always connected with the appearance of that language which the observer ordinarily speaks, and is represented as being outside of himself.53 A spirit reads in the memory of another spirit the ideas which are contained in the inner memory with clearness. Thus the spirits see in Swedenborg the perceptions which he has from this world, with such clearness, that they deceive themselves, and often imagine they perceive immediately those things which it is impossible for them to see;54 for no spirit has the least sensation from the corporeal world. Also, through communication with the souls of other living men, they can receive no idea of this world, because the interior of such men is not opened, and contains only ideas entirely obscure. For this reason Swedenborg is the very oracle of the spirits, who are just as curious to view in him the present state of the world, as he is curious to observe in their memory, as in a mirror, the wonders of the spirit-world. Although these spirits are also in the closest conjunction with the souls of all other men, operating upon them and being operated upon by them, they yet know this as little as men know it; so entirely obscure is that interior sense which belongs to the spiritual personality of men. The spirits therefore believe that those things which have been effected in them through the influence of the souls of men, have been thought by themselves alone; just as men in this life think no otherwise, than that all their thoughts and inclinations come from themselves, although, as a matter of fact, they often flow into them out of the other world.55 Each human soul has already in this life its place in the spiritworld, and belongs to a society, always in accordance with the inner state of good and truth, i.e., of will and understanding.29 But the places of spirits among themselves have nothing in common with space in the corporeal world. Thus the soul of a man in India can be next to the soul of another man in Europe, as far as their spiritual places are concerned, while those which, according to the body, live in one house, may be spiritually very far from one another. When man dies, the soul does not change its place, but only perceives itself to be in that place which, in relation to other spirits, it occupied already in this life. But although the relation of spirits among themselves is no real space, it has still with them the appearance of it,56 and their conjunctions are perceived under the accessory condition of nearness, their differences, on the other hand, as distances. In the same way spirits possess no extent, but yet present to each other the appearance of human figures. In this imaginary space there exists a universal community of spiritual natures. Swedenborg talks with departed souls at will, and reads in their memory

(power of perception) that state which they observe in themselves, and sees it just as clearly as with bodily eyes. Moreover, the enormous distances which divide the rational inhabitants of the world are nothing in regard to the spiritual universe, and it is just as easy for one to talk with an inhabitant of Saturn, as with a deceased human soul. Everything depends on the condition of the interior state, and upon the conjunction in which spirits are according to the harmony of their states of good and truth. And the more remote spirits can easily enter into mutual communication through the intermediation of others. Thus man does not need to have actually dwelt in the other worlds for the sake of knowing them some day with all their wonders. His soul reads in the memory of the deceased citizens of other worlds the perceptions which they possess about their life and dwelling-place, and thereby sees objects as easily as by immediate observation.57

A principal conception in Swedenborg's phantasm is the following: — Corporeal beings have no substance of their own, but exist only through the spirit-world, not, however, that each body exists through one spirit, but through all taken together. For that reason the knowledge of material things has a double significance, an external meaning in regard to the inter-relations of matter, an internal meaning in so far as material effects indicate the powers of the spirit-world which cause them. Thus the parts in the body of man stand in relation to each other according to material laws. But in so far as the body is preserved by the spirit living in it, its various members and their functions are of value in indicating those powers of the soul by the operation of which they have their form, activity, and stability.58 This inner meaning is unknown to man, and it is that which Swedenborg, whose interiors are opened, wants to make known to the world. With all other things of the visible world the case is the same; they have, as I say, a signification as things, which amounts to little, and another as signs, which amounts to much.59 This also is the origin of all the new interpretations which he would make of the Scripture.60 For this inner meaning, the internal sense, i.e., the symbolic relation of all things told there to the spirit-world, is, as he fancies, the kernel of its value, the rest only the shell. Again, the important point in this symbolic conjunction of corporeal things, as images, with the interior spiritual state, is the following. All spirits present themselves to each other under the appearance of figures possessing extent; and the influences of all these spiritual beings among each other at the same time call forth the appearance of still other spiritual creatures possessing extent, thus, as it were, the appearance of a material world. The scenes of this world, however, are only symbols of its inner state; nevertheless they cause such a clear and enduring deception of the senses as to equal the real sensation of such objects. (A future interpreter will conclude from this that Swedenborg was an idealist, because he denies to this world its independent subsistence, and therefore held it to be only a systematic appearance, arising from the constitution of the spirit world.) Thus he talks about the gardens, vast countries, the dwelling-places, galleries, and arcades of the spirits, which he claims to see with his own eyes in the clearest light. And he assures us that, having spoken after their death with all his friends, he had nearly always found that those having died recently could persuade themselves with difficulty that they had died, because they beheld a similar world; also, that societies of spirits of the same inner state live in the same appearance in regard to the country and other things there, and that a change of state is accompanied by the appearance of a change of locality. The mass of wild and unspeakably absurd forms and figures which our dreamer believes to see quite clearly in his daily intercourse with spirits must be derived from the fact that, whenever spirits communicate their thoughts to the souls of men, these thoughts take the appearance of material things, which, however, present themselves to the subject only on the strength of their relation to an inner meaning, but, still, with all appearance of reality.

I have already stated that, according to our author, the many powers and qualities of the soul are in sympathy with those organs of the body which they govern. The whole outer man therefore corresponds to the whole inner man. If, then, a perceptible spiritual influx from the invisible world flows mainly into some one of the powers of the soul, he harmoniously feels its apparent presence also in the corresponding

member of his outer man. Under this head he classifies a great variety of sensations in his body which he claims are always connected with spiritual contemplation. But their foolishness is too great for me to dare to quote even one of them.

From these data, if it be considered worth while, one may now form a conception of that most extravagant and queerest of fancies in which all his dreams culminate. Just as various powers and capacities form that unity which constitutes the soul or the inner man, in the same way also various spirits (whose principal traits have the same relation to each other as the many faculties of a single spirit have among themselves) form a society which has the appearance of a great man.17:36 In this image each spirit finds himself in that place and in that apparent member which is in accordance with his peculiar office in such a spiritual body. Again, all societies of spirits together, and the world of all these invisible beings, finally presents itself in the appearance of the *Grand Man, Maximus Homo*.61 A colossal and gigantic fancy, which, perhaps, has grown out of an old childish conception, just as in schools sometimes, as an aid to memory, a whole continent is pictured to the pupils under the image of a sitting virgin, &c. In this enormous man there is a universal, most intimate communion of one spirit with all others, and of all with one; and, whatever may be the positions or changes of living beings in regard to each other in this world, still each has his place in the Grand Man entirely distinct from his place here, a place which he never changes, which is in immeasurable space only according to appearance, but in reality signifies only a particular character of his relations and influences.

I am tired of copying the wild chimeras of this worst of all dreamers, and forbear continuing them to his descriptions of the state after death. I have still other scruples. For, although a collector of objects of natural history puts up in his press among the prepared objects of animal procreation not only such as are formed naturally but also abortions, he nevertheless has to be careful not to show them too plainly and not to everybody. For among the curious there might easily be some pregnant persons who might receive an injurious impression. And as among my readers some might be just as likely in an interesting condition in regard to spiritual conceptions, I should be sorry if they had received a detrimental shock by anything I have told. However, as I have warned them right at the start, I am responsible for nothing, and hope not to be burdened with the moon-calves which their fruitful imagination might bring forth on this occasion.

As it is, I have not substituted my own fancies for those of our author, but have offered his views in a faithful extract to the comfortable and economic reader who does not care to sacrifice seven pounds for a little curiosity. It is true, I have mostly avoided quoting the visions themselves, as such wild chimeras only disturb the sleep of the reader, and the confused meaning of his revelations has been brought now and then into somewhat intelligible language; but the main traits of the sketch have thereby not suffered in accuracy. Nevertheless, it is only in vain that one would hide the fact which, after all, is conspicuous to everybody, that all this labour finally comes to nothing. For, as the pretended private visions narrated in the book cannot prove themselves, the motive for bothering oneself with them could lie only in the supposition that the author might offer in substantiation happenings of the above-mentioned kind which could be confirmed by living witnesses. But nothing of the kind is found. And thus we retire with some confusion from a foolish attempt, making the rational though somewhat belated observation that it is often easy to think wisely, but unfortunately only after one has been for some time deceived.

I have treated an unfruitful subject which the inquiries and importunity of idle and inquisitive friends has forced upon me. By submitting my labours to their curiosity, I have still left their expectation unrewarded, and have satisfied neither the curious by novelties, nor the studious by reasons. If I had been animated in this work by no other intentions than those just stated, I should have wasted my time; for I have lost the confidence of the reader, whom, in his inquisitiveness and eagerness to know, I have led by a tiresome roundabout way to the same point of ignorance from which he started. But I really had an aim in view that seemed to me more important than the pretended one, and that, I believe, I have attained.

Metaphysics, with which it is my fate to be in love, although only rarely can I boast of any favours from her, offers two advantages. The first is that it serves to solve the tasks which the questioning mind sets itself when by means of reason it inquires into the hidden qualities of things. But here the result only too often falls below expectation, and also this time the answer has evaded our too eager grasp.

Ter frustra comprensa manus, effugit imago,
Par levibus ventis volucrique simillima somno.
— Virgil.

The other advantage is more adapted to human reason, and consists in recognizing whether the task be within the limits of our knowledge and in stating its relation to the conceptions derived from experience, for these must always be the foundation of all our judgments. In so far metaphysics is the science of the boundaries of human reason. And as a small country always has many boundaries, and is generally more careful to intimately know and defend its possessions than blindly to set out upon conquests, it is this use of metaphysics, as setting boundaries, which is at the same time the least known and the most important, and which further is obtained only late and by long experience. In this case I indeed have not accurately defined the boundaries; but I have indicated them for the reader” so far that, after further consideration, he will find himself able to do without such vain investigations about a question the data of which he has to seek in a world different from that of which he is sensible. Thus I have wasted my time that I might gain it. I have deceived the reader so that I might be of use to him, and although I have offered him no new knowledge, I have nevertheless destroyed that vain belief and empty knowledge which inflates reason, and, in its narrow space, takes the place which might be occupied by the teachings of wisdom and of useful instruction.

The impatience of the reader, whom our considerations thus far have only wearied without giving instruction, may be appeased by the words with which Diogenes is said to have cheered his yawning listeners when he saw the last page of a tiresome book: “Courage, gentlemen, I see land!” Before, we walked, like Demokritus, in empty space, whither we had flown on the butterfly-wings of metaphysics, and there we conversed with spiritual beings. Now, since the sobering power of self-recognition has caused the silky wings to be folded, we find ourselves again on the ground of experience and common sense. Happy, if we look at it as the place allotted to us, which we never can leave with impunity, and which contains everything to satisfy us as long as we hold fast to the useful.

THIRD CHAPTER.

PRACTICAL CONCLUSION FROM THE WHOLE TREATISE.

It is the zeal of a sophist to inquire into any idle proposition and to set to the craving after knowledge no other limits than impossibility. But to select from among the innumerable tasks before us the one which humanity must solve, is the merit of the wise. After science has completed its course, it naturally arrives at a modest mistrust and, indignant with itself, it says: How many things there are which I do not understand! But reason, matured by experience so as to become wisdom, speaks through the mouth of Socrates when, among all the merchandise of a fair, he says serenely: "How many things there are which I do not need!" In this manner two endeavours of a dissimilar nature flow together into one, though in the beginning they set out in very different directions, the one being vain and discontented, the other staid and content. To be able to choose rationally, one must know first even the unnecessary, yea the impossible; then, at last, science arrives at the definition of the limits set to human reason by nature. All hollow schemes, perhaps not unworthy in themselves but lying outside of the sphere of men, will then flee to the limbus of vanity. Then even metaphysics will become that from which at present it is rather far off, and which would seem the last thing to be expected of her — the companion of wisdom. As long as people think it still possible to attain knowledge about things so far off, wise simplicity may call out in vain that such great endeavours are unnecessary. The pleasure accompanying the extension of knowledge will easily make it appear a duty, and will consider deliberate and intentional contentedness to be foolish simplicity, opposed to the improvement of our nature. The questions about the spiritual nature, about freedom and predestination, the future state, &c., at first animate all the powers of reason, and through their excellency draw man into the rivalry of a speculation which reasons and decides, teaches and refutes without discrimination, just according to the nature of the apparent knowledge in each case. But if this investigation develop into philosophy which judges its own proceedings, and which knows not only objects, but their relation to man's reason, then the lines of demarcation are drawn closer, and the boundary stones are laid which in future never allow investigation to wander beyond its proper district. We had to make use of a good deal of philosophy to know the difficulties surrounding a conception generally treated as being very convenient and common. Still more philosophy moves this phantom of knowledge yet further away, and convinces us that it is entirely beyond the horizon of man. For in the relations of cause and effect, of substance and action, philosophy at first serves to dissolve the complicated phenomena, and to reduce them to simpler conceptions. But when one has, finally, arrived at fundamental relations, philosophy has no business any more. Questions like "How something can be a cause, or possess power," can never be decided by reason; but these relations must be taken from experience alone. For the rules of our reason are applicable only to comparison in respect to identity or contrast. But in the case of a cause something is assumed to have come from something else; one can find therefore no connection in regard to identity. In the same way, if this effect is not already implied in what preceded, a contrast can never be made out; because it is not contradictory to merely assume one thing and abolish another. Thence the fundamental conceptions of causes, of forces, and of actions, if they are not taken from experience, are entirely arbitrary, and can be neither proved nor disproved.2:8:9 I know that will and understanding move my body, but I can never reduce by analysis this phenomenon, as a simple experience, to another experience, and can, therefore, indeed recognize it, but not understand it. That my will moves my arm is not more intelligible to me than if somebody said to me that he could stop the moon in his orbit. The difference is only that the one I experience, but that the latter has never occurred to me. I recognize in myself changes as of a living subject, namely, thoughts, power to choose,

&c., &c., and, as these terms indicate things different in kind from any of those which, taken together, make up my body, I have good reason to conceive of an incorporeal and constant being. Whether such a being be able to think also without connection with a body, can never be concluded from this empirical conception of its nature. I am conjoined with beings kindred to myself by means of corporeal laws, but whether I am, or ever shall be, conjoined according to other laws which I will call spiritual, without the instrumentality of matter, I can in no way conclude from what is given to me. All such opinions, as those concerning the manner in which the soul moves my body, or is related to other beings, now, or in future, can never be anything more than fictions. And they are far from having even that value which fictions of science, called hypotheses, have. For with these no fundamental powers are invented; only those known already by experience are connected according to the phenomena; their possibility, therefore, must be provable at any moment. It is different in the former case, when even new fundamental relations of cause and effect are assumed, the possibility of which can never, nor in any way, be ascertained, and which thus are only invented by creative genius or by chimera, whichever you like to call it. That several true or pretended phenomena can be comprehended by means of such assumed fundamental ideas, cannot at all be quoted in their favour. For a reason may be given for everything, if one is entitled to invent at will actions and laws of operation. We must wait, therefore, until perhaps in the future world, by new experiences, we are informed about new conceptions concerning powers in our thinking selves which, as yet, are hidden to us. Thus the observations of later days, analysed by mathematics, have revealed to us the power of attraction in matter, concerning the possibility of which we shall never be able to learn anything further, because it seems to be a fundamental power. Those who would have invented such a quality without first having obtained the proof from experience, would rightly have deserved to be laughed at as fools. Because, in such cases, reasons are of no account whatever, neither for the sake of inventing, nor of confirming the possibility or impossibility of certain results: the right of decision must be left to experience alone. Just as I leave to time, which brings experience, the ascertainment of something about the famous healing-powers of the magnet in cases of toothache, when experience shall have produced as many observations to the effect that magnetic rods act upon flesh and bones, as we have already proving their effect on steel and iron. But, if certain pretended experiences cannot be classified under any law of sensation that is unanimously accepted by men: if, therefore, they would only go to prove irregularity in the testimony of the senses — which, indeed, is the case with rumoured ghost-stories — then it is advisable to simply ignore them. For the lack of unanimity and uniformity makes the historic knowledge about them valueless for the proof of anything, and renders them unfit to serve as basis for any law of experience within the domain of reason.

Just as, on the one hand, by somewhat deeper investigation, one will learn that convincing and philosophic knowledge is impossible in the case under consideration, one will have to confess, on the other hand, in a quiet and unprejudiced state of mind, that such knowledge is dispensable and unnecessary. The vanity of science likes to excuse its occupations by the pretext of importance; thus it is pretended in this case that a rational understanding of the spiritual nature of the soul is very necessary for the conviction of an existence after death; again, that this conviction is very necessary as a motive for a virtuous life. Idle curiosity adds that the fact of apparitions of departed souls even furnishes us with a proof from experience of the existence of such things. But true wisdom is the companion of simplicity, and as, with the latter, the heart rules the understanding, it generally renders unnecessary the great preparations of scholars, and its aims do not need such means as can never be at the command of all men. What? is it good to be virtuous only because there is another world, or will not actions be rewarded rather because they were good and virtuous in themselves? Does man's heart not contain immediate moral precepts, and is it absolutely necessary to fix our machinery to the other world for the sake of moving man here according to his destiny? Can he be called honest, can he be called virtuous, who would like to yield to his favourite vices if only he were not frightened by future punishment? Must we not rather say that

indeed he shuns the doing of wicked things, but nurtures the vicious disposition in his soul; that he loves the advantages of actions similar to virtue, but hates virtue itself? In fact, experience teaches that very many who are instructed concerning the future world, and are convinced of it, nevertheless yield to vice and corruption, and only think upon means cunningly to escape the threatening consequences of the future.62 But there probably never was a righteous soul who could endure the thought that with death everything would end, and whose noble mind had not elevated itself to the hope of the future. Therefore it seems to be more in accordance with human nature and the purity of morals to base the expectation of a future world upon the sentiment of a good soul, than, conversely, to base the soul's good conduct upon the hope of another world. Of that nature is also that moral faith, the simplicity of which can do without many a subtlety of reasoning, and which alone is appropriate to man in any state, because, without deviations, it guides him to his true aims. Let us therefore leave to speculation and to the care of idle men all the noisy systems of doctrine concerning such remote subjects. They are really immaterial to us, and the reasons pro and con which, for the moment, prevail, may, perhaps, decide the applause of schools, but hardly anything about the future destiny of the righteous. Human reason was not given strong enough wings to part clouds so high above us, clouds which withhold from our eyes the secrets of the other world. The curious who inquire about it so anxiously may receive the simple but very natural reply, that it would be best for them to please have patience until they get there. But as our fate in the other world probably depends very much on the manner in which we have conducted our office in the present world, I conclude with the words with which Voltaire, after so many sophistries, lets his honest Candide conclude: "*Let us look after our happiness, go into the garden, and work*."

DISSERTATION ON THE FORM AND PRINCIPLES OF THE SENSIBLE AND THE INTELLIGIBLE WORLD: INAUGURAL DISSERTATION 1770

Translated by William J. Eckoff

CONTENTS

SECTION I
SECTION II
SECTION III
SECTION IV
SECTION V

SECTION I

ON THE IDEA OF A WORLD IN GENERAL

Paragraph 1

As the analysis of a substantial composite terminates only in a part which is not a whole, that is, in a *simple part*, so synthesis terminates only in a whole which is not a part, that is, the *world*.

In this exposition of the underlying concept I have had regard not only to the marks pertaining to the distinct cognition of the object, but somewhat also to the *two-fold* genesis of the concept from the nature of the mind, which, being serviceable to a method of deeper metaphysical insight, by way of example appears to me not a little commendable. For it is one thing, the parts being given, to conceive the *composition* of the whole by an abstract notion of the intellect, and another thing to *follow out* this general *notion* considered as a problem of the reason by the cognitive sensuous faculty, that is, to represent it to one's self in the concrete by a distinct intuition. The former is done through the class concept by *composition*, as several things are contained either under it or mutually, and hence by intellectual and universal ideas. The latter rests on the *conditions* of time, inasmuch as the concept of a composite is possible genetically, that is by *synthesis*, by the successive union of part to part, and falls under the laws of *intuition*. Similarly, a substantial composite being given, we easily attain to the idea of the simple parts by the general removal of the intellectual notion of *composition;* for what remains after the removal of conjunction are the simple parts. But according to the laws of intuitive cognition this is not done, that is, all composition is not removed, except by a regress from the given whole to *any possible parts* whatsoever — in other words, by an analysis again resting on the condition of time. But since in order to a composite a *multiplicity*, in order to a whole, the *allness*, of parts is required, neither the analysis nor the synthesis will be complete; hence neither by the former will the concept of the *simple* part emerge, nor by the latter the concept of the *whole*, unless either can be gone through within a time that is finite and assignable.

But since in a *continuous quantity* the *regress* from the whole to assignable parts, and in an *infinite quantity* the *progress* from the parts to the given whole *are endless*, complete analysis in the one and complete synthesis in the other direction are impossible; hence neither the whole in the first case as to *composition*, nor the composite in the latter case as to *totality* can be thought completely in accordance with the laws of intuition. *Unthinkable* and *impossible* being vulgarly deemed to have the same meaning, it is plain why the concepts of the *continuous* as well as that of the *infinite* are rejected by most men as concepts whose representation *according to the laws of intuitive cognition* is impossible. Although I do not here champion these notions, especially not the first, which are considered exploded by many schools, still the following reminder is of the greatest moment. Those who use so perverse an argumentation have fallen into a grave error. For whatever is repugnant to the laws of the intellect and reason is of course impossible, but that which being the object of pure reason does merely *not fall under* the laws of intuitive cognition is not so. For here the disagreement between the *sensuous* and the *intellectual* faculties, whose natures I shall presently explain, indicates nothing except *that the abstract ideas which the mind has received from the intellect can often not be followed out in the concrete and converted into intuitions*. This *subjective* difficulty generally feigns some objective repugnance and easily deceives the incautious, the limits by which the human mind is circumscribed being taken for those by which the essence of things themselves is contained.

Furthermore, as the argument from intellectual reasonings easily shows that substantial composites being given, whether by the testimony of the senses or otherwise, the simple parts and the world are also given, so does our definition point out causes contained in the nature of the subject why the notion of a world should not seem merely arbitrary and made up, as in mathematics, only for the sake of the deducible consequences. The mind intent upon resolving as well as compounding the concept of a composite demands and presumes boundaries in which it may acquiesce in the former as well as in the latter direction.

Paragraph 2

In defining the World the following points require attention:

Matter (in the transcendental sense), that is, the *parts* which are here assumed to be *substances*. We might plainly be regardless of coincidence between our definition and the meaning of the common word, the question being, so to speak, of a problem arising in accordance with the laws of reasoning, namely, how several substances may coalesce into one, and on what condition rests this one's being no part of another. But the force of the word World, as commonly used, of itself falls in with us. For no one will attribute *accidents* to the *World* as *parts*, but as *determinations*, *states;* hence the so-called world of the *ego*, unrestrained by the single substance and its accidents, is not very appositely called a World, unless, perhaps, an imaginary one. For the same reason it is not permissible to refer the successive series — namely, of states — as a part to the mundane whole; for modifications are *not parts*, but *consequences* of the subject. Finally, as to the nature of the substances constituting the world, I have not here called into debate whether they be *contingent* or necessary, nor do I hide such a determination unproved in the definition in order subsequently, as is sometimes done, to draw it thence by some specious argumentation. But I shall show further on that their contingency can be amply concluded from the conditions here posited.

Form, which consists in the *co-ordination* of the substances, not in their subordination. For *co-ordinates* are to be regarded as mutual complements to a whole, *subordinates* as effect and cause, or generally, as principle and consequence. The former relation is reciprocal and *homonymous*, any correlate in respect to any other being considered as at once determining and determined. The latter is *heteronymous;* on the one hand dependence only, causality on the other. This co-ordination is conceived as real and objective, not as ideal, and resting in the mere pleasure of a subject making up a whole by the summation of any multiplicity whatever. For the grasping of several things can by no contrivance be made a *whole of representation*, nor, for that reason, *a representation of the whole*. Therefore, if there be any totals of substances connected by no bond, a grasping of them together, the mind forcing the multiplicity into ideal oneness, will be called nothing more than a plurality of worlds comprehended in a single thought. But the connection constituting the *essential* form of a world is looked upon as the principle of the *possible influences* of the substances composing that world. For an actual influence pertains not to essence but to state, and the transitive forces, the causes of the influences, suppose some principle by which it is possible that the states of several things in other respects existing independently of each other are mutually related as consequences, which principle being abandoned, the possibility of transitive force in a world is an illicit assumption. And, furthermore, this *form essential* to the world is on that account *immutable*, and exposed to no vicissitude whatever. It is so in the first place for a logical reason, since any change supposes the identity of the subject with determinations succeeding one another in turn. Hence the world, remaining the same world through all the states succeeding one another, preserves the same fundamental form. For it does not suffice to the identity of the whole that all the *parts* be identical, the identity of characteristic *composition* is required also. But it follows especially from a *real cause*. For the nature of the world, which is the primary inner principle of whatever variable determinations may

pertain to its state, never by any possibility being opposite to itself, is naturally, that is, by itself, immutable; hence there is given in any world whatever some form ascribable to its nature, constant and invariable, as the perennial principle of any contingent and transitory form pertaining to the state of the world. They who hold this disquisition superfluous are confuted by the concepts of space and time, conditions, as it were, given by their very own selves and primitive, by whose aid, that is to say, without any other principle, it is not only possible but necessary for several actual things to be regarded as reciprocally parts constituting a whole. But I shall show presently that these are plainly not *rational* notions, nor the bonds which they form objective *ideas*, but phenomena; and that though they witness, to be sure, some principle which is the common universal bond, it is not set forth by them.

Universality, which is the *absolute* allness of the appertaining parts. For, *regard* being had to any given composite, though it may be besides a part of another, still there always obtains a certain comparative allness, namely, that of the parts belonging to it as a particular quantity. But in this case whatsoever things are regarded as mutually parts of *whatsoever* whole, are understood to be conjointly posited. This absolute *totality*, apparently an everyday and perfectly obvious concept, especially when, as happens in the definition, it is enunciated negatively, when canvassed thoroughly becomes the crucial test of the philosopher. For it is scarce conceivable how the *inexhaustible series* of the states of the universe succeeding one another *eternally* be reducible to a *whole* comprehending all changes whatsoever. Since it is necessary to very infinitude to be without *end*, and hence no successive series is given but what is the part of another, completeness or *absolute totality* is by parity of reasoning plainly excluded. For although the notion of a part can be taken in a universal sense, and although everything contained under this notion, if regarded as posited in the same series, constitutes unity, yet the concept of the *whole* appears to exact their all being *taken simultaneously*, which in the case given is impossible. For, although to the whole series nothing succeeds, there is given in the succession no posited series to which nothing succeeds, unless it be the last. There will, then, in eternity be something which is last, which is absurd. Perhaps some may think that the difficulty which besets a successive infinite is absent from a *simultaneous infinite*, for the reason that apparently *simultaneity* plainly professes to embrace *all at the same time*. But, if the simultaneous infinite be admitted, the successive infinite also will have to be conceded, and the negation of the latter cancels the former. For the simultaneous infinite offers matters everlastingly inexhaustible to a successive progress in infinitum through its innumerable parts, which numberless series actually being given in the simultaneous infinite, a series though inexhaustible by successive addition could be given as a *whole*. In solution of the perplexing problem note; that both the successive and the simultaneous co-ordination of several things, since they rest upon the concept of time, do not pertain to the *intellectual* concept of a whole, but only to the conditions of *sensuous intuition;* hence though not sensuously conceivable, they do not on that score cease being intellectual concepts. For in order to the latter it suffices that co-ordinates be given, no matter how, and that they be thought of as all pertaining to a unit.

SECTION II

ON THE DISTINCTION BETWEEN THE SENSIBLE AND THE INTELLIGIBLE GENERALLY

Paragraph 3

Sensibility is the *receptivity* of a subject by which it is possible for its representative state to be affected in a certain way by the presence of some object. *Intelligence*, rationality, is the *faculty* of a subject by which it is able to represent to itself what by its quality cannot enter the senses. The object of sensibility is sensuous; what contains nothing but what is knowable by the intellect is intelligible. In the older schools the former was called *phenomenon*, the latter *noumenon*. To the extent to which knowledge is subject to the laws of sensuousness it is sensuous; to the extent to which it is subject to the laws of intelligence it is *intellectual* or rational.

Paragraph 4

Since whatever is in sensuous knowledge depends upon the subject's peculiar nature, as the latter is capable of receiving some modification or other from the presence of objects which on account of subjective variety may be different in different subjects, whilst whatever knowledge is exempt from such subjective condition regards the object only, it is plain that what is sensuously thought is the representation of things *as they appear*, while the intellectual presentations are the representations of things *as they are*. Now there is in sense representation something which may be called the *matter*, namely, the *sensation*, and in addition to this something which may be called the *form*, namely, the *appearance* of the sensible things, showing forth to what extent a natural law of the mind co-ordinates the variety of sensuous affections. Furthermore, as the sensation constituting the *matter* of sensuous representations argues, to be sure, the presence of something sensible, but depends as to quality on the nature of the subject, as the latter is modifiable by the object; exactly so does the *form* of that representation witness certainly some reference or relation among the sensuous percepts, but itself is not, as it were, the shadowing forth or outlining of the object, but only a certain law inherent in the mind for co-ordinating among themselves sensuous percepts arising from the presence of the object. For by form or appearance the objects do not strike the sense, hence in order that various sense-affecting objects may coalesce into some whole of representation, there is need of an inner principle of the mind by which, in accordance with stable and innate laws, that variety shall take on some *appearance*.

Paragraph 5

To sensual cognition then pertains both the matter which is sensation and by which the knowledge is said to be *sensual*, and the form by which, even though we find it without any sensation, the representations are called *sensuous*. On the other hand, as to *intellectual* concepts, it is above all to be well noted that the use of the intellect, or of the superior faculty of the soul, is two-fold. By the first use are *given* the very concepts both of things and relations. This is the *real use*. By the second use they, whencesoever given, are merely by common marks *subordinated* to one another, the lower to the higher, and compared among themselves according to the principle of contradiction. This is called the *logical* use. The logical use of the intellect is common to all the sciences; the real use is not. For a cognition given in any wise is

regarded either as contained under or as opposed to a mark common to several cognitions, and this either by immediate apposition, as in *judgments* in order to distinct cognition, or mediately, as in *reasoning*, in order to adequate cognition. Thus sensuous knowledge being given, sensuous percepts are by the logical use of the intellect subordinated to other sensuous percepts, as to common concepts, and phenomena to the more general laws of phenomena. In this connection it is of the greatest moment to note that cognitions must continue to be regarded as sensuous, no matter how great may have been the logical use of the intellect upon them. For they are called sensuous *on account of their origin*, not of their *collation* by identity and opposition. Hence, empirical laws, though of the greatest generality, are, nevertheless, sensual, and the principles of sensuous form in geometry, the relations in determinate space, however much the intellect arguing according to logical rules from what is sensuously given, by pure intuition, be employed upon them, do not for that matter pass beyond the class of sense-percepts. That in sense-percepts and phenomena which precedes the logical use of the intellect is called *appearance*, while the reflex knowledge originating from several appearances compared by the intellect is called *experience*. Thus there is no way from appearance to experience except by reflection according to the logical use of the intellect. The common concepts of experience are termed *empirical*, its objects *phenomena*, and the laws as well of experience as of all sensuous cognition generally are called the laws of phenomena. Empirical concepts, then, are not by a reduction to greater universality rendered intellectual in the *real sense* and do not transcend the species of sensuous cognition, but, however high abstraction may carry them, remain indefinitely sensuous.

Paragraph 6

Now as to *strictly intellectual concepts* in which the *use* of the *intellect* is *real*. Such concepts both of objects and relations are given by the very nature of the intellect, are not abstracted from any use of the senses, and do not contain any form of sensuous knowledge as such. It is needful here to take note of the extreme ambiguity of the word *abstract*, which, in order not to confuse our disquisition on intellectual concepts, must be removed to begin with, for properly we should say *abstract from some things*, not *abstract something*. The former denotes that in a concept we give no attention to other matters in whatsoever way they may be connected with it; but the latter, that it is not given but in the concrete and so as to be separated from what it is conjoined with. Hence an intellectual concept *abstracts* from everything sensuous, it is *not abstracted* from sensuous things, and perhaps would be more correctly called *abstracting* than *abstract*. Intellectual concepts it is more cautious, therefore, to call *pure ideas*, and concepts given only empirically, *abstract* ideas.

Paragraph 7

From the foregoing it will be seen that it is badly to expound the sensuous to call it the *more confusedly* known, and the intellectual the *distinctly* known. For these are only logical distinctions and plainly do *not touch* the *data* underlying all logical comparison. The sensuous may be exceedingly distinct, while intellectual concepts are extremely confused. The former we observe in the prototype of sensuous knowledge, *geometry;* the latter, in the organon of all intellectual concepts, *metaphysics*. It is evident how much toil the latter is expending to dispel the fogs of confusion darkening the common intellect, though not always with the happy success of the former science. Nevertheless, any cognition retains the marks of its origin, the former, however distinct, being called by genesis sensuous; the latter, no matter how confused, remaining intellectual, as for instance, the *moral* concepts, which are known not experientially but by the pure intellect itself. The writer fears that Wolf by the distinction between the sensuous and the intellectual, which to him is only logical, checked, perhaps wholly, and to the great

detriment of philosophy, that noble enterprise of antiquity of discussing the nature of phenomena and noumena, turning us from the investigation of these to what are frequently but logical trifles.

Paragraph 8

The *primary* philosophy containing the *principles* of the use of *pure intellect* is *metaphysics*. But there is a science *propaedeutical* to it, showing the distinction of sensuous cognition from intellectual, a specimen of which we present in this dissertation. Empirical principles not being found in metaphysics, the concepts to be met with in it are not then to be sought for in the senses, but in the very nature of pure intellect; not as *connate* notions, but as abstracted from laws whose seat is in the mind, by attending to the actions of the mind on the occasion of experience, and hence as *acquired*. Of this species are possibility, existence, necessity, substance, cause, etc., with their opposites and correlates, which, never entering as parts into any sensual representation, can by no means have been abstracted thence.

Paragraph 9

The purpose of intellectual concepts is mainly twofold; in the first place *refutative*, by which they are of negative use, when, shutting off sensuous concepts from noumena, though not advancing science a hair's breadth, they maintain however its immunity from the contagion of error. In the second place *dogmatic*, following which the general principles of pure intellect, such as are set forth in ontology or rational psychology, go forth into an exemplar inconceivable except by pure intellect, and the common measure of all other things considered as realities, namely, *noumenal perfection*. The latter is such either in the theoretical or in the practical sense. In the former it is the highest being, *God*. In the latter sense, it is *moral perfection*. *Moral philosophy*, then, inasmuch as supplying the first *principles of judgment*, is not cognized except by pure intellect, and itself belongs to pure philosophy, and Epicurus reducing its criteria to deduction from the sense of pleasure or pain is rightly reprehended, together with some moderns following him a certain distance from afar, as Shaftesbury and his adherents. In any class of things having variable quantity the *maximum* is the common measure and the principle of cognition. Now the *maximum of perfection* is called *ideal*, by Plato, Idea — for instance, his Idea of a Republic — and is the principle of all that is contained under the general notion of any perfection, inasmuch as the lesser grades are not thought determinable but by limiting the maximum. But God, the Ideal of perfection, and hence the principle of cognition, is also, as existing really, the principle of the creation of all perfection.

Paragraph 10

To man, no *intuition* of intellectual concepts is given, only *symbolical cognition*, and intellection is granted us only by universal concepts in the abstract, not by the concrete singular. For all intuition is restricted by some principle of form under which alone anything can be *discerned* by the mind immediately or as *singular*, and not merely conceived discursively by general concepts. This formal principle of our intuition — space and time — is the condition under which something can be an object of our senses, and hence as a condition of sensuous knowledge is not a medium for intellectual intuition. Besides, all the material of our cognition is given only by the senses, but the noumenon, as such, is not conceivable by representations drawn from sensations; hence the intellectual concept, as such, is destitute of all *data* of human intuition. For the intuition of our mind is always *passive*, and therefore possible only to the extent to which something can affect our senses. But the divine intuition, the cause — not the consequence, of objects, being independent, is the archetype, and hence perfectly intellectual.

Paragraph 11

But although phenomena are properly the appearances of things, but not ideas, or express the inner and absolute quality of objects, their cognition is nevertheless of the truest. For in the first place, being apprehended sensual concepts, they, being consequences, witness the presence of the object, contrary to Idealism; and as regards judgments concerning that which is sensuously known, since truth in judging consists in the agreement of the predicate with the given subject, and since the concept of the subject as a phenomenon is given only by relation to the sensuous cognitive faculty, the sensuously observable predicates being given according to the same, it is plain that the representations of subject and predicate are made according to common laws, and hence give occasion for perfectly true cognition.

Paragraph 12

All sense-objects are phenomena, but that which, not touching our senses, contains the form only of sensuality, belongs to pure intuition, that is, an intuition devoid of sensations, but not on that account, intellectual. Phenomena of the external sense are examined and set forth in *physics;* those of the internal sense in empirical psychology. But pure human intuition is not a universal or logical concept *under which*, but a singular in which all sensible objects are thought, and hence contains concepts of space and time, which, since they determine nothing concerning sensible objects as to *quality*, are not the objects of science except as to *quantity*. Hence *pure mathematics* considers *space* in *geometry* and *time* in *pure mechanics*. To these is to be added a certain concept, intellectual to be sure in itself, but whose becoming actual in the concrete requires the auxiliary notions of time and space in the successive addition and simultaneous juxtaposition of separate units, which is the concept of *number* treated in *arithmetic*. Pure mathematics, then, expounding the form of our entire sensuous cognition, is the organon of all intuitive and distinct knowledge, and since its objects are not only the formal principles of all intuition, but themselves original intuitions, it confers cognition both perfectly true, and the model of the highest degree of clearness to others. There is *given*, *therefore*, *a science of sensual things*, though being phenomena there is not given a real intellection, but a logical one only; hence it is plain in what sense those borrowing from the Eleatic school are to be thought to have denied a science of phenomena.

SECTION III

ON THE PRINCIPLES OF THE FORM OF THE SENSIBLE WORLD

Paragraph 13

The principle of the form of a universe is that which contains the cause of the universal tie by means of which all substances and their states pertain to one which is called a *world*. The principle of the form of the *sensible world* is that which contains the cause of the universal tie of all things regarded as *phenomena*. The form of the *intelligible world* acknowledges an objective principle, that is, some cause by which it is the colligation of what exists in it. But the world regarded as phenomenon, that is, in respect to the sensibility of the human mind, acknowledges no principle of form but a subjective one, that is, a certain mental law by which it is necessary that all things qualified for being objects of the senses would seem to pertain *necessarily* to the same whole. Whatever be, therefore, the principle of the form of the sensible world, it will comprise only *actual* things in as far as thought of as possibly falling under *sense-perception;* hence neither immaterial substances, which as such are excluded by definition from the external senses altogether, nor the cause of the world, which, since by it the mind exists and has the power of sense-perception, cannot be the object of the senses. These formal principles of the *phenomenal universe* which are absolutely primary, universal, and, so to speak, the outlines and conditions of anything else whatsoever in human sensuous cognition, I shall now show to be two: time and space.

Paragraph 14 OF TIME

The idea of time does not originate in, but is presupposed by the senses. Whether things falling under sense-perception be simultaneous or in line of succession cannot be represented but by the idea of time; nor does succession beget the concept of time; it appeals to it. Hence the notion of time, though acquired by experience, is badly defined by a series of actual things existing one *after* another, for what the word *after* means I understand only by the previous concept of time. For those things are *after* one another which exist at *different times*, as those are *simultaneous* which exist at the *same time*.

The idea of time is singular, not general. For any time whatever is thought only as a part of one and the same unmeasured time. If you think two years you cannot represent them to yourself but in a mutually determinate position, and if they do not immediately follow one the other, you cannot think of them except as connected by some intermediate time. Which of different times is *first* and which *later* can be defined in no way by any marks conceivable by the intellect, unless you are willing to run into a circle, and the mind discerns it by no more than one intuition. Besides, we conceive of all actual things as posited *in* time, not as contained as common marks *under* a general notion of time.

The idea of time, therefore, *is an intuition*, and being conceived before all sensation as the condition of the relations occurring in sensible things, it is not a sensual but *pure intuition*.

Time is a continuous quantity and the principle of the laws of continuity in the changes of the universe. For a *continuous* quantity is one which does not consist of simple parts. But since by time are only thought relations without any mutually related data, there is in time — as a quantity — composition, which being conceived wholly removed leaves nothing over. But a composite of which, composition being removed, nothing is left, does not consist of simple parts. Therefore, etc. Any part of time, then, is time; and the simple things in time, namely, the *moments*, are not parts of it, but termini between which time

intervenes. For two moments being given, time is not given, except as in them actualities succeed each other; hence, beside the given moment it is necessary that time be given in the latter part of which there is another moment.

The metaphysical law of *continuity* is this: *All changes are continuous* or flowing, that is, opposite states succeed each other only by an intermediate series of different states. For since two opposite states are in different moments of time, and some time is always intercepted between two moments, in which infinite series of moments the substance is neither in one assignable state nor the other, nor yet in none, it will be in different states, and so on infinitely.

The celebrated Kästner, calling in question this Leibnitzian law, calls on its defenders to demonstrate that the *continuous motion of a point around the sides of a triangle is impossible*, it being necessary to prove this if the law of continuity be granted. Here is the demonstration required. Let the letters *a b c* denote the three angular points of a rectilineal triangle. If the point did move continuously over the lines *ab, bc, ca*, that is, over the perimeter of the figure, it would be necessary for it to move at the point *b* in the direction *ab*, and also at the same point *b* in the direction *bc*. These motions being diverse, they cannot be *simultaneous*. Therefore, the moment of presence of the movable point at vertex *b*, considered as moving in the direction *ab*, is different from the moment of presence of the movable point at the same vertex *b*, considered as moving in the same direction *bc*. But between two moments there is time; therefore, the movable point is present at point *b* for some time, that is, it *rests*. Therefore it does not move continuously, which is contrary to the assumption. The same demonstration is valid for motion over any right lines including an assignable angle. Hence a body does not change its direction in continuous motion except by following a line no part of which is straight, that is, a curve, as Leibnitz maintained.

Time is not something objective and real, neither a substance, nor an accident, nor a relation. It is the subjective condition necessary by the nature of the human mind for coordinating any sensible objects among themselves by a certain law; time is a *pure intuition*. Substances as well as accidents we co-ordinate whether according to simultaneity or succession by the concept only of time; hence the notion of time as the principle of form outranks the concepts of the former. Any relations so far as occurring in sense-perception, whether simultaneous or successive, involve nothing but the determination of positions in time, to wit, either in the same point or in different points of the latter.

Those who assert the objective reality of time either conceive of it as a continuous flow in what exists, without, however, any existing thing, as is done especially by the English philosophers, an absurd fiction, or as something real abstracted from the succession of inner states, as it has been put by Leibnitz and his followers. The falsity of the latter opinion, besides obviously exposing it to the vicious circle in the definition of time, and, moreover, plainly neglecting *simultaneity*, the most important consequence of time, disturbs all sound reason, because it demands instead of the determining of the laws of motion by the measure of time, that time itself, as to its nature, be determined by what is observed in motion or some series of inner changes, whereby plainly all certitude of rules is abolished. That we can estimate the *quantity* of time only in the concrete, namely, either by *motion* or by a *series of thoughts*, arises from the concept of time resting only on an inherent mental law, it not being a connate intuition; whence the act of the mind co-ordinating the impressions is elicited only by the aid of the senses. So far from its being possible to deduce and explain the concept of time from some other source by force of reason, it is presupposed by the very principle of contradiction, it underlies it by way of condition. For *a* and *not-a* are not repugnant unless thought of the *same thing simultaneously*, that is, at the same time; they may *belong* to the same thing *after* each other, at different times. Hence the possibility of changes is not thinkable except in time. Time is not thinkable by changes, but reversely.

But although *time* posited in itself and absolutely be an imaginary thing, yet as appertaining to the immutable law of sensible things as such, it is a perfectly true concept, and the patent condition of intuitive representation throughout all the infinite range of possible sense-objects. For since simultaneous

things as such cannot be placed before the senses but by the aid of time, and since changes are unthinkable except by time, it is obvious that this concept contains the universal form of phenomena, and that, indeed, all events observable in the world, all motions, all internal changes, agree necessarily with the temporal axioms of cognition which we have partly expounded, *since only under these conditions can they become sense-objects and be co-ordinated*. It is, therefore, absurd to excite reason against the primary postulates of pure time, as, for example, continuity, etc., since they follow from laws prior and superior to which nothing is found, and since reason herself in the use of the principle of contradiction cannot dispense with the support of this concept, so primitive and original is it.

Time, then, is the absolutely first *formal principle of the sensible world*. For all sensible things of whatsoever description are unthinkable except as posited either simultaneously or one after another, and, indeed, as if involved and mutually related by determinate position in the tract of unique time, so that by this primary concept of everything sensuous originates necessarily that formal whole which is not a part of another, that is, the *phenomenal World*.

Paragraph 15 OF SPACE

The concept of space is not abstracted from external sensations. For I am unable to conceive of anything posited without me unless by representing it as in a place different from that in which I am, and of things as mutually outside of each other unless by locating them in different places in space. Therefore the possibility of external perceptions, as such, *presupposes* and does not *create* the concept of space, so that, although what is in space affects the senses, space cannot itself be derived from the senses.

The concept of space is a singular representation comprehending all things *in itself*, not an abstract and common notion containing them *under* itself. What are called *several spaces* are only parts of the same immense space mutually related by certain positions, nor can you conceive of a cubic foot except as being bounded in all directions by surrounding space.

The concept of space, therefore, is a pure intuition, being a singular concept, not made up by sensations, but itself the fundamental form of all external sensation. This pure intuition is in fact easily perceived in geometrical axioms, and any mental construction of postulates or even problems. That in space there are no more than three dimensions, that between two points there is but one straight line, that in a plane surface from a given point with a given right line a circle is describable, are not conclusions from some universal notion of space, but only *discernible* in space as in the concrete. Which things in a given space lie toward one side and which are turned toward the other can by no acuteness of reasoning be described discursively or reduced to intellectual marks. There being in perfectly similar and equal but incongruous solids, such as the right and the left hand, conceived of solely as to extent, or spherical triangles in opposite hemispheres, a difference rendering impossible the coincidence of their limits of extension, although for all that can be stated in marks intelligible to the mind by speech they are interchangeable, it is patent that only by pure intuition can the difference, namely, incongruity, be noticed. Geometry, therefore, uses principles not only undoubted and discursive but falling under the mental view, and the *obviousness* of its demonstrations — which means the clearness of certain cognition in as far as assimilated to sensual knowledge — is not only greatest, but the only one which is given in the pure sciences, and the *exemplar* and medium of all *obviousness* in the others. For, since geometry considers the *relations of space*, the concept of which contains the very form of all sensual intuition, nothing that is perceived by the external sense can be clear and perspicuous unless by means of that intuition which it is the business of geometry to contemplate. Besides, this science does not demonstrate its universal propositions by thinking the object through the universal concept, as is done in intellectual disquisition, but by submitting it to the eyes in a single intuition, as is done in matters of sense.

Space is not something objective and real, neither substance, nor accident, nor relation; but *subjective*

and ideal, arising by fixed law from the nature of the mind like an outline for the mutual co-ordination of all external sensations whatsoever. Those who defend the reality of space either conceive of it as an *absolute* and immense *receptacle* of possible things, an opinion which, besides the English, pleases most geometricians, or they contend for its being the relation of existing things *itself*, which clearly vanishes in the removal of things and is thinkable only in actual things, as besides Leibnitz, is maintained by most of our countrymen. The first inane fiction of the reason, imagining true infinite relation without any mutually related things, pertains to the world of fable. But the adherents of the second opinion fall into a much worse error. Whilst the former only cast an obstacle in the way of some rational or noumenal concepts, otherwise most recondite, such as questions concerning the spiritual world, omnipresence, etc., the latter place themselves in fiat opposition to the very phenomena, and to the most faithful interpreter of all phenomena, to geometry. For, not to enlarge upon the obvious circle in which they become involved in defining space, they cast forth geometry, thrown down from the pinnacle of certitude, into the number of those sciences whose principles are empirical. If we have obtained all the properties of space by experience from external relations only, geometrical axioms have only comparative universality, such as is acquired by induction. They have universality evident as far as observed, but neither necessity, except as far as the laws of nature may be established, nor precision, except what is arbitrarily made. There is hope, as in empirical sciences, that a space may some time be discovered endowed with other primary properties, perchance even a rectilinear figure of two lines.

Though the *concept of space* as an objective and real thing or quality is imaginary, it is nevertheless *in respect to all sensible things* not only *perfectly true*, it is the foundation of truth in external sensibility. Things cannot appear to the senses under any form but by means of a power of the soul co-ordinating all sensations in accordance with a fixed law implanted in its nature. Since, therefore, nothing at all can be given the senses except conformably to the primary axioms of space and their consequences which are taught by geometry, though their principle be but subjective, yet the soul will necessarily agree with them, since to this extent it agrees with itself; and the laws of sensuality will be the laws of nature *so far as it can be perceived by our senses*. Nature, therefore, is subject with absolute precision to all the precepts of geometry as to all the properties of space there demonstrated, this being the subjective condition, not hypothetically but intuitively given, of every phenomenon in which nature can ever be revealed to the senses. Surely, unless the concept of space were originally given by the nature of the mind, so as to cause him to toil in vain who should labor to fashion mentally any relations other than those prescribed by it, since in the fiction he would be compelled to employ the aid of this very same concept, geometry could not be used very safely in natural philosophy, For it might be doubted whether this same notion drawn from experience would agree sufficiently with nature, the determinations from which it was abstracted being, perchance, denied, a suspicion of which has entered some minds already. *Space*, then, is the absolutely first *formal principle of the sensible world*, not only because by its concept the objects of the universe can be phenomena, but especially for the reason that it is. essentially but one, comprising all externally sensible things whatsoever; and hence constitutes the principle of the *universe*, that is, of that whole which cannot be the part of another.

COROLLARY

Here, then, are *two principles of sensuous cognition*, not, as in intellectual knowledge, general concepts, but *single and nevertheless pure intuition*, in which the parts, and especially the simple parts, do not, as the laws of reason prescribe, contain the possibility of the composite, but, according to the pattern of sensuous intuition, the *infinite* contains the reason of the part, and finally of its thinkable simple part or rather limit. For unless infinite space as well as infinite time be given, no definite space and time is assignable *by limitation*, and a point as well as a moment is unthinkable by itself and only conceived in a

space and time already given as the limits. All primitive properties of these concepts are then beyond the purview of reason, and hence cannot intellectually be explained in any way. Nevertheless, they are *what underlies the intellect* when from intuitive primary data it derives consequences according to logical laws with the greatest possible certainty. *One* of these concepts properly concerns the intuition of the *object;* the other the *state*, especially the *representative* state. Hence space is employed as the type even of the concept of *time* itself, representing it by a line, and its limits — moments — by points. Time, on the other hand, *approaches* more to a *universal* and *rational concept*, comprising under its relations all things whatsoever, to wit, space itself, and besides, those accidents which are not comprehended in the relations of space, such as the thoughts of the soul. Again, time, besides this, though it certainly does not dictate the laws of reason, yet *constitutes* the principal *conditions under* favor of *which the mind compares its notions according to the laws of reason*. Thus, I cannot judge what is impossible except by predicating *a* and *not-a* of the same subject *at the same time*. And especially, considering experience, though the reference of cause to effect in external objects were to lack the relations of space, still in all things, external or internal, the mind could by the auxiliary relation of time alone be informed which is the first and which latter or caused. And even the *quantity* of space itself cannot be rendered intelligible unless, referring it to measure as to a unity, we set it forth in number, which itself is but multiplicity distinctly cognized by numeration, that is, by the successive addition of one to one in a given time.

Lastly, the question will arise in any one as if spontaneously, whether either *concept* be *connate* or *acquired*. The latter by what has been shown seems refuted already, but the former, smoothing the way for *lazy philosophy*, declaring vain by the citing of a first cause any further quest, is not to be admitted thus rashly. But beyond doubt *either concept is acquired*, not, it is true, abstracted from the sense of objects, for sensation gives the matter not the form of human cognition, but from the very action of the mind co-ordinating its sense-percepts in accordance with perpetual laws, as though an immutable type, and hence to be known intuitively. For sensations excite this act of the mind but do not influence intuition, neither is there anything connate here except the law of the soul in accordance with which it conjoins in a certain way its sensations derived from the presence of an object.

SECTION IV

ON THE PRINCIPLE OF THE FORM OF THE INTELLIGIBLE WORLD

Paragraph 16

Those who deem space and time to be something real and the absolute bond, so to speak, of all possible substances in space, hold nothing else to be required in order to conceive how an original relation can belong to several existing things as the primitive condition of possible influence and the principle of the essential form of the universe. For since whatever exists is, according to their opinion, necessarily somewhere, it seems to them quite superfluous to inquire why things are present to one another in a certain manner, since this is of itself determined by the universality of all-comprehending space. But this concept, besides relating as has been shown rather to the sensuous laws of the subject than to the conditions of the objects themselves, even granting it the greatest reality, still denotes nothing but the intuitively given possibility of universal co-ordination, leaving undealt with the question solvable only by the intellect: *In what principle does this very relation of all substances rest, which intuitively regarded is called space?* The question of the *principle of the form of the intelligible world* turns, therefore, upon making apparent in what manner it is possible *for several substances to be in mutual commerce*, and for this reason to pertain to the same whole, which is called world. We do not here consider the world, let it be understood, as to matter, that is, as to the nature of the substances of which it consists, whether they be material or immaterial, but as to form, that is to say, how among several things taken separately a connection, and among them all, totality can have place.

Paragraph 17

Several substances being given, the *principle* of their possible *intercommunication is not apparent from their existence solely*, but something else is required besides from which their mutual relations may be understood. For on account of mere existence they are not necessarily related to anything, unless it be to their cause; but the relation of an effect to the cause is not intercommunication, but dependence. Therefore, if any commerce intervenes among them, there is need of an exactly determining specific reason.

The sham cause in *physical influence* consists in rashly assuming that the commerce of substance and transitive forces is sufficiently knowable from their mere existence. Hence it is not so much a system as rather the neglect of all philosophical system as a superfluity in the argument. Freeing the concept from this defect, we shall have a species of commerce alone deserving to be called real, and from which the whole constituting the world merits being called real, and not ideal or imaginary.

Paragraph 18

A whole from necessary substances is impossible. For, since the existence of each stands for itself without dependence on any other, a dependence which in necessary substances clearly cannot befall, it is plain that not only does the intercommunication of substances (that is, the reciprocal dependence of their states) not follow from their existence, but as necessary substances cannot belong to them at all.

Paragraph 19

The whole, therefore, of substances is a whole of contingent things, and the *world consists essentially of only contingent things*. Besides, no necessary substance is in connection with the world except as a cause with the effect, and, therefore, not as a part with its complements making up a whole, since the bond connecting parts is mutual dependence, which in a necessary being cannot occur. The cause, therefore, of the world is an extramundane being, and so is not the soul of the world, nor is its presence in the world local, but virtual.

Paragraph 20

The mundane substances are beings from, another being; not from several, but *all from one*. For, suppose them to be caused by several necessary beings. In intercommunication there are not effects from causes alien to all mutual relation. Hence, the *unity* in the *conjunction of the substances of the universe is the consequence of the dependence of all on one*. Therefore, the form of the universe witnesses the cause of matter, and only the *sole cause of all things is the cause of the universe*, nor is there an *architect* of the world not at the same time its *creator*.

Paragraph 21

If there were several primary and necessary causes together with their effects, their works would be *worlds*, not a *world*, since they would in no wise be connected into one whole. And vice versa, if there be several actual worlds without one another, several primary and necessary causes are given, so, however, as to give intercommunication neither to one world with another, nor to the cause of one with the world caused by another.

Several actual worlds without one another *are not*, therefore, *impossible by the very concept*, as Wolf hastily concluded from the notion of a complex or multiplicity which he deemed sufficient to a whole, as such, but only on condition *that there exist but one necessary cause of all things*. If several are admitted, *several worlds without one another will be possible* in the strictest metaphysical sense.

Paragraph 22

If, as we validly conclude from a given world to a single cause of all its parts, we may similarly argue reversely from the given cause common to all to their interconnection, and hence to the form of the world — though I confess this conclusion does not seem as plain to me — then the primary connection of substances will not be contingent but *by the sustentation* of all *by the common principle*, necessary, and hence the harmony proceeding from their very subsistence founded in a common cause would proceed according to the usual rules. Such a *harmony* I term *established generally;* as that which does not take place except as far as any individual states of a substance are adapted to the condition of another is *harmony established particularly;* the communion by the former being real and *physical*, by the latter ideal and *sympathetic*. All communion, then, of the substance of the universe is *eternally established* by the common cause of all, and either established generally by physical influence — as amended; see paragraph 17 — or adapted particularly to their states; and the latter either rests *originally* in the primary constitution of every substance or is impressed on the *occasion* of any change whatever; the first being called *pre-established harmony*, the latter *occasionalism*. If, then, on account of the sustentation of all substances by one, the *conjunction* of all constituting them a unit be *necessary*, the universal commerce of substances will be by *physical influence*, and the world a real whole; if not, the commerce will be sympathetic, that is a harmony without true commerce, and the world only an ideal whole. To me the former, though not demonstrated, appears abundantly proved by other reasons.

SCHOLIUM

If it were right to overstep a little the limits of apodictic certainty befitting metaphysics, it would seem worth while to trace out some things pertaining not merely to the laws but even to the causes of sensuous intuition, which are only *intellectually* knowable. Of course the human mind is not affected by external things, and the world does not lie open to its insight infinitely, except *as far as itself together with all other things is sustained by the same infinite power of one*. Hence it does not perceive external things but by the presence of the same common sustaining cause; and hence space, which is the universal and necessary condition of the joint presence of everything known sensuously, may be called the *phenomenal omnipresence*, for the cause of the universe is not present to all things and everything, as being in their places, but their places, that is the relations of the substances, are possible, because it is intimately present to all. Furthermore, since the possibility of the changes and successions of all things whose principle as far as sensuously known resides in the concept of time, supposes the continuous existence of the subject whose opposite states succeed; that whose states are in flux, lasting not, however, unless sustained by another; the concept of time as one infinite and immutable in which all things are and last, is the *phenomenal eternity* of the general *cause*. But it seems more cautious to hug the shore of the cognitions granted to us by the mediocrity of our intellect than to be carried out upon the high seas of such mystic investigations, like Malebranche, whose opinion that *we see all things in God* is pretty nearly what has here been expounded.

SECTION V

ON THE METHOD RESPECTING THE SENSUOUS AND THE INTELLECTUAL IN METAPHYSICS

Paragraph 23

In all sciences whose principles are given intuitively, whether by sensual intuition, that is, experience, or by an intuition sensuous, to be sure, but pure — the concepts of space, time, and number — that is to say, in the natural and in the mathematical sciences, *use gives method*, and by trying and finding after the science has been carried to some degree of copiousness and consonancy it appears by what method and in what direction we must proceed in order to finish and to purify it by removing the defects of error as well as of confused thoughts; exactly as grammar after the more copious use of speech, and style after the appearance of choice examples in poetry and oratory, furnished vantage-ground to rules and to discipline. But the *use of the intellect* in the sciences whose primitive concepts as well as axioms are given by sensuous intuition is only *logical*, that is, by it we only subordinate cognitions to one another according to their relative universality conformably to the principle of contradiction, phenomena to more general phenomena, and consequences of pure intuition to intuitive axioms. But in pure philosophy, such as metaphysics, in which the *use of the intellect* in respect to principles is *real*, that is to say, where the primary concept of things and relations and the very axioms are given originally by the pure intellect itself, and not being intuitions do not enjoy immunity from error, *the method precedes the whole science*, and whatever is attempted before its precepts are thoroughly discussed and firmly established is looked upon as rashly conceived and to be rejected among vain instances of mental playfulness. For, since here the right use of the reason constitutes the very principles and the objects as well, what axioms are to be thought of concerning them become primarily known solely by its own nature, the exposition of the laws of pure reason is the very origin of the science, and their distinction from spurious laws the criterion of truth. The method of the science not being practiced much nowadays, except what logic prescribes to all sciences generally, that fitted for the peculiar nature of metaphysics being simply ignored, it is no wonder that those who everlastingly turn the Sisyphean stone of this inquiry do not seem so far to have made much progress. Though here I neither can nor will expatiate upon so important and extensive a subject, I shall briefly shadow forth what constitutes no despicable part of this method, namely, the *infection between sensuous and intellectual cognition*, not only as creeping in on those incautious in the application of principles, but even producing spurious principles under the appearance of axioms.

Paragraph 24

In substance the whole method of metaphysics as to the sensuous and the intellectual amounts to this precept; to take care *not to allow the principles at home in sensuous cognition to outstray their limits and affect the intellectual concepts*. For, since the *predicate* in any judgment enounced intellectually *is a condition* in the absence of which the subject is asserted to be unthinkable, the predicate hence being the principle of cognition, it will, if a sensuous concept, be only the condition of a possible sensuous cognition — and hence will square well enough with the subject of a judgment whose concept is also sensuous. But if it be applied to an intellectual concept, the judgment will be valid only according to subjective laws, and hence must not be affirmed objectively and predicated of the intellectual notion itself, but *only as a condition in the absence of which the sensuous cognition of the given concept does*

not take place.

Now, since the tricks of the intellect by the subordination of sensuous concepts as though intellectual marks may be called, analogously to the accepted meaning, *a fallacy of subreption*, the exchanging of intellectual and sensual concepts will be a *metaphysical fallacy of subreption*, the *intellectualized phenomenon*, if the barbarous expression be permissible, and hence I call such a *hybrid* axiom as palms off the sensuous as necessarily adhering to the intellectual concept, a *surreptitious axiom*. From these spurious axioms have gone forth, and are rife throughout metaphysics, principles deceiving the intellect. In order that we may have, however, a readily and clearly knowable criterion of those judgments, a touchstone, so to speak, by which to distinguish them from genuine judgments, and at the same time if, perhaps, they seem to cling tenaciously to the intellect, an assaying art by which we can justly estimate how much belongs to the sensuous and how much to the intellectual sphere, I think it necessary to go into the question more deeply.

Paragraph 25

Here, then, is the *principle of reduction* for any spurious axiom: *If concerning any intellectual concept something pertaining to time and space relations be predicated generally, it is not to be enounced objectively, but denotes only the condition without which the given concept is not knowable sensuously*. That such an axiom is spurious, and, if not false, at least a rash and question-begging assertion, appears thus: the subject of the judgment being intellectually conceived pertains to the object, whilst the predicate, since it contains the determinations of space and time, pertains only to the conditions of human sensuous cognition, which, not adhering of necessity to any cognition whatsoever of the object, cannot be enounced concerning the given intellectual concept universally. The intellect's being so readily subject to this fallacy of subreption comes of its being deceived under the plea of another and perfectly true rule. For we rightly suppose that *that which can be cognized by no intuition whatever is utterly unthinkable* and hence impossible. But since we cannot attain by any mental striving, even fictitiously, to any other intuition but that according to the form of space and time, it happens that we deem all intuition whatever impossible which is not bound by these laws, passing by the pure intellectual intuition exempt from the laws of the senses, such as the divine, by Plato called the Idea, and hence subject all possible given things to the sensual axioms of space and time.

Paragraph 26

All sleights of substitution of sensuous cognition under guise of intellectual concepts, from which spurious axioms originate, can be reduced to three species, whose general formulae are the following:

The sensual condition under which alone the *intuition* of an object is possible, is the condition of its *possibility*.

The sensual condition under which alone *data can be compared in order to form the intellectual concept of the object*, is the condition of the very possibility of the object.

The sensual condition under which alone the *subsumption* of an *object under a given intellectual concept is possible, is the condition of the possibility of the object*.

Paragraph 27

A spurious axiom of the *first class* is: *Whatever is, is somewhere and sometime*. Now by this spurious principle all beings, even though they be intellectually cognized, are restricted in existence by the conditions of space and time. Hence people discuss all sorts of inane questions, such as concerning the places of immaterial substances — of which, for that very reason, there is no sensuous intuition, nor,

under that form, any representation — in the corporeal universe, or the seat of the soul; and as they improperly mix sensual things with intellectual concepts, like square figures with round, it oftens happens that of the disputants one appears as milking a he-goat, and the other as holding the sieve under. The presence of immaterial substances in the corporeal world is virtual, not local, though thus improperly talked about. Space does not contain the conditions of possible mutual activities, except those of matter. What may constitute the external relations of forces in immaterial substances, as well among themselves as toward bodies, altogether escapes the human intellect, as was acutely noted, for instance, in a letter to a German prince by the clear-sighted Euler, otherwise a great investigator and judge of phenomena. But when people have arrived at the concept of a highest and extra-mundane being, they are fooled by these shadows flitting before the intellect to a degree beyond the force of language to express. The presence of God they figure to themselves as a *local* one, involving God in the world as if also comprised in infinite space, compensating Him for this limitation by a locality, so to speak, *eminently* conceived, that is, infinite. But it is absolutely impossible to be at the same time in several places, since different places are mutually without each other, and hence what is in several places is outside of itself, which implies being present to itself externally. But as to time, having not only exempted it from the laws of sensual knowledge, but transferred it beyond the limits of the world to the extra-mundane Being Himself as a condition of His existence, they involve themselves in an inextricable labyrinth. Hence they cudgel their brains with absurd questions, such as, for instance, why God did not make the world many centuries earlier. They persuade themselves that it is easy to conceive, to be sure, how God may discern what is present, that is, what is actual in the *time in which he is*, but how He may foresee what is future, that is, what is actual in the *time in which He is not yet*, they deem an intellectual difficulty; as if the existence of the Necessary Being descended through all the moments of an imaginary time, and, having already exhausted a part of His duration, saw before Him the eternity He was yet to live simultaneously with the present events of the world. All these difficulties upon proper insight into the notion of time vanish like smoke.

Paragraph 28

The prejudices of the second species, since they impose upon the intellect by the sensual conditions restricting the mind if it wishes in certain cases to attain to what is intellectual, lurk more deeply. One of them is that which affects knowledge of quantity, the other that affecting knowledge of qualities generally. The former is: *every actual multiplicity can be given numerically*, and hence, every infinite quantity; the latter, *whatever is impossible contradicts itself*. In either of them the concept of time, it is true, does not enter into the very notion of the predicate, nor is it attributed as a qualification to the subject. But yet it serves as a means for forming an idea of the predicate, and thus, being a condition, affects the intellectual concept of the subject to the extent that the latter is only attained by its aid.

As to the *first*, as every quantity and any series whatever are distinctly known only by successive co-ordination, the intellectual concept of amount and multiplicity arises only by the aid of this concept of time, and never attains to completeness unless the synthesis can be gone through with in finite time. It is hence that the *infinite series* of co-ordinate things cannot be comprehended distinctly according to the limits of our intellect; it hence by the fallacy of subreption seems impossible. According to the laws of pure intellect any series of effects has its *principle*, that is, there is not given in a series of effects a regress without a limit; whilst according to sensual laws any series of co-ordinate things has its assignable *beginning*. These propositions, the latter of which involves the *mensurability* of the series, the former the dependence of the whole, are taken hastily for identical. In the same way, to the *argument of the intellect*, proving that a substantial composite being given so are the elements of composition, that is, the simple things, there is adjoined a *supposititious* one suborned from sensual knowledge, namely, that in

such a composite there is not given an infinite regress in the composition of the parts, that is to say, that in any composite there is given a definite number of parts, a sense certainly not germane to the former, and hence substituted rashly for it. For that the quantity of the world is limited, not the maximum, that it owns a principle, that bodies consist of simple parts, can certainly be cognized rationally. But that the universe as to its mass is mathematically finite, that its age as elapsed can be given by measure, that the number of simple parts constituting any body whatever is a definite number, are propositions openly proclaiming their origin from the nature of sensual knowledge; however true they may be held to be, they bear the undoubted stigma of their origin.

As for the *latter spurious axiom*, it originates from a rash conversion of the principle of contradiction. For to this primitive judgment the concept of time adheres to the extent that contradictorily opposed data being given *at the same time* in the same thing, the impossibility is plain, which is enounced thus: *whatever simultaneously is and is not, is impossible*. Here, as the intellect predicates something in a case given according to sensual laws, the judgment is perfectly true and obvious. On the contrary, converting this axiom, saying: *whatever is impossible is and is not at the same time*, or involves a contradiction, we predicate through sensual knowledge something concerning the object of reason generally, thus subjecting the intellectual conception of the possible and the impossible to the conditions of sensual knowledge, namely, to the relations of time; which certainly is true enough of the laws restricting and limiting the human intellect, but cannot be conceded objectively and generally by any means. Of course, our intellect *perceives no impossibility* except where it can note the simultaneous enunciation of opposites concerning the same thing, that is, only where contradiction occurs. Wherever, therefore, this contradiction does not occur, there is no room for the judgment of impossibility by the human intellect. But that on this account it should be open to no intellect whatever, and hence that *what does not involve contradiction is therefore possible*, is concluded rashly by taking the subjective conditions of judgment for objective ones. It is for this reason that a host of fictitious *forces*, gotten up *ad libitum*, bursts, in the absence of self-contradiction, from any constructive, or, if you prefer, from every chimerical mind. For as a *force* is nothing but a *relation* of a substance *a* to *something else b*, an accident, as of a reason to the consequence, the possibility of any force does *not rest in the identity* of the cause and the effect, or the substance and the accident, and hence even the impossibility of forces made up falsely does *not depend solely on contradiction*. Therefore it is not permissible to assume as possible any *original force* unless the force be *given by experience*. Neither can the possibility be conceived *a priori* by any perspicacity of the intellect.

Paragraph 29

The spurious axioms of the *third* kind from conditions proper to the *subject* whence they are transferred rashly to the *object* are plentiful, not, as in those of the Second Class, because the only way to the intellectual concept lies *through the sensuous data*, but because only by aid of the latter can the concept *be applied* to that which is *given* by experience, that is, can we know whether something is contained under a certain intellectual concept or not. To this class belongs the threadbare one of the schools: *whatever exists contingently does at some time not exist*. This spurious principle springs from the poverty of the intellect, having insight frequently into the *nominal*, rarely into the *real*, marks of contingency or necessity. Hence, whether the opposite of any substance be possible, an insight hardly obtained from *a priori* marks, is not otherwise known than by its being evident *that at some time that substance was not;* and changes rather witness contingency than contingency mutability, so that were nothing fleeting and transitory to occur in the world, a notion of contingence would hardly be possible in us. Therefore, though the direct proposition is perfectly true: *whatever at some time was not is contingent*, its converse indicates nothing but the conditions under which we can alone distinguish

whether something exists necessarily or contingently. Hence if enunciated as a subjective law, which indeed it is, it should be enounced thus: *Sufficient marks of contingency of that of which it is not evident that at some time it was not, are not, by common intelligence, given*. This, however, tacitly deviates into an objective condition, as though in its absence there were no room for contingence; which being done, a counterfeit and erroneous axiom arises. For this world though existing contingently *is sempiternal*, that is, simultaneous with all time. It is a rash assertion that there was a time when it did not exist.

Paragraph 30

To these spurious principles must be added some others of great affinity with them, not imparting to the given intellectual concept any blemish of sensuous cognition, but deceiving the intellect so as to take them for arguments drawn from the object, though they are commended to us only by the peculiar nature. of the intellect *for the convenience* of its free and ample use. Therefore, these as well as those enumerated above, rest in *subjective* reasons, although not in the laws of sensuous, but in those of intellectual cognition itself, namely, in the conditions under which it appears easy and quick to the mind to make use of its insight. I shall beg leave to throw in here, by way of conclusion, some mention of these principles, not as yet, as far as I know, set forth distinctly. I call, then, *principles of convenience* rules of judging to which we freely submit, and to which we adhere as if they were axioms, for the only reason that, *were we to depart from them, scarcely any judgment concerning a given object would be permissible to our intellect*. In this list belong the following: *First*, that by which we assume that *everything in the universe is done according to the order of nature*, which principle by Epicurus was proclaimed without any restriction, and by all other philosophers unanimously with extremely rare exceptions, not to be admitted but from supreme necessity. Still we thus affirm, not on account of possessing so ample a knowledge of the events of the world according to the common laws of nature, or because the impossibility or smaller hypothetical possibility of supernatural things is plain to us, but because departing from the order of nature there would be no use for the intellect, the rash citation of the supernatural being the couch of lazy understandings. For the same reason we take care to shut out from the exposition of phenomena *comparative miracles*, namely, the influence of spirits, since, as we do not know their nature, the intellect, to its great detriment, would be turned aside from the light of experience, by which alone it is able to provide for itself laws of judging, into the night of species and causes unknown to us. The *second is the partiality for unity* proper to the philosophical mind, whence this wide-spread canon has flown forth: *principles are not to be multiplied beyond supreme necessity*, to which we give in our adhesion, not because we have insight into causal unity in the world either by reason or experience, but as seeking it by an impulse of the intellect which seems to itself to have by thus much advanced in the explication of phenomena, by as much as it is granted to it to descend from the same principle to a greater number of consequences, The *third* of this kind of principles is: *matter neither originates nor perishes;* all the changes in the world concern *form* only; a postulate which on the recommendation of common sense has spread through all philosophical schools, not because it is to be taken as having been found so, or as having been demonstrated by arguments *a priori*, but because if we were to admit that matter itself is fleeting and transitory, nothing at all that is stable and lasting would be left any longer to serve for the explication of phenomena according to universal and perpetual laws, and hence nothing at all would be left for the exercise of the intellect.

This method, especially in respect to the distinction between sensual and intellectual knowledge, which, when reduced by more careful investigation to exactness, will occupy the position of a propaedeutical science, will certainly be of unlimited benefit to all intending to penetrate into the very recesses of metaphysics.

Note. — As in this last section the tracing out of the method occupies all the space at disposal, and the

rules prescribing the true form of arguing concerning sensuous things shine by their own light and do not borrow it from the illustrative examples, I have thrown in but a cursory mention of the latter. For this reason it is not strange if some things should seem to have been asserted with more audacity than truth, they certainly calling, when a broader treatment shall be possible, for greater force of arguments. Thus, what is alleged in paragraph 27 on the locality of immaterial substances lacks an explication which, if the reader please, may be found in Euler in the place cited, Vol. II, p, 52. For the soul is not in communion with the body as being detained in a certain place in the latter, but a determined place in the universe is attributed to it, for the reason that it is in mutual commerce with some body, which commerce being dissolved all its position in space is removed. Its *locality*, therefore, is *derivative* and contingently applied to it, *not primitive* and a necessary condition of its existence, because whatever things cannot by themselves be objects of external senses such as man's, that is, *immaterial* substances, are exempt altogether from the universal condition of *externally sensible things*, namely, space. Hence absolute and immediate locality may be denied to the soul, while yet hypothetical and mediate locality may be attributed to it.

CRITIQUE OF PURE REASON

Second Edition; Translated by J. M. D. Meiklejohn

First published in 1781 and followed by a revised second edition of 1787, the *Critique of Pure Reason* is now widely regarded as one of the most influential works in the history of philosophy. In the preface to the first edition Kant explains what he means by a critique of pure reason: “I do not mean by this a critique of books and systems, but of the faculty of reason in general, in respect of all knowledge after which it may strive independently of all experience.” Dealing with questions concerning the foundations and extent of human knowledge, Kant builds on the work of empiricist philosophers such as John Locke and David Hume, as well as taking into account the theories of rationalist philosophers such as Gottfried Wilhelm Leibniz and Christian Wolff. In the *Critique of Pure Reason* Kant expounds new ideas on the nature of space and time, and claims to solve the problem that Hume posed regarding human knowledge of the relation of cause and effect, assessing the ability of the human mind to engage in metaphysics.

Before Kant, it was generally held that truths of reason must be analytic, meaning that what is stated in the predicate must already be present in the subject (for example, “An intelligent man is intelligent” or “An intelligent man is a man”). In either case, the judgment is analytic, as it is ascertained by analysing the subject. It was thought that all truths of reason, or necessary truths, are of this kind: that in all of them there is a predicate that is only part of the subject of which it is asserted. If this were so, attempting to deny anything that could be known *a priori* (for example, “An intelligent man is not intelligent” or “An intelligent man is not a man”) would involve a contradiction. It was therefore thought that the law of contradiction is sufficient to establish all *a priori* knowledge.

David Hume (1711–1776) at first accepted the general view of rationalism about *a priori* knowledge, though upon closer examination of the subject, he discovered that some judgments thought to be analytic, especially those related to cause and effect, were actually synthetic (i.e. no analysis of the subject will reveal the predicate). They thus depend exclusively upon experience and are therefore *a posteriori*. Before Hume, rationalists had held that effect could be deduced from cause; Hume argued that it could not and from this inferred that nothing at all could be known *a priori* in relation to cause and effect. Kant was brought up under the auspices of rationalism and was deeply disturbed by Hume’s skepticism. Kant decided to find an answer and spent at least twelve years thinking about the subject. Although *The Critique of Pure Reason* was set down in written form in just four to five months, while Kant was lecturing and teaching, the book is a summation of the development of his philosophy throughout that twelve year period.

Kant’s work was stimulated by his decision to take seriously Hume’s skeptical conclusions on such basic principles as cause and effect, which had implications for Kant’s grounding in rationalism. In Kant’s view, Hume’s skepticism rested on the premise that all ideas are presentations of sensory experience. The problem that Hume identified was that basic principles such as causality cannot be derived from sense experience only: experience shows only that one event regularly succeeds another, not that it is caused by it.

In section VI (The General Problem of Pure Reason) of the introduction of the work, Kant explains that Hume stopped short of considering that a synthetic judgment could be made *a priori*. Kant’s objective was to find some way to derive cause and effect without relying on empirical knowledge. Kant rejects analytical methods for this, arguing that analytic reasoning cannot tell us anything that is not already self-evident, so his goal was to find a way to demonstrate how the synthetic *a priori* is possible.

To accomplish this, Kant argues that it would be necessary to use synthetic reasoning. However, this poses a new problem — how is it possible to have synthetic knowledge that is not based on empirical observation — that is, how are synthetic a priori truths possible? Kant believes this question is exceedingly important, because he contended that all important metaphysical knowledge is of synthetic *a priori* propositions. If it is impossible to determine which synthetic a priori propositions are true, he argues, then metaphysics as a discipline is impossible. The remainder of the *Critique of Pure Reason* is devoted to examining whether and how knowledge of synthetic *a priori* propositions is possible

The book is arranged around several basic distinctions. After the two Prefaces (the A edition Preface of 1781 and the B edition Preface of 1787) and the Introduction, the book is divided into the *Doctrine of Elements* and the *Doctrine of Method*. The former sets out the *a priori* products of the mind and the correct and incorrect use of these presentations. *The Doctrine of Method* contains four sections. The first section, Discipline of Pure Reason, compares mathematical and logical methods of proof, and the second section, Canon of Pure Reason, distinguishes theoretical from practical reason.

Critik

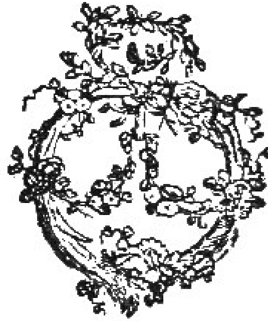
der

reinen Vernunft

von

Immanuel Kant

Professor in Königsberg.



Riga,

verlegts Johann Friedrich Hartknoch

1781.

The first edition's title page

CONTENTS

PREFACE TO THE FIRST EDITION, 1781
PREFACE TO THE SECOND EDITION, 1787
INTRODUCTION
INTRODUCTION. Idea of a Transcendental Logic.
I. Of Logic in General.
CHAPTER I. Of the Transcendental Clue to the Discovery of all Pure
SS 3. Introductory.
CHAPTER II Of the Deduction of the Pure Conceptions of the
INTRODUCTION. Of the Transcendental Faculty of judgement in General.
CHAPTER I. Of the Schematism at of the Pure Conceptions of the
CHAPTER II. System of all Principles of the Pure Understanding.
CHAPTER III Of the Ground of the Division of all Objects into Phenomena
APPENDIX.
CHAPTER I. Of the Paralogisms of Pure Reason.
Conclusion of the Solution of the Psychological Paralogism.
CHAPTER II. The Antinomy of Pure Reason.
CHAPTER III. The Ideal of Pure Reason.
SECTION I. Of the Ideal in General.
APPENDIX.
CHAPTER I. The Discipline of Pure Reason.
CHAPTER II. The Canon of Pure Reason.
CHAPTER III. The Architectonic of Pure Reason.
CHAPTER IV. The History of Pure Reason.

David Hume (1711-1776) was a Scottish philosopher, historian, economist and essayist, who is best known today for his highly influential system of radical philosophical empiricism, skepticism and naturalism.

PREFACE TO THE FIRST EDITION, 1781

Human reason, in one sphere of its cognition, is called upon to consider questions, which it cannot decline, as they are presented by its own nature, but which it cannot answer, as they transcend every faculty of the mind.

It falls into this difficulty without any fault of its own. It begins with principles, which cannot be dispensed with in the field of experience, and the truth and sufficiency of which are, at the same time, insured by experience. With these principles it rises, in obedience to the laws of its own nature, to ever higher and more remote conditions. But it quickly discovers that, in this way, its labours must remain ever incomplete, because new questions never cease to present themselves; and thus it finds itself compelled to have recourse to principles which transcend the region of experience, while they are regarded by common sense without distrust. It thus falls into confusion and contradictions, from which it conjectures the presence of latent errors, which, however, it is unable to discover, because the principles it employs, transcending the limits of experience, cannot be tested by that criterion. The arena of these endless contests is called Metaphysic.

Time was, when she was the queen of all the sciences; and, if we take the will for the deed, she certainly deserves, so far as regards the high importance of her object-matter, this title of honour. Now, it is the fashion of the time to heap contempt and scorn upon her; and the matron mourns, forlorn and forsaken, like Hecuba:

> Modo maxima rerum,
> Tot generis, natisque potens...
> Nunc trahor exul, inops.
> — Ovid, Metamorphoses. xiii

At first, her government, under the administration of the dogmatists, was an absolute despotism. But, as the legislative continued to show traces of the ancient barbaric rule, her empire gradually broke up, and intestine wars introduced the reign of anarchy; while the sceptics, like nomadic tribes, who hate a permanent habitation and settled mode of living, attacked from time to time those who had organized themselves into civil communities. But their number was, very happily, small; and thus they could not entirely put a stop to the exertions of those who persisted in raising new edifices, although on no settled or uniform plan. In recent times the hope dawned upon us of seeing those disputes settled, and the legitimacy of her claims established by a kind of physiology of the human understanding — that of the celebrated Locke. But it was found that — although it was affirmed that this so-called queen could not refer her descent to any higher source than that of common experience, a circumstance which necessarily brought suspicion on her claims — as this genealogy was incorrect, she persisted in the advancement of her claims to sovereignty. Thus metaphysics necessarily fell back into the antiquated and rotten constitution of dogmatism, and again became obnoxious to the contempt from which efforts had been made to save it. At present, as all methods, according to the general persuasion, have been tried in vain, there reigns nought but weariness and complete indifferentism — the mother of chaos and night in the scientific world, but at the same time the source of, or at least the prelude to, the re-creation and reinstallation of a science, when it has fallen into confusion, obscurity, and disuse from ill directed effort.

For it is in reality vain to profess indifference in regard to such inquiries, the object of which cannot be indifferent to humanity. Besides, these pretended indifferentists, however much they may try to disguise themselves by the assumption of a popular style and by changes on the language of the schools,

unavoidably fall into metaphysical declarations and propositions, which they profess to regard with so much contempt. At the same time, this indifference, which has arisen in the world of science, and which relates to that kind of knowledge which we should wish to see destroyed the last, is a phenomenon that well deserves our attention and reflection. It is plainly not the effect of the levity, but of the matured judgement* of the age, which refuses to be any longer entertained with illusory knowledge, It is, in fact, a call to reason, again to undertake the most laborious of all tasks — that of self-examination, and to establish a tribunal, which may secure it in its well-grounded claims, while it pronounces against all baseless assumptions and pretensions, not in an arbitrary manner, but according to its own eternal and unchangeable laws. This tribunal is nothing less than the critical investigation of pure reason.

[Footnote: We very often hear complaints of the shallowness of the present age, and of the decay of profound science. But I do not think that those which rest upon a secure foundation, such as mathematics, physical science, etc., in the least deserve this reproach, but that they rather maintain their ancient fame, and in the latter case, indeed, far surpass it. The same would be the case with the other kinds of cognition, if their principles were but firmly established. In the absence of this security, indifference, doubt, and finally, severe criticism are rather signs of a profound habit of thought. Our age is the age of criticism, to which everything must be subjected. The sacredness of religion, and the authority of legislation, are by many regarded as grounds of exemption from the examination of this tribunal. But, if they on they are exempted, they become the subjects of just suspicion, and cannot lay claim to sincere respect, which reason accords only to that which has stood the test of a free and public examination.]

I do not mean by this a criticism of books and systems, but a critical inquiry into the faculty of reason, with reference to the cognitions to which it strives to attain without the aid of experience; in other words, the solution of the question regarding the possibility or impossibility of metaphysics, and the determination of the origin, as well as of the extent and limits of this science. All this must be done on the basis of principles.

This path — the only one now remaining — has been entered upon by me; and I flatter myself that I have, in this way, discovered the cause of — and consequently the mode of removing — all the errors which have hitherto set reason at variance with itself, in the sphere of non-empirical thought. I have not returned an evasive answer to the questions of reason, by alleging the inability and limitation of the faculties of the mind; I have, on the contrary, examined them completely in the light of principles, and, after having discovered the cause of the doubts and contradictions into which reason fell, have solved them to its perfect satisfaction. It is true, these questions have not been solved as dogmatism, in its vain fancies and desires, had expected; for it can only be satisfied by the exercise of magical arts, and of these I have no knowledge. But neither do these come within the compass of our mental powers; and it was the duty of philosophy to destroy the illusions which had their origin in misconceptions, whatever darling hopes and valued expectations may be ruined by its explanations. My chief aim in this work has been thoroughness; and I make bold to say that there is not a single metaphysical problem that does not find its solution, or at least the key to its solution, here. Pure reason is a perfect unity; and therefore, if the principle presented by it prove to be insufficient for the solution of even a single one of those questions to which the very nature of reason gives birth, we must reject it, as we could not be perfectly certain of its sufficiency in the case of the others.

While I say this, I think I see upon the countenance of the reader signs of dissatisfaction mingled with contempt, when he hears declarations which sound so boastful and extravagant; and yet they are beyond comparison more moderate than those advanced by the commonest author of the commonest philosophical programme, in which the dogmatist professes to demonstrate the simple nature of the soul, or the necessity of a primal being. Such a dogmatist promises to extend human knowledge beyond the limits of possible experience; while I humbly confess that this is completely beyond my power. Instead of any such attempt, I confine myself to the examination of reason alone and its pure thought; and I do not need to seek far for the sum-total of its cognition, because it has its seat in my own mind. Besides, common logic presents me

with a complete and systematic catalogue of all the simple operations of reason; and it is my task to answer the question how far reason can go, without the material presented and the aid furnished by experience.

So much for the completeness and thoroughness necessary in the execution of the present task. The aims set before us are not arbitrarily proposed, but are imposed upon us by the nature of cognition itself.

The above remarks relate to the matter of our critical inquiry. As regards the form, there are two indispensable conditions, which any one who undertakes so difficult a task as that of a critique of pure reason, is bound to fulfil. These conditions are certitude and clearness.

As regards certitude, I have fully convinced myself that, in this sphere of thought, opinion is perfectly inadmissible, and that everything which bears the least semblance of an hypothesis must be excluded, as of no value in such discussions. For it is a necessary condition of every cognition that is to be established upon a priori grounds that it shall be held to be absolutely necessary; much more is this the case with an attempt to determine all pure a priori cognition, and to furnish the standard — and consequently an example — of all apodeictic (philosophical) certitude. Whether I have succeeded in what I professed to do, it is for the reader to determine; it is the author's business merely to adduce grounds and reasons, without determining what influence these ought to have on the mind of his judges. But, lest anything he may have said may become the innocent cause of doubt in their minds, or tend to weaken the effect which his arguments might otherwise produce — he may be allowed to point out those passages which may occasion mistrust or difficulty, although these do not concern the main purpose of the present work. He does this solely with the view of removing from the mind of the reader any doubts which might affect his judgement of the work as a whole, and in regard to its ultimate aim.

I know no investigations more necessary for a full insight into the nature of the faculty which we call understanding, and at the same time for the determination of the rules and limits of its use, than those undertaken in the second chapter of the "Transcendental Analytic," under the title of "Deduction of the Pure Conceptions of the Understanding"; and they have also cost me by far the greatest labour — labour which, I hope, will not remain uncompensated. The view there taken, which goes somewhat deeply into the subject, has two sides, The one relates to the objects of the pure understanding, and is intended to demonstrate and to render comprehensible the objective validity of its a priori conceptions; and it forms for this reason an essential part of the Critique. The other considers the pure understanding itself, its possibility and its powers of cognition — that is, from a subjective point of view; and, although this exposition is of great importance, it does not belong essentially to the main purpose of the work, because the grand question is what and how much can reason and understanding, apart from experience, cognize, and not, how is the faculty of thought itself possible? As the latter is an inquiry into the cause of a given effect, and has thus in it some semblance of an hypothesis (although, as I shall show on another occasion, this is really not the fact), it would seem that, in the present instance, I had allowed myself to enounce a mere opinion, and that the reader must therefore be at liberty to hold a different opinion. But I beg to remind him that, if my subjective deduction does not produce in his mind the conviction of its certitude at which I aimed, the objective deduction, with which alone the present work is properly concerned, is in every respect satisfactory.

As regards clearness, the reader has a right to demand, in the first place, discursive or logical clearness, that is, on the basis of conceptions, and, secondly, intuitive or aesthetic clearness, by means of intuitions, that is, by examples or other modes of illustration in concreto. I have done what I could for the first kind of intelligibility. This was essential to my purpose; and it thus became the accidental cause of my inability to do complete justice to the second requirement. I have been almost always at a loss, during the progress of this work, how to settle this question. Examples and illustrations always appeared to me necessary, and, in the first sketch of the Critique, naturally fell into their proper places. But I very soon became aware of the magnitude of my task, and the numerous problems with which I should be engaged;

and, as I perceived that this critical investigation would, even if delivered in the driest scholastic manner, be far from being brief, I found it unadvisable to enlarge it still more with examples and explanations, which are necessary only from a popular point of view. I was induced to take this course from the consideration also that the present work is not intended for popular use, that those devoted to science do not require such helps, although they are always acceptable, and that they would have materially interfered with my present purpose. Abbe Terrasson remarks with great justice that, if we estimate the size of a work, not from the number of its pages, but from the time which we require to make ourselves master of it, it may be said of many a book that it would be much shorter, if it were not so short. On the other hand, as regards the comprehensibility of a system of speculative cognition, connected under a single principle, we may say with equal justice: many a book would have been much clearer, if it had not been intended to be so very clear. For explanations and examples, and other helps to intelligibility, aid us in the comprehension of parts, but they distract the attention, dissipate the mental power of the reader, and stand in the way of his forming a clear conception of the whole; as he cannot attain soon enough to a survey of the system, and the colouring and embellishments bestowed upon it prevent his observing its articulation or organization — which is the most important consideration with him, when he comes to judge of its unity and stability.

The reader must naturally have a strong inducement to co-operate with the present author, if he has formed the intention of erecting a complete and solid edifice of metaphysical science, according to the plan now laid before him. Metaphysics, as here represented, is the only science which admits of completion — and with little labour, if it is united, in a short time; so that nothing will be left to future generations except the task of illustrating and applying it didactically. For this science is nothing more than the inventory of all that is given us by pure reason, systematically arranged. Nothing can escape our notice; for what reason produces from itself cannot lie concealed, but must be brought to the light by reason itself, so soon as we have discovered the common principle of the ideas we seek. The perfect unity of this kind of cognitions, which are based upon pure conceptions, and uninfluenced by any empirical element, or any peculiar intuition leading to determinate experience, renders this completeness not only practicable, but also necessary.

> Tecum habita, et noris quam sit tibi curta supellex.
> — Persius. Satirae iv. 52.

Such a system of pure speculative reason I hope to be able to publish under the title of Metaphysic of Nature*. The content of this work (which will not be half so long) will be very much richer than that of the present Critique, which has to discover the sources of this cognition and expose the conditions of its possibility, and at the same time to clear and level a fit foundation for the scientific edifice. In the present work, I look for the patient hearing and the impartiality of a judge; in the other, for the good-will and assistance of a co-labourer. For, however complete the list of principles for this system may be in the Critique, the correctness of the system requires that no deduced conceptions should be absent. These cannot be presented a priori, but must be gradually discovered; and, while the synthesis of conceptions has been fully exhausted in the Critique, it is necessary that, in the proposed work, the same should be the case with their analysis. But this will be rather an amusement than a labour.

[Footnote: In contradistinction to the Metaphysic of Ethics. This work was never published.]

PREFACE TO THE SECOND EDITION, 1787

Whether the treatment of that portion of our knowledge which lies within the province of pure reason advances with that undeviating certainty which characterizes the progress of science, we shall be at no loss to determine. If we find those who are engaged in metaphysical pursuits, unable to come to an understanding as to the method which they ought to follow; if we find them, after the most elaborate preparations, invariably brought to a stand before the goal is reached, and compelled to retrace their steps and strike into fresh paths, we may then feel quite sure that they are far from having attained to the certainty of scientific progress and may rather be said to be merely groping about in the dark. In these circumstances we shall render an important service to reason if we succeed in simply indicating the path along which it must travel, in order to arrive at any results — even if it should be found necessary to abandon many of those aims which, without reflection, have been proposed for its attainment.

That logic has advanced in this sure course, even from the earliest times, is apparent from the fact that, since Aristotle, it has been unable to advance a step and, thus, to all appearance has reached its completion. For, if some of the moderns have thought to enlarge its domain by introducing psychological discussions on the mental faculties, such as imagination and wit, metaphysical, discussions on the origin of knowledge and the different kinds of certitude, according to the difference of the objects (idealism, scepticism, and so on), or anthropological discussions on prejudices, their causes and remedies: this attempt, on the part of these authors, only shows their ignorance of the peculiar nature of logical science. We do not enlarge but disfigure the sciences when we lose sight of their respective limits and allow them to run into one another. Now logic is enclosed within limits which admit of perfectly clear definition; it is a science which has for its object nothing but the exposition and proof of the formal laws of all thought, whether it be a priori or empirical, whatever be its origin or its object, and whatever the difficulties — natural or accidental — which it encounters in the human mind.

The early success of logic must be attributed exclusively to the narrowness of its field, in which abstraction may, or rather must, be made of all the objects of cognition with their characteristic distinctions, and in which the understanding has only to deal with itself and with its own forms. It is, obviously, a much more difficult task for reason to strike into the sure path of science, where it has to deal not simply with itself, but with objects external to itself. Hence, logic is properly only a propaedeutic — forms, as it were, the vestibule of the sciences; and while it is necessary to enable us to form a correct judgement with regard to the various branches of knowledge, still the acquisition of real, substantive knowledge is to be sought only in the sciences properly so called, that is, in the objective sciences.

Now these sciences, if they can be termed rational at all, must contain elements of a priori cognition, and this cognition may stand in a twofold relation to its object. Either it may have to determine the conception of the object — which must be supplied extraneously, or it may have to establish its reality. The former is theoretical, the latter practical, rational cognition. In both, the pure or a priori element must be treated first, and must be carefully distinguished from that which is supplied from other sources. Any other method can only lead to irremediable confusion.

Mathematics and physics are the two theoretical sciences which have to determine their objects a priori. The former is purely a priori, the latter is partially so, but is also dependent on other sources of cognition.

In the earliest times of which history affords us any record, mathematics had already entered on the sure course of science, among that wonderful nation, the Greeks. Still it is not to be supposed that it was as easy for this science to strike into, or rather to construct for itself, that royal road, as it was for logic, in which reason has only to deal with itself. On the contrary, I believe that it must have remained long —

chiefly among the Egyptians — in the stage of blind groping after its true aims and destination, and that it was revolutionized by the happy idea of one man, who struck out and determined for all time the path which this science must follow, and which admits of an indefinite advancement. The history of this intellectual revolution — much more important in its results than the discovery of the passage round the celebrated Cape of Good Hope — and of its author, has not been preserved. But Diogenes Laertius, in naming the supposed discoverer of some of the simplest elements of geometrical demonstration — elements which, according to the ordinary opinion, do not even require to be proved — makes it apparent that the change introduced by the first indication of this new path, must have seemed of the utmost importance to the mathematicians of that age, and it has thus been secured against the chance of oblivion. A new light must have flashed on the mind of the first man (Thales, or whatever may have been his name) who demonstrated the properties of the isosceles triangle. For he found that it was not sufficient to meditate on the figure, as it lay before his eyes, or the conception of it, as it existed in his mind, and thus endeavour to get at the knowledge of its properties, but that it was necessary to produce these properties, as it were, by a positive a priori construction; and that, in order to arrive with certainty at a priori cognition, he must not attribute to the object any other properties than those which necessarily followed from that which he had himself, in accordance with his conception, placed in the object.

A much longer period elapsed before physics entered on the highway of science. For it is only about a century and a half since the wise Bacon gave a new direction to physical studies, or rather — as others were already on the right track — imparted fresh vigour to the pursuit of this new direction. Here, too, as in the case of mathematics, we find evidence of a rapid intellectual revolution. In the remarks which follow I shall confine myself to the empirical side of natural science.

When Galilei experimented with balls of a definite weight on the inclined plane, when Torricelli caused the air to sustain a weight which he had calculated beforehand to be equal to that of a definite column of water, or when Stahl, at a later period, converted metals into lime, and reconverted lime into metal, by the addition and subtraction of certain elements; [Footnote: I do not here follow with exactness the history of the experimental method, of which, indeed, the first steps are involved in some obscurity.] a light broke upon all natural philosophers. They learned that reason only perceives that which it produces after its own design; that it must not be content to follow, as it were, in the leading-strings of nature, but must proceed in advance with principles of judgement according to unvarying laws, and compel nature to reply its questions. For accidental observations, made according to no preconceived plan, cannot be united under a necessary law. But it is this that reason seeks for and requires. It is only the principles of reason which can give to concordant phenomena the validity of laws, and it is only when experiment is directed by these rational principles that it can have any real utility. Reason must approach nature with the view, indeed, of receiving information from it, not, however, in the character of a pupil, who listens to all that his master chooses to tell him, but in that of a judge, who compels the witnesses to reply to those questions which he himself thinks fit to propose. To this single idea must the revolution be ascribed, by which, after groping in the dark for so many centuries, natural science was at length conducted into the path of certain progress.

We come now to metaphysics, a purely speculative science, which occupies a completely isolated position and is entirely independent of the teachings of experience. It deals with mere conceptions — not, like mathematics, with conceptions applied to intuition — and in it, reason is the pupil of itself alone. It is the oldest of the sciences, and would still survive, even if all the rest were swallowed up in the abyss of an all-destroying barbarism. But it has not yet had the good fortune to attain to the sure scientific method. This will be apparent; if we apply the tests which we proposed at the outset. We find that reason perpetually comes to a stand, when it attempts to gain a priori the perception even of those laws which the most common experience confirms. We find it compelled to retrace its steps in innumerable instances, and

to abandon the path on which it had entered, because this does not lead to the desired result. We find, too, that those who are engaged in metaphysical pursuits are far from being able to agree among themselves, but that, on the contrary, this science appears to furnish an arena specially adapted for the display of skill or the exercise of strength in mock-contests — a field in which no combatant ever yet succeeded in gaining an inch of ground, in which, at least, no victory was ever yet crowned with permanent possession.

This leads us to inquire why it is that, in metaphysics, the sure path of science has not hitherto been found. Shall we suppose that it is impossible to discover it? Why then should nature have visited our reason with restless aspirations after it, as if it were one of our weightiest concerns? Nay, more, how little cause should we have to place confidence in our reason, if it abandons us in a matter about which, most of all, we desire to know the truth — and not only so, but even allures us to the pursuit of vain phantoms, only to betray us in the end? Or, if the path has only hitherto been missed, what indications do we possess to guide us in a renewed investigation, and to enable us to hope for greater success than has fallen to the lot of our predecessors?

It appears to me that the examples of mathematics and natural philosophy, which, as we have seen, were brought into their present condition by a sudden revolution, are sufficiently remarkable to fix our attention on the essential circumstances of the change which has proved so advantageous to them, and to induce us to make the experiment of imitating them, so far as the analogy which, as rational sciences, they bear to metaphysics may permit. It has hitherto been assumed that our cognition must conform to the objects; but all attempts to ascertain anything about these objects a priori, by means of conceptions, and thus to extend the range of our knowledge, have been rendered abortive by this assumption. Let us then make the experiment whether we may not be more successful in metaphysics, if we assume that the objects must conform to our cognition. This appears, at all events, to accord better with the possibility of our gaining the end we have in view, that is to say, of arriving at the cognition of objects a priori, of determining something with respect to these objects, before they are given to us. We here propose to do just what Copernicus did in attempting to explain the celestial movements. When he found that he could make no progress by assuming that all the heavenly bodies revolved round the spectator, he reversed the process, and tried the experiment of assuming that the spectator revolved, while the stars remained at rest. We may make the same experiment with regard to the intuition of objects. If the intuition must conform to the nature of the objects, I do not see how we can know anything of them a priori. If, on the other hand, the object conforms to the nature of our faculty of intuition, I can then easily conceive the possibility of such an a priori knowledge. Now as I cannot rest in the mere intuitions, but — if they are to become cognitions — must refer them, as representations, to something, as object, and must determine the latter by means of the former, here again there are two courses open to me. Either, first, I may assume that the conceptions, by which I effect this determination, conform to the object — and in this case I am reduced to the same perplexity as before; or secondly, I may assume that the objects, or, which is the same thing, that experience, in which alone as given objects they are cognized, conform to my conceptions — and then I am at no loss how to proceed. For experience itself is a mode of cognition which requires understanding. Before objects, are given to me, that is, a priori, I must presuppose in myself laws of the understanding which are expressed in conceptions a priori. To these conceptions, then, all the objects of experience must necessarily conform. Now there are objects which reason thinks, and that necessarily, but which cannot be given in experience, or, at least, cannot be given so as reason thinks them. The attempt to think these objects will hereafter furnish an excellent test of the new method of thought which we have adopted, and which is based on the principle that we only cognize in things a priori that which we ourselves place in them.*

[Footnote: This method, accordingly, which we have borrowed from the natural philosopher, consists in seeking for the elements of pure reason

in that which admits of confirmation or refutation by experiment. Now the propositions of pure reason, especially when they transcend the limits of possible experience, do not admit of our making any experiment with their objects, as in natural science. Hence, with regard to those conceptions and principles which we assume a priori, our only course ill be to view them from two different sides. We must regard one and the same conception, on the one hand, in relation to experience as an object of the senses and of the understanding, on the other hand, in relation to reason, isolated and transcending the limits of experience, as an object of mere thought. Now if we find that, when we regard things from this double point of view, the result is in harmony with the principle of pure reason, but that, when we regard them from a single point of view, reason is involved in self-contradiction, then the experiment will establish the correctness of this distinction.]

This attempt succeeds as well as we could desire, and promises to metaphysics, in its first part — that is, where it is occupied with conceptions a priori, of which the corresponding objects may be given in experience — the certain course of science. For by this new method we are enabled perfectly to explain the possibility of a priori cognition, and, what is more, to demonstrate satisfactorily the laws which lie a priori at the foundation of nature, as the sum of the objects of experience — neither of which was possible according to the procedure hitherto followed. But from this deduction of the faculty of a priori cognition in the first part of metaphysics, we derive a surprising result, and one which, to all appearance, militates against the great end of metaphysics, as treated in the second part. For we come to the conclusion that our faculty of cognition is unable to transcend the limits of possible experience; and yet this is precisely the most essential object of this science. The estimate of our rational cognition a priori at which we arrive is that it has only to do with phenomena, and that things in themselves, while possessing a real existence, lie beyond its sphere. Here we are enabled to put the justice of this estimate to the test. For that which of necessity impels us to transcend the limits of experience and of all phenomena is the unconditioned, which reason absolutely requires in things as they are in themselves, in order to complete the series of conditions. Now, if it appears that when, on the one hand, we assume that our cognition conforms to its objects as things in themselves, the unconditioned cannot be thought without contradiction, and that when, on the other hand, we assume that our representation of things as they are given to us, does not conform to these things as they are in themselves, but that these objects, as phenomena, conform to our mode of representation, the contradiction disappears: we shall then be convinced of the truth of that which we began by assuming for the sake of experiment; we may look upon it as established that the unconditioned does not lie in things as we know them, or as they are given to us, but in things as they are in themselves, beyond the range of our cognition.*

[Footnote: This experiment of pure reason has a great similarity to that of the chemists, which they term the experiment of reduction, or, more usually, the synthetic process. The analysis of the metaphysician separates pure cognition a priori into two heterogeneous elements, viz., the cognition of things as phenomena, and of things in themselves. Dialectic combines these again into harmony with the necessary rational idea of the unconditioned, and finds that this harmony never results except through the above distinction, which is, therefore, concluded to be just.]

But, after we have thus denied the power of speculative reason to make any progress in the sphere of the supersensible, it still remains for our consideration whether data do not exist in practical cognition which may enable us to determine the transcendent conception of the unconditioned, to rise beyond the limits of all possible experience from a practical point of view, and thus to satisfy the great ends of metaphysics. Speculative reason has thus, at least, made room for such an extension of our knowledge: and, if it must leave this space vacant, still it does not rob us of the liberty to fill it up, if we can, by means of practical data — nay, it even challenges us to make the attempt.*

[Footnote: So the central laws of the movements of the heavenly bodies established the truth of that which Copernicus, first, assumed only as a hypothesis, and, at the same time, brought to light that invisible force (Newtonian attraction) which holds the universe together. The latter

would have remained forever undiscovered, if Copernicus had not ventured on the experiment — contrary to the senses but still just — of looking for the observed movements not in the heavenly bodies, but in the spectator. In this Preface I treat the new metaphysical method as a hypothesis with the view of rendering apparent the first attempts at such a change of method, which are always hypothetical. But in the Critique itself it will be demonstrated, not hypothetically, but apodeictically, from the nature of our representations of space and time, and from the elementary conceptions of the understanding.]

This attempt to introduce a complete revolution in the procedure of metaphysics, after the example of the geometricians and natural philosophers, constitutes the aim of the Critique of Pure Speculative Reason. It is a treatise on the method to be followed, not a system of the science itself. But, at the same time, it marks out and defines both the external boundaries and the internal structure of this science. For pure speculative reason has this peculiarity, that, in choosing the various objects of thought, it is able to define the limits of its own faculties, and even to give a complete enumeration of the possible modes of proposing problems to itself, and thus to sketch out the entire system of metaphysics. For, on the one hand, in cognition a priori, nothing must be attributed to the objects but what the thinking subject derives from itself; and, on the other hand, reason is, in regard to the principles of cognition, a perfectly distinct, independent unity, in which, as in an organized body, every member exists for the sake of the others, and all for the sake of each, so that no principle can be viewed, with safety, in one relationship, unless it is, at the same time, viewed in relation to the total use of pure reason. Hence, too, metaphysics has this singular advantage — an advantage which falls to the lot of no other science which has to do with objects — that, if once it is conducted into the sure path of science, by means of this criticism, it can then take in the whole sphere of its cognitions, and can thus complete its work, and leave it for the use of posterity, as a capital which can never receive fresh accessions. For metaphysics has to deal only with principles and with the limitations of its own employment as determined by these principles. To this perfection it is, therefore, bound, as the fundamental science, to attain, and to it the maxim may justly be applied:

Nil actum reputans, si quid superesset agendum.

But, it will be asked, what kind of a treasure is this that we propose to bequeath to posterity? What is the real value of this system of metaphysics, purified by criticism, and thereby reduced to a permanent condition? A cursory view of the present work will lead to the supposition that its use is merely negative, that it only serves to warn us against venturing, with speculative reason, beyond the limits of experience. This is, in fact, its primary use. But this, at once, assumes a positive value, when we observe that the principles with which speculative reason endeavours to transcend its limits lead inevitably, not to the extension, but to the contraction of the use of reason, inasmuch as they threaten to extend the limits of sensibility, which is their proper sphere, over the entire realm of thought and, thus, to supplant the pure (practical) use of reason. So far, then, as this criticism is occupied in confining speculative reason within its proper bounds, it is only negative; but, inasmuch as it thereby, at the same time, removes an obstacle which impedes and even threatens to destroy the use of practical reason, it possesses a positive and very important value. In order to admit this, we have only to be convinced that there is an absolutely necessary use of pure reason — the moral use — in which it inevitably transcends the limits of sensibility, without the aid of speculation, requiring only to be insured against the effects of a speculation which would involve it in contradiction with itself. To deny the positive advantage of the service which this criticism renders us would be as absurd as to maintain that the system of police is productive of no positive benefit, since its main business is to prevent the violence which citizen has to apprehend from citizen, that so each may pursue his vocation in peace and security. That space and time are only forms of sensible intuition, and hence are only conditions of the existence of things as phenomena; that, moreover, we have no conceptions of the understanding, and, consequently, no elements for the cognition of things, except in so far as a corresponding intuition can be given to these conceptions; that, accordingly, we can have no cognition of an object, as a thing in itself, but only as an object of sensible intuition, that is, as

phenomenon — all this is proved in the analytical part of the Critique; and from this the limitation of all possible speculative cognition to the mere objects of experience, follows as a necessary result. At the same time, it must be carefully borne in mind that, while we surrender the power of cognizing, we still reserve the power of thinking objects, as things in themselves.* For, otherwise, we should require to affirm the existence of an appearance, without something that appears — which would be absurd. Now let us suppose, for a moment, that we had not undertaken this criticism and, accordingly, had not drawn the necessary distinction between things as objects of experience and things as they are in themselves. The principle of causality, and, by consequence, the mechanism of nature as determined by causality, would then have absolute validity in relation to all things as efficient causes. I should then be unable to assert, with regard to one and the same being, e.g., the human soul, that its will is free, and yet, at the same time, subject to natural necessity, that is, not free, without falling into a palpable contradiction, for in both propositions I should take the soul in the same signification, as a thing in general, as a thing in itself — as, without previous criticism, I could not but take it. Suppose now, on the other hand, that we have undertaken this criticism, and have learnt that an object may be taken in two senses, first, as a phenomenon, secondly, as a thing in itself; and that, according to the deduction of the conceptions of the understanding, the principle of causality has reference only to things in the first sense. We then see how it does not involve any contradiction to assert, on the one hand, that the will, in the phenomenal sphere — in visible action — is necessarily obedient to the law of nature, and, in so far, not free; and, on the other hand, that, as belonging to a thing in itself, it is not subject to that law, and, accordingly, is free. Now, it is true that I cannot, by means of speculative reason, and still less by empirical observation, cognize my soul as a thing in itself and consequently, cannot cognize liberty as the property of a being to which I ascribe effects in the world of sense. For, to do so, I must cognize this being as existing, and yet not in time, which — since I cannot support my conception by any intuition — is impossible. At the same time, while I cannot cognize, I can quite well think freedom, that is to say, my representation of it involves at least no contradiction, if we bear in mind the critical distinction of the two modes of representation (the sensible and the intellectual) and the consequent limitation of the conceptions of the pure understanding and of the principles which flow from them. Suppose now that morality necessarily presupposed liberty, in the strictest sense, as a property of our will; suppose that reason contained certain practical, original principles a priori, which were absolutely impossible without this presupposition; and suppose, at the same time, that speculative reason had proved that liberty was incapable of being thought at all. It would then follow that the moral presupposition must give way to the speculative affirmation, the opposite of which involves an obvious contradiction, and that liberty and, with it, morality must yield to the mechanism of nature; for the negation of morality involves no contradiction, except on the presupposition of liberty. Now morality does not require the speculative cognition of liberty; it is enough that I can think it, that its conception involves no contradiction, that it does not interfere with the mechanism of nature. But even this requirement we could not satisfy, if we had not learnt the twofold sense in which things may be taken; and it is only in this way that the doctrine of morality and the doctrine of nature are confined within their proper limits. For this result, then, we are indebted to a criticism which warns us of our unavoidable ignorance with regard to things in themselves, and establishes the necessary limitation of our theoretical cognition to mere phenomena.

[Footnote: In order to cognize an object, I must be able to prove its possibility, either from its reality as attested by experience, or a priori, by means of reason. But I can think what I please, provided only I do not contradict myself; that is, provided my conception is a possible thought, though I may be unable to answer for the existence of a corresponding object in the sum of possibilities. But something more is required before I can attribute to such a conception objective validity, that is real possibility — the other possibility being merely logical. We are not, however, confined to theoretical sources of cognition for the means of satisfying this additional requirement, but may derive them from practical sources.]

The positive value of the critical principles of pure reason in relation to the conception of God and of the simple nature of the soul, admits of a similar exemplification; but on this point I shall not dwell. I cannot even make the assumption — as the practical interests of morality require — of God, freedom, and immortality, if I do not deprive speculative reason of its pretensions to transcendent insight. For to arrive at these, it must make use of principles which, in fact, extend only to the objects of possible experience, and which cannot be applied to objects beyond this sphere without converting them into phenomena, and thus rendering the practical extension of pure reason impossible. I must, therefore, abolish knowledge, to make room for belief. The dogmatism of metaphysics, that is, the presumption that it is possible to advance in metaphysics without previous criticism, is the true source of the unbelief (always dogmatic) which militates against morality.

Thus, while it may be no very difficult task to bequeath a legacy to posterity, in the shape of a system of metaphysics constructed in accordance with the Critique of Pure Reason, still the value of such a bequest is not to be depreciated. It will render an important service to reason, by substituting the certainty of scientific method for that random groping after results without the guidance of principles, which has hitherto characterized the pursuit of metaphysical studies. It will render an important service to the inquiring mind of youth, by leading the student to apply his powers to the cultivation of genuine science, instead of wasting them, as at present, on speculations which can never lead to any result, or on the idle attempt to invent new ideas and opinions. But, above all, it will confer an inestimable benefit on morality and religion, by showing that all the objections urged against them may be silenced for ever by the Socratic method, that is to say, by proving the ignorance of the objector. For, as the world has never been, and, no doubt, never will be without a system of metaphysics of one kind or another, it is the highest and weightiest concern of philosophy to render it powerless for harm, by closing up the sources of error.

This important change in the field of the sciences, this loss of its fancied possessions, to which speculative reason must submit, does not prove in any way detrimental to the general interests of humanity. The advantages which the world has derived from the teachings of pure reason are not at all impaired. The loss falls, in its whole extent, on the monopoly of the schools, but does not in the slightest degree touch the interests of mankind. I appeal to the most obstinate dogmatist, whether the proof of the continued existence of the soul after death, derived from the simplicity of its substance; of the freedom of the will in opposition to the general mechanism of nature, drawn from the subtle but impotent distinction of subjective and objective practical necessity; or of the existence of God, deduced from the conception of an ens realissimum — the contingency of the changeable, and the necessity of a prime mover, has ever been able to pass beyond the limits of the schools, to penetrate the public mind, or to exercise the slightest influence on its convictions. It must be admitted that this has not been the case and that, owing to the unfitness of the common understanding for such subtle speculations, it can never be expected to take place. On the contrary, it is plain that the hope of a future life arises from the feeling, which exists in the breast of every man, that the temporal is inadequate to meet and satisfy the demands of his nature. In like manner, it cannot be doubted that the clear exhibition of duties in opposition to all the claims of inclination, gives rise to the consciousness of freedom, and that the glorious order, beauty, and providential care, everywhere displayed in nature, give rise to the belief in a wise and great Author of the Universe. Such is the genesis of these general convictions of mankind, so far as they depend on rational grounds; and this public property not only remains undisturbed, but is even raised to greater importance, by the doctrine that the schools have no right to arrogate to themselves a more profound insight into a matter of general human concernment than that to which the great mass of men, ever held by us in the highest estimation, can without difficulty attain, and that the schools should, therefore, confine themselves to the elaboration of these universally comprehensible and, from a moral point of view, amply satisfactory proofs. The change, therefore, affects only the arrogant pretensions of the schools, which would gladly

retain, in their own exclusive possession, the key to the truths which they impart to the public.

Quod mecum nescit, solus vult scire videri.

At the same time it does not deprive the speculative philosopher of his just title to be the sole depositor of a science which benefits the public without its knowledge — I mean, the Critique of Pure Reason. This can never become popular and, indeed, has no occasion to be so; for finespun arguments in favour of useful truths make just as little impression on the public mind as the equally subtle objections brought against these truths. On the other hand, since both inevitably force themselves on every man who rises to the height of speculation, it becomes the manifest duty of the schools to enter upon a thorough investigation of the rights of speculative reason and, thus, to prevent the scandal which metaphysical controversies are sure, sooner or later, to cause even to the masses. It is only by criticism that metaphysicians (and, as such, theologians too) can be saved from these controversies and from the consequent perversion of their doctrines. Criticism alone can strike a blow at the root of materialism, fatalism, atheism, free-thinking, fanaticism, and superstition, which are universally injurious — as well as of idealism and scepticism, which are dangerous to the schools, but can scarcely pass over to the public. If governments think proper to interfere with the affairs of the learned, it would be more consistent with a wise regard for the interests of science, as well as for those of society, to favour a criticism of this kind, by which alone the labours of reason can be established on a firm basis, than to support the ridiculous despotism of the schools, which raise a loud cry of danger to the public over the destruction of cobwebs, of which the public has never taken any notice, and the loss of which, therefore, it can never feel.

This critical science is not opposed to the dogmatic procedure of reason in pure cognition; for pure cognition must always be dogmatic, that is, must rest on strict demonstration from sure principles a priori — but to dogmatism, that is, to the presumption that it is possible to make any progress with a pure cognition, derived from (philosophical) conceptions, according to the principles which reason has long been in the habit of employing — without first inquiring in what way and by what right reason has come into the possession of these principles. Dogmatism is thus the dogmatic procedure of pure reason without previous criticism of its own powers, and in opposing this procedure, we must not be supposed to lend any countenance to that loquacious shallowness which arrogates to itself the name of popularity, nor yet to scepticism, which makes short work with the whole science of metaphysics. On the contrary, our criticism is the necessary preparation for a thoroughly scientific system of metaphysics which must perform its task entirely a priori, to the complete satisfaction of speculative reason, and must, therefore, be treated, not popularly, but scholastically. In carrying out the plan which the Critique prescribes, that is, in the future system of metaphysics, we must have recourse to the strict method of the celebrated Wolf, the greatest of all dogmatic philosophers. He was the first to point out the necessity of establishing fixed principles, of clearly defining our conceptions, and of subjecting our demonstrations to the most severe scrutiny, instead of rashly jumping at conclusions. The example which he set served to awaken that spirit of profound and thorough investigation which is not yet extinct in Germany. He would have been peculiarly well fitted to give a truly scientific character to metaphysical studies, had it occurred to him to prepare the field by a criticism of the organum, that is, of pure reason itself. That he failed to perceive the necessity of such a procedure must be ascribed to the dogmatic mode of thought which characterized his age, and on this point the philosophers of his time, as well as of all previous times, have nothing to reproach each other with. Those who reject at once the method of Wolf, and of the Critique of Pure Reason, can have no other aim but to shake off the fetters of science, to change labour into sport, certainty into opinion, and philosophy into philodoxy.

In this second edition, I have endeavoured, as far as possible, to remove the difficulties and obscurity which, without fault of mine perhaps, have given rise to many misconceptions even among acute thinkers. In the propositions themselves, and in the demonstrations by which they are supported, as well as in the form and the entire plan of the work, I have found nothing to alter; which must be attributed partly to the

long examination to which I had subjected the whole before offering it to the public and partly to the nature of the case. For pure speculative reason is an organic structure in which there is nothing isolated or independent, but every Single part is essential to all the rest; and hence, the slightest imperfection, whether defect or positive error, could not fail to betray itself in use. I venture, further, to hope, that this system will maintain the same unalterable character for the future. I am led to entertain this confidence, not by vanity, but by the evidence which the equality of the result affords, when we proceed, first, from the simplest elements up to the complete whole of pure reason and, and then, backwards from the whole to each part. We find that the attempt to make the slightest alteration, in any part, leads inevitably to contradictions, not merely in this system, but in human reason itself. At the same time, there is still much room for improvement in the exposition of the doctrines contained in this work. In the present edition, I have endeavoured to remove misapprehensions of the aesthetical part, especially with regard to the conception of time; to clear away the obscurity which has been found in the deduction of the conceptions of the understanding; to supply the supposed want of sufficient evidence in the demonstration of the principles of the pure understanding; and, lastly, to obviate the misunderstanding of the paralogisms which immediately precede the rational psychology. Beyond this point — the end of the second main division of the “Transcendental Dialectic” — I have not extended my alterations,* partly from want of time, and partly because I am not aware that any portion of the remainder has given rise to misconceptions among intelligent and impartial critics, whom I do not here mention with that praise which is their due, but who will find that their suggestions have been attended to in the work itself.

[Footnote: The only addition, properly so called — and that only in the method of proof — which I have made in the present edition, consists of a new refutation of psychological idealism, and a strict demonstration — the only one possible, as I believe — of the objective reality of external intuition. However harmless idealism may be considered — although in reality it is not so — in regard to the essential ends of metaphysics, it must still remain a scandal to philosophy and to the general human reason to be obliged to assume, as an article of mere belief, the existence of things external to ourselves (from which, yet, we derive the whole material of cognition for the internal sense), and not to be able to oppose a satisfactory proof to any one who may call it in question. As there is some obscurity of expression in the demonstration as it stands in the text, I propose to alter the passage in question as follows: “But this permanent cannot be an intuition in me. For all the determining grounds of my existence which can be found in me are representations and, as such, do themselves require a permanent, distinct from them, which may determine my existence in relation to their changes, that is, my existence in time, wherein they change.” It may, probably, be urged in opposition to this proof that, after all, I am only conscious immediately of that which is in me, that is, of my representation of external things, and that, consequently, it must always remain uncertain whether anything corresponding to this representation does or does not exist externally to me. But I am conscious, through internal experience, of my existence in time (consequently, also, of the determinability of the former in the latter), and that is more than the simple consciousness of my representation. It is, in fact, the same as the empirical consciousness of my existence, which can only be determined in relation to something, which, while connected with my existence, is external to me. This consciousness of my existence in time is, therefore, identical with the consciousness of a relation to something external to me, and it is, therefore, experience, not fiction, sense, not imagination, which inseparably connects the external with my internal sense. For the external sense is, in itself, the relation of intuition to something real, external to me; and the reality of this something, as opposed to the mere imagination of it, rests solely on its inseparable connection with internal experience as the condition of its possibility. If with the intellectual consciousness of my existence, in the representation: I am, which accompanies all my judgements, and all the operations of my understanding, I could, at the same time, connect a determination of my existence by intellectual intuition, then the consciousness of a relation to something external to me would not be necessary. But the internal intuition in which alone my existence can be determined, though preceded by that purely intellectual consciousness, is itself sensible and attached to the condition of time. Hence this determination of my existence, and consequently my internal experience itself, must depend on something permanent which is not in me, which can be, therefore, only in something external to me, to which I must look upon myself as being related. Thus the reality of the external sense is necessarily connected with that of the internal, in order to the possibility of experience in general; that is, I am just as certainly conscious that there are things external to me related to my sense as I am that I myself exist as determined in time. But in order to ascertain to what given intuitions objects, external me, really correspond, in other words, what intuitions belong to the external sense and not to imagination, I must have recourse, in every particular case, to those rules according to which experience in general (even internal experience) is distinguished from imagination, and which are always based on the proposition that there really is an external experience. We may add the remark that the representation of something permanent in existence, is not the same thing as the permanent representation; for a representation may be very variable and changing — as all our representations, even that of matter, are — and yet refer to something permanent, which must, therefore, be distinct from all my representations and external to me, the existence of which is necessarily included in the determination of my own existence, and with it constitutes one experience — an experience which would not even be possible internally, if it were not also at the same time, in part, external. To the question How? we are no more able to reply, than we are, in general, to think the stationary in time, the coexistence of which with the variable, produces the conception of change.]

In attempting to render the exposition of my views as intelligible as possible, I have been compelled to leave out or abridge various passages which were not essential to the completeness of the work, but which many readers might consider useful in other respects, and might be unwilling to miss. This trifling loss, which could not be avoided without swelling the book beyond due limits, may be supplied, at the pleasure of the reader, by a comparison with the first edition, and will, I hope, be more than compensated for by the greater clearness of the exposition as it now stands.

I have observed, with pleasure and thankfulness, in the pages of various reviews and treatises, that the spirit of profound and thorough investigation is not extinct in Germany, though it may have been overborne and silenced for a time by the fashionable tone of a licence in thinking, which gives itself the airs of genius, and that the difficulties which beset the paths of criticism have not prevented energetic and acute thinkers from making themselves masters of the science of pure reason to which these paths conduct — a science which is not popular, but scholastic in its character, and which alone can hope for a lasting existence or possess an abiding value. To these deserving men, who so happily combine profundity of view with a talent for lucid exposition — a talent which I myself am not conscious of possessing — I leave the task of removing any obscurity which may still adhere to the statement of my doctrines. For, in this case, the danger is not that of being refuted, but of being misunderstood. For my own part, I must henceforward abstain from controversy, although I shall carefully attend to all suggestions, whether from friends or adversaries, which may be of use in the future elaboration of the system of this propaedeutic. As, during these labours, I have advanced pretty far in years this month I reach my sixty-fourth year — it will be necessary for me to economize time, if I am to carry out my plan of elaborating the metaphysics of nature as well as of morals, in confirmation of the correctness of the principles established in this Critique of Pure Reason, both speculative and practical; and I must, therefore, leave the task of clearing up the obscurities of the present work — inevitable, perhaps, at the outset — as well as, the defence of the whole, to those deserving men, who have made my system their own. A philosophical system cannot come forward armed at all points like a mathematical treatise, and hence it may be quite possible to take objection to particular passages, while the organic structure of the system, considered as a unity, has no danger to apprehend. But few possess the ability, and still fewer the inclination, to take a comprehensive view of a new system. By confining the view to particular passages, taking these out of their connection and comparing them with one another, it is easy to pick out apparent contradictions, especially in a work written with any freedom of style. These contradictions place the work in an unfavourable light in the eyes of those who rely on the judgement of others, but are easily reconciled by those who have mastered the idea of the whole. If a theory possesses stability in itself, the action and reaction which seemed at first to threaten its existence serve only, in the course of time, to smooth down any superficial roughness or inequality, and — if men of insight, impartiality, and truly popular gifts, turn their attention to it — to secure to it, in a short time, the requisite elegance also.

Konigsberg, April 1787.

INTRODUCTION

I. Of the difference between Pure and Empirical Knowledge

That all our knowledge begins with experience there can be no doubt. For how is it possible that the faculty of cognition should be awakened into exercise otherwise than by means of objects which affect our senses, and partly of themselves produce representations, partly rouse our powers of understanding into activity, to compare to connect, or to separate these, and so to convert the raw material of our sensuous impressions into a knowledge of objects, which is called experience? In respect of time, therefore, no knowledge of ours is antecedent to experience, but begins with it.

But, though all our knowledge begins with experience, it by no means follows that all arises out of experience. For, on the contrary, it is quite possible that our empirical knowledge is a compound of that which we receive through impressions, and that which the faculty of cognition supplies from itself (sensuous impressions giving merely the occasion), an addition which we cannot distinguish from the original element given by sense, till long practice has made us attentive to, and skilful in separating it. It is, therefore, a question which requires close investigation, and not to be answered at first sight, whether there exists a knowledge altogether independent of experience, and even of all sensuous impressions? Knowledge of this kind is called a priori, in contradistinction to empirical knowledge, which has its sources a posteriori, that is, in experience.

But the expression, "a priori," is not as yet definite enough adequately to indicate the whole meaning of the question above started. For, in speaking of knowledge which has its sources in experience, we are wont to say, that this or that may be known a priori, because we do not derive this knowledge immediately from experience, but from a general rule, which, however, we have itself borrowed from experience. Thus, if a man undermined his house, we say, "he might know a priori that it would have fallen;" that is, he needed not to have waited for the experience that it did actually fall. But still, a priori, he could not know even this much. For, that bodies are heavy, and, consequently, that they fall when their supports are taken away, must have been known to him previously, by means of experience.

By the term "knowledge a priori," therefore, we shall in the sequel understand, not such as is independent of this or that kind of experience, but such as is absolutely so of all experience. Opposed to this is empirical knowledge, or that which is possible only a posteriori, that is, through experience. Knowledge a priori is either pure or impure. Pure knowledge a priori is that with which no empirical element is mixed up. For example, the proposition, "Every change has a cause," is a proposition a priori, but impure, because change is a conception which can only be derived from experience.

II. The Human Intellect, even in an Unphilosophical State, is in Possession of Certain Cognitions "a priori".

The question now is as to a criterion, by which we may securely distinguish a pure from an empirical cognition. Experience no doubt teaches us that this or that object is constituted in such and such a manner, but not that it could not possibly exist otherwise. Now, in the first place, if we have a proposition which contains the idea of necessity in its very conception, it is a if, moreover, it is not derived from any other proposition, unless from one equally involving the idea of necessity, it is absolutely priori. Secondly, an empirical judgement never exhibits strict and absolute, but only assumed and comparative universality (by induction); therefore, the most we can say is — so far as we have hitherto observed, there is no exception to this or that rule. If, on the other hand, a judgement carries with it strict and absolute universality, that is, admits of no possible exception, it is not derived from experience, but is valid absolutely a priori.

Empirical universality is, therefore, only an arbitrary extension of validity, from that which may be predicated of a proposition valid in most cases, to that which is asserted of a proposition which holds

good in all; as, for example, in the affirmation, "All bodies are heavy." When, on the contrary, strict universality characterizes a judgement, it necessarily indicates another peculiar source of knowledge, namely, a faculty of cognition a priori. Necessity and strict universality, therefore, are infallible tests for distinguishing pure from empirical knowledge, and are inseparably connected with each other. But as in the use of these criteria the empirical limitation is sometimes more easily detected than the contingency of the judgement, or the unlimited universality which we attach to a judgement is often a more convincing proof than its necessity, it may be advisable to use the criteria separately, each being by itself infallible.

Now, that in the sphere of human cognition we have judgements which are necessary, and in the strictest sense universal, consequently pure a priori, it will be an easy matter to show. If we desire an example from the sciences, we need only take any proposition in mathematics. If we cast our eyes upon the commonest operations of the understanding, the proposition, "Every change must have a cause," will amply serve our purpose. In the latter case, indeed, the conception of a cause so plainly involves the conception of a necessity of connection with an effect, and of a strict universality of the law, that the very notion of a cause would entirely disappear, were we to derive it, like Hume, from a frequent association of what happens with that which precedes; and the habit thence originating of connecting representations — the necessity inherent in the judgement being therefore merely subjective. Besides, without seeking for such examples of principles existing a priori in cognition, we might easily show that such principles are the indispensable basis of the possibility of experience itself, and consequently prove their existence a priori. For whence could our experience itself acquire certainty, if all the rules on which it depends were themselves empirical, and consequently fortuitous? No one, therefore, can admit the validity of the use of such rules as first principles. But, for the present, we may content ourselves with having established the fact, that we do possess and exercise a faculty of pure a priori cognition; and, secondly, with having pointed out the proper tests of such cognition, namely, universality and necessity.

Not only in judgements, however, but even in conceptions, is an a priori origin manifest. For example, if we take away by degrees from our conceptions of a body all that can be referred to mere sensuous experience — colour, hardness or softness, weight, even impenetrability — the body will then vanish; but the space which it occupied still remains, and this it is utterly impossible to annihilate in thought. Again, if we take away, in like manner, from our empirical conception of any object, corporeal or incorporeal, all properties which mere experience has taught us to connect with it, still we cannot think away those through which we cogitate it as substance, or adhering to substance, although our conception of substance is more determined than that of an object. Compelled, therefore, by that necessity with which the conception of substance forces itself upon us, we must confess that it has its seat in our faculty of cognition a priori.

III. Philosophy stands in need of a Science which shall Determine the Possibility, Principles, and Extent of Human Knowledge "a priori"

Of far more importance than all that has been above said, is the consideration that certain of our cognitions rise completely above the sphere of all possible experience, and by means of conceptions, to which there exists in the whole extent of experience no corresponding object, seem to extend the range of our judgements beyond its bounds. And just in this transcendental or supersensible sphere, where experience affords us neither instruction nor guidance, lie the investigations of reason, which, on account of their importance, we consider far preferable to, and as having a far more elevated aim than, all that the understanding can achieve within the sphere of sensuous phenomena. So high a value do we set upon these investigations, that even at the risk of error, we persist in following them out, and permit neither doubt nor disregard nor indifference to restrain us from the pursuit. These unavoidable problems of mere pure reason are God, freedom (of will), and immortality. The science which, with all its preliminaries, has for its especial object the solution of these problems is named metaphysics — a science which is at the very outset dogmatical, that is, it confidently takes upon itself the execution of this task without any previous

investigation of the ability or inability of reason for such an undertaking.

Now the safe ground of experience being thus abandoned, it seems nevertheless natural that we should hesitate to erect a building with the cognitions we possess, without knowing whence they come, and on the strength of principles, the origin of which is undiscovered. Instead of thus trying to build without a foundation, it is rather to be expected that we should long ago have put the question, how the understanding can arrive at these a priori cognitions, and what is the extent, validity, and worth which they may possess? We say, "This is natural enough," meaning by the word natural, that which is consistent with a just and reasonable way of thinking; but if we understand by the term, that which usually happens, nothing indeed could be more natural and more comprehensible than that this investigation should be left long unattempted. For one part of our pure knowledge, the science of mathematics, has been long firmly established, and thus leads us to form flattering expectations with regard to others, though these may be of quite a different nature. Besides, when we get beyond the bounds of experience, we are of course safe from opposition in that quarter; and the charm of widening the range of our knowledge is so great that, unless we are brought to a standstill by some evident contradiction, we hurry on undoubtingly in our course. This, however, may be avoided, if we are sufficiently cautious in the construction of our fictions, which are not the less fictions on that account.

Mathematical science affords us a brilliant example, how far, independently of all experience, we may carry our a priori knowledge. It is true that the mathematician occupies himself with objects and cognitions only in so far as they can be represented by means of intuition. But this circumstance is easily overlooked, because the said intuition can itself be given a priori, and therefore is hardly to be distinguished from a mere pure conception. Deceived by such a proof of the power of reason, we can perceive no limits to the extension of our knowledge. The light dove cleaving in free flight the thin air, whose resistance it feels, might imagine that her movements would be far more free and rapid in airless space. Just in the same way did Plato, abandoning the world of sense because of the narrow limits it sets to the understanding, venture upon the wings of ideas beyond it, into the void space of pure intellect. He did not reflect that he made no real progress by all his efforts; for he met with no resistance which might serve him for a support, as it were, whereon to rest, and on which he might apply his powers, in order to let the intellect acquire momentum for its progress. It is, indeed, the common fate of human reason in speculation, to finish the imposing edifice of thought as rapidly as possible, and then for the first time to begin to examine whether the foundation is a solid one or no. Arrived at this point, all sorts of excuses are sought after, in order to console us for its want of stability, or rather, indeed, to enable Us to dispense altogether with so late and dangerous an investigation. But what frees us during the process of building from all apprehension or suspicion, and flatters us into the belief of its solidity, is this. A great part, perhaps the greatest part, of the business of our reason consists in the analysation of the conceptions which we already possess of objects. By this means we gain a multitude of cognitions, which although really nothing more than elucidations or explanations of that which (though in a confused manner) was already thought in our conceptions, are, at least in respect of their form, prized as new introspections; whilst, so far as regards their matter or content, we have really made no addition to our conceptions, but only disinvolved them. But as this process does furnish a real priori knowledge, which has a sure progress and useful results, reason, deceived by this, slips in, without being itself aware of it, assertions of a quite different kind; in which, to given conceptions it adds others, a priori indeed, but entirely foreign to them, without our knowing how it arrives at these, and, indeed, without such a question ever suggesting itself. I shall therefore at once proceed to examine the difference between these two modes of knowledge.

IV. Of the Difference Between Analytical and Synthetical Judgements.

In all judgements wherein the relation of a subject to the predicate is cogitated (I mention affirmative judgements only here; the application to negative will be very easy), this relation is possible in two different ways. Either the predicate B belongs to the subject A, as somewhat which is contained (though

covertly) in the conception A; or the predicate B lies completely out of the conception A, although it stands in connection with it. In the first instance, I term the judgement analytical, in the second, synthetical. Analytical judgements (affirmative) are therefore those in which the connection of the predicate with the subject is cogitated through identity; those in which this connection is cogitated without identity, are called synthetical judgements. The former may be called explicative, the latter augmentative judgements; because the former add in the predicate nothing to the conception of the subject, but only analyse it into its constituent conceptions, which were thought already in the subject, although in a confused manner; the latter add to our conceptions of the subject a predicate which was not contained in it, and which no analysis could ever have discovered therein. For example, when I say, "All bodies are extended," this is an analytical judgement. For I need not go beyond the conception of body in order to find extension connected with it, but merely analyse the conception, that is, become conscious of the manifold properties which I think in that conception, in order to discover this predicate in it: it is therefore an analytical judgement. On the other hand, when I say, "All bodies are heavy," the predicate is something totally different from that which I think in the mere conception of a body. By the addition of such a predicate, therefore, it becomes a synthetical judgement.

Judgements of experience, as such, are always synthetical. For it would be absurd to think of grounding an analytical judgement on experience, because in forming such a judgement I need not go out of the sphere of my conceptions, and therefore recourse to the testimony of experience is quite unnecessary. That "bodies are extended" is not an empirical judgement, but a proposition which stands firm a priori. For before addressing myself to experience, I already have in my conception all the requisite conditions for the judgement, and I have only to extract the predicate from the conception, according to the principle of contradiction, and thereby at the same time become conscious of the necessity of the judgement, a necessity which I could never learn from experience. On the other hand, though at first I do not at all include the predicate of weight in my conception of body in general, that conception still indicates an object of experience, a part of the totality of experience, to which I can still add other parts; and this I do when I recognize by observation that bodies are heavy. I can cognize beforehand by analysis the conception of body through the characteristics of extension, impenetrability, shape, etc., all which are cogitated in this conception. But now I extend my knowledge, and looking back on experience from which I had derived this conception of body, I find weight at all times connected with the above characteristics, and therefore I synthetically add to my conceptions this as a predicate, and say, "All bodies are heavy." Thus it is experience upon which rests the possibility of the synthesis of the predicate of weight with the conception of body, because both conceptions, although the one is not contained in the other, still belong to one another (only contingently, however), as parts of a whole, namely, of experience, which is itself a synthesis of intuitions.

But to synthetical judgements a priori, such aid is entirely wanting. If I go out of and beyond the conception A, in order to recognize another B as connected with it, what foundation have I to rest on, whereby to render the synthesis possible? I have here no longer the advantage of looking out in the sphere of experience for what I want. Let us take, for example, the proposition, "Everything that happens has a cause." In the conception of "something that happens," I indeed think an existence which a certain time antecedes, and from this I can derive analytical judgements. But the conception of a cause lies quite out of the above conception, and indicates something entirely different from "that which happens," and is consequently not contained in that conception. How then am I able to assert concerning the general conception— "that which happens" — something entirely different from that conception, and to recognize the conception of cause although not contained in it, yet as belonging to it, and even necessarily? what is here the unknown = X, upon which the understanding rests when it believes it has found, out of the conception A a foreign predicate B, which it nevertheless considers to be connected with it? It cannot be experience, because the principle adduced annexes the two representations, cause and effect, to the

representation existence, not only with universality, which experience cannot give, but also with the expression of necessity, therefore completely a priori and from pure conceptions. Upon such synthetical, that is augmentative propositions, depends the whole aim of our speculative knowledge a priori; for although analytical judgements are indeed highly important and necessary, they are so, only to arrive at that clearness of conceptions which is requisite for a sure and extended synthesis, and this alone is a real acquisition.

V. In all Theoretical Sciences of Reason, Synthetical Judgements "a priori" are contained as Principles.

1. Mathematical judgements are always synthetical. Hitherto this fact, though incontestably true and very important in its consequences, seems to have escaped the analysts of the human mind, nay, to be in complete opposition to all their conjectures. For as it was found that mathematical conclusions all proceed according to the principle of contradiction (which the nature of every apodeictic certainty requires), people became persuaded that the fundamental principles of the science also were recognized and admitted in the same way. But the notion is fallacious; for although a synthetical proposition can certainly be discerned by means of the principle of contradiction, this is possible only when another synthetical proposition precedes, from which the latter is deduced, but never of itself.

Before all, be it observed, that proper mathematical propositions are always judgements a priori, and not empirical, because they carry along with them the conception of necessity, which cannot be given by experience. If this be demurred to, it matters not; I will then limit my assertion to pure mathematics, the very conception of which implies that it consists of knowledge altogether non-empirical and a priori.

We might, indeed at first suppose that the proposition 7 + 5 = 12 is a merely analytical proposition, following (according to the principle of contradiction) from the conception of a sum of seven and five. But if we regard it more narrowly, we find that our conception of the sum of seven and five contains nothing more than the uniting of both sums into one, whereby it cannot at all be cogitated what this single number is which embraces both. The conception of twelve is by no means obtained by merely cogitating the union of seven and five; and we may analyse our conception of such a possible sum as long as we will, still we shall never discover in it the notion of twelve. We must go beyond these conceptions, and have recourse to an intuition which corresponds to one of the two — our five fingers, for example, or like Segner in his Arithmetic five points, and so by degrees, add the units contained in the five given in the intuition, to the conception of seven. For I first take the number 7, and, for the conception of 5 calling in the aid of the fingers of my hand as objects of intuition, I add the units, which I before took together to make up the number 5, gradually now by means of the material image my hand, to the number 7, and by this process, I at length see the number 12 arise. That 7 should be added to 5, I have certainly cogitated in my conception of a sum = 7 + 5, but not that this sum was equal to 12. Arithmetical propositions are therefore always synthetical, of which we may become more clearly convinced by trying large numbers. For it will thus become quite evident that, turn and twist our conceptions as we may, it is impossible, without having recourse to intuition, to arrive at the sum total or product by means of the mere analysis of our conceptions. Just as little is any principle of pure geometry analytical. "A straight line between two points is the shortest," is a synthetical proposition. For my conception of straight contains no notion of quantity, but is merely qualitative. The conception of the shortest is therefore fore wholly an addition, and by no analysis can it be extracted from our conception of a straight line. Intuition must therefore here lend its aid, by means of which, and thus only, our synthesis is possible.

Some few principles preposited by geometricians are, indeed, really analytical, and depend on the principle of contradiction. They serve, however, like identical propositions, as links in the chain of method, not as principles — for example, a = a, the whole is equal to itself, or (a+b) — > a, the whole is greater than its part. And yet even these principles themselves, though they derive their validity from pure conceptions, are only admitted in mathematics because they can be presented in intuition. What causes us here commonly to believe that the predicate of such apodeictic judgements is already contained in our

conception, and that the judgement is therefore analytical, is merely the equivocal nature of the expression. We must join in thought a certain predicate to a given conception, and this necessity cleaves already to the conception. But the question is, not what we must join in thought to the given conception, but what we really think therein, though only obscurely, and then it becomes manifest that the predicate pertains to these conceptions, necessarily indeed, yet not as thought in the conception itself, but by virtue of an intuition, which must be added to the conception.

2. The science of natural philosophy (physics) contains in itself synthetical judgements a priori, as principles. I shall adduce two propositions. For instance, the proposition, "In all changes of the material world, the quantity of matter remains unchanged"; or, that, "In all communication of motion, action and reaction must always be equal." In both of these, not only is the necessity, and therefore their origin a priori clear, but also that they are synthetical propositions. For in the conception of matter, I do not cogitate its permanency, but merely its presence in space, which it fills. I therefore really go out of and beyond the conception of matter, in order to think on to it something a priori, which I did not think in it. The proposition is therefore not analytical, but synthetical, and nevertheless conceived a priori; and so it is with regard to the other propositions of the pure part of natural philosophy.

3. As to metaphysics, even if we look upon it merely as an attempted science, yet, from the nature of human reason, an indispensable one, we find that it must contain synthetical propositions a priori. It is not merely the duty of metaphysics to dissect, and thereby analytically to illustrate the conceptions which we form a priori of things; but we seek to widen the range of our a priori knowledge. For this purpose, we must avail ourselves of such principles as add something to the original conception — something not identical with, nor contained in it, and by means of synthetical judgements a priori, leave far behind us the limits of experience; for example, in the proposition, "the world must have a beginning," and such like. Thus metaphysics, according to the proper aim of the science, consists merely of synthetical propositions a priori.

VI. The Universal Problem of Pure Reason.

It is extremely advantageous to be able to bring a number of investigations under the formula of a single problem. For in this manner, we not only facilitate our own labour, inasmuch as we define it clearly to ourselves, but also render it more easy for others to decide whether we have done justice to our undertaking. The proper problem of pure reason, then, is contained in the question: "How are synthetical judgements a priori possible?"

That metaphysical science has hitherto remained in so vacillating a state of uncertainty and contradiction, is only to be attributed to the fact that this great problem, and perhaps even the difference between analytical and synthetical judgements, did not sooner suggest itself to philosophers. Upon the solution of this problem, or upon sufficient proof of the impossibility of synthetical knowledge a priori, depends the existence or downfall of the science of metaphysics. Among philosophers, David Hume came the nearest of all to this problem; yet it never acquired in his mind sufficient precision, nor did he regard the question in its universality. On the contrary, he stopped short at the synthetical proposition of the connection of an effect with its cause (principium causalitatis), insisting that such proposition a priori was impossible. According to his conclusions, then, all that we term metaphysical science is a mere delusion, arising from the fancied insight of reason into that which is in truth borrowed from experience, and to which habit has given the appearance of necessity. Against this assertion, destructive to all pure philosophy, he would have been guarded, had he had our problem before his eyes in its universality. For he would then have perceived that, according to his own argument, there likewise could not be any pure mathematical science, which assuredly cannot exist without synthetical propositions a priori — an absurdity from which his good understanding must have saved him.

In the solution of the above problem is at the same time comprehended the possibility of the use of pure reason in the foundation and construction of all sciences which contain theoretical knowledge a priori of

objects, that is to say, the answer to the following questions:

How is pure mathematical science possible?

How is pure natural science possible?

Respecting these sciences, as they do certainly exist, it may with propriety be asked, how they are possible? — for that they must be possible is shown by the fact of their really existing.* But as to metaphysics, the miserable progress it has hitherto made, and the fact that of no one system yet brought forward, far as regards its true aim, can it be said that this science really exists, leaves any one at liberty to doubt with reason the very possibility of its existence.

[Footnote: As to the existence of pure natural science, or physics, perhaps many may still express doubts. But we have only to look at the different propositions which are commonly treated of at the commencement of proper (empirical) physical science — those, for example, relating to the permanence of the same quantity of matter, the vis inertiae, the equality of action and reaction, etc. — to be soon convinced that they form a science of pure physics (physica pura, or rationalis), which well deserves to be separately exposed as a special science, in its whole extent, whether that be great or confined.]

Yet, in a certain sense, this kind of knowledge must unquestionably be looked upon as given; in other words, metaphysics must be considered as really existing, if not as a science, nevertheless as a natural disposition of the human mind (metaphysica naturalis). For human reason, without any instigations imputable to the mere vanity of great knowledge, unceasingly progresses, urged on by its own feeling of need, towards such questions as cannot be answered by any empirical application of reason, or principles derived therefrom; and so there has ever really existed in every man some system of metaphysics. It will always exist, so soon as reason awakes to the exercise of its power of speculation. And now the question arises: “How is metaphysics, as a natural disposition, possible?” In other words, how, from the nature of universal human reason, do those questions arise which pure reason proposes to itself, and which it is impelled by its own feeling of need to answer as well as it can?

But as in all the attempts hitherto made to answer the questions which reason is prompted by its very nature to propose to itself, for example, whether the world had a beginning, or has existed from eternity, it has always met with unavoidable contradictions, we must not rest satisfied with the mere natural disposition of the mind to metaphysics, that is, with the existence of the faculty of pure reason, whence, indeed, some sort of metaphysical system always arises; but it must be possible to arrive at certainty in regard to the question whether we know or do not know the things of which metaphysics treats. We must be able to arrive at a decision on the subjects of its questions, or on the ability or inability of reason to form any judgement respecting them; and therefore either to extend with confidence the bounds of our pure reason, or to set strictly defined and safe limits to its action. This last question, which arises out of the above universal problem, would properly run thus: “How is metaphysics possible as a science?”

Thus, the critique of reason leads at last, naturally and necessarily, to science; and, on the other hand, the dogmatical use of reason without criticism leads to groundless assertions, against which others equally specious can always be set, thus ending unavoidably in scepticism.

Besides, this science cannot be of great and formidable prolixity, because it has not to do with objects of reason, the variety of which is inexhaustible, but merely with Reason herself and her problems; problems which arise out of her own bosom, and are not proposed to her by the nature of outward things, but by her own nature. And when once Reason has previously become able completely to understand her own power in regard to objects which she meets with in experience, it will be easy to determine securely the extent and limits of her attempted application to objects beyond the confines of experience.

We may and must, therefore, regard the attempts hitherto made to establish metaphysical science dogmatically as non-existent. For what of analysis, that is, mere dissection of conceptions, is contained in

one or other, is not the aim of, but only a preparation for metaphysics proper, which has for its object the extension, by means of synthesis, of our a priori knowledge. And for this purpose, mere analysis is of course useless, because it only shows what is contained in these conceptions, but not how we arrive, a priori, at them; and this it is her duty to show, in order to be able afterwards to determine their valid use in regard to all objects of experience, to all knowledge in general. But little self-denial, indeed, is needed to give up these pretensions, seeing the undeniable, and in the dogmatic mode of procedure, inevitable contradictions of Reason with herself, have long since ruined the reputation of every system of metaphysics that has appeared up to this time. It will require more firmness to remain undeterred by difficulty from within, and opposition from without, from endeavouring, by a method quite opposed to all those hitherto followed, to further the growth and fruitfulness of a science indispensable to human reason — a science from which every branch it has borne may be cut away, but whose roots remain indestructible.

VII. Idea and Division of a Particular Science, under the Name of a Critique of Pure Reason.

From all that has been said, there results the idea of a particular science, which may be called the Critique of Pure Reason. For reason is the faculty which furnishes us with the principles of knowledge a priori. Hence, pure reason is the faculty which contains the principles of cognizing anything absolutely a priori. An organon of pure reason would be a compendium of those principles according to which alone all pure cognitions a priori can be obtained. The completely extended application of such an organon would afford us a system of pure reason. As this, however, is demanding a great deal, and it is yet doubtful whether any extension of our knowledge be here possible, or, if so, in what cases; we can regard a science of the mere criticism of pure reason, its sources and limits, as the propaedeutic to a system of pure reason. Such a science must not be called a doctrine, but only a critique of pure reason; and its use, in regard to speculation, would be only negative, not to enlarge the bounds of, but to purify, our reason, and to shield it against error — which alone is no little gain. I apply the term transcendental to all knowledge which is not so much occupied with objects as with the mode of our cognition of these objects, so far as this mode of cognition is possible a priori. A system of such conceptions would be called transcendental philosophy. But this, again, is still beyond the bounds of our present essay. For as such a science must contain a complete exposition not only of our synthetical a priori, but of our analytical a priori knowledge, it is of too wide a range for our present purpose, because we do not require to carry our analysis any farther than is necessary to understand, in their full extent, the principles of synthesis a priori, with which alone we have to do. This investigation, which we cannot properly call a doctrine, but only a transcendental critique, because it aims not at the enlargement, but at the correction and guidance, of our knowledge, and is to serve as a touchstone of the worth or worthlessness of all knowledge a priori, is the sole object of our present essay. Such a critique is consequently, as far as possible, a preparation for an organon; and if this new organon should be found to fail, at least for a canon of pure reason, according to which the complete system of the philosophy of pure reason, whether it extend or limit the bounds of that reason, might one day be set forth both analytically and synthetically. For that this is possible, nay, that such a system is not of so great extent as to preclude the hope of its ever being completed, is evident. For we have not here to do with the nature of outward objects, which is infinite, but solely with the mind, which judges of the nature of objects, and, again, with the mind only in respect of its cognition a priori. And the object of our investigations, as it is not to be sought without, but, altogether within, ourselves, cannot remain concealed, and in all probability is limited enough to be completely surveyed and fairly estimated, according to its worth or worthlessness. Still less let the reader here expect a critique of books and systems of pure reason; our present object is exclusively a critique of the faculty of pure reason itself. Only when we make this critique our foundation, do we possess a pure touchstone for estimating the philosophical value of ancient and modern writings on this subject; and without this criterion, the incompetent historian or judge decides upon and corrects the groundless

assertions of others with his own, which have themselves just as little foundation.

Transcendental philosophy is the idea of a science, for which the Critique of Pure Reason must sketch the whole plan architectonically, that is, from principles, with a full guarantee for the validity and stability of all the parts which enter into the building. It is the system of all the principles of pure reason. If this Critique itself does not assume the title of transcendental philosophy, it is only because, to be a complete system, it ought to contain a full analysis of all human knowledge a priori. Our critique must, indeed, lay before us a complete enumeration of all the radical conceptions which constitute the said pure knowledge. But from the complete analysis of these conceptions themselves, as also from a complete investigation of those derived from them, it abstains with reason; partly because it would be deviating from the end in view to occupy itself with this analysis, since this process is not attended with the difficulty and insecurity to be found in the synthesis, to which our critique is entirely devoted, and partly because it would be inconsistent with the unity of our plan to burden this essay with the vindication of the completeness of such an analysis and deduction, with which, after all, we have at present nothing to do. This completeness of the analysis of these radical conceptions, as well as of the deduction from the conceptions a priori which may be given by the analysis, we can, however, easily attain, provided only that we are in possession of all these radical conceptions, which are to serve as principles of the synthesis, and that in respect of this main purpose nothing is wanting.

To the Critique of Pure Reason, therefore, belongs all that constitutes transcendental philosophy; and it is the complete idea of transcendental philosophy, but still not the science itself; because it only proceeds so far with the analysis as is necessary to the power of judging completely of our synthetical knowledge a priori.

The principal thing we must attend to, in the division of the parts of a science like this, is that no conceptions must enter it which contain aught empirical; in other words, that the knowledge a priori must be completely pure. Hence, although the highest principles and fundamental conceptions of morality are certainly cognitions a priori, yet they do not belong to transcendental philosophy; because, though they certainly do not lay the conceptions of pain, pleasure, desires, inclinations, etc. (which are all of empirical origin), at the foundation of its precepts, yet still into the conception of duty — as an obstacle to be overcome, or as an incitement which should not be made into a motive — these empirical conceptions must necessarily enter, in the construction of a system of pure morality. Transcendental philosophy is consequently a philosophy of the pure and merely speculative reason. For all that is practical, so far as it contains motives, relates to feelings, and these belong to empirical sources of cognition.

If we wish to divide this science from the universal point of view of a science in general, it ought to comprehend, first, a Doctrine of the Elements, and, secondly, a Doctrine of the Method of pure reason. Each of these main divisions will have its subdivisions, the separate reasons for which we cannot here particularize. Only so much seems necessary, by way of introduction of premonition, that there are two sources of human knowledge (which probably spring from a common, but to us unknown root), namely, sense and understanding. By the former, objects are given to us; by the latter, thought. So far as the faculty of sense may contain representations a priori, which form the conditions under which objects are given, in so far it belongs to transcendental philosophy. The transcendental doctrine of sense must form the first part of our science of elements, because the conditions under which alone the objects of human knowledge are given must precede those under which they are thought.

I. TRANSCENDENTAL DOCTRINE OF ELEMENTS. FIRST PART. TRANSCENDENTAL AESTHETIC.

SS I. Introductory.

In whatsoever mode, or by whatsoever means, our knowledge may relate to objects, it is at least quite clear that the only manner in which it immediately relates to them is by means of an intuition. To this as the indispensable groundwork, all thought points. But an intuition can take place only in so far as the

object is given to us. This, again, is only possible, to man at least, on condition that the object affect the mind in a certain manner. The capacity for receiving representations (receptivity) through the mode in which we are affected by objects, objects, is called sensibility. By means of sensibility, therefore, objects are given to us, and it alone furnishes us with intuitions; by the understanding they are thought, and from it arise conceptions. But an thought must directly, or indirectly, by means of certain signs, relate ultimately to intuitions; consequently, with us, to sensibility, because in no other way can an object be given to us.

The effect of an object upon the faculty of representation, so far as we are affected by the said object, is sensation. That sort of intuition which relates to an object by means of sensation is called an empirical intuition. The undetermined object of an empirical intuition is called phenomenon. That which in the phenomenon corresponds to the sensation, I term its matter; but that which effects that the content of the phenomenon can be arranged under certain relations, I call its form. But that in which our sensations are merely arranged, and by which they are susceptible of assuming a certain form, cannot be itself sensation. It is, then, the matter of all phenomena that is given to us a posteriori; the form must lie ready a priori for them in the mind, and consequently can be regarded separately from all sensation.

I call all representations pure, in the transcendental meaning of the word, wherein nothing is met with that belongs to sensation. And accordingly we find existing in the mind a priori, the pure form of sensuous intuitions in general, in which all the manifold content of the phenomenal world is arranged and viewed under certain relations. This pure form of sensibility I shall call pure intuition. Thus, if I take away from our representation of a body all that the understanding thinks as belonging to it, as substance, force, divisibility, etc., and also whatever belongs to sensation, as impenetrability, hardness, colour, etc.; yet there is still something left us from this empirical intuition, namely, extension and shape. These belong to pure intuition, which exists a priori in the mind, as a mere form of sensibility, and without any real object of the senses or any sensation.

The science of all the principles of sensibility a priori, I call transcendental aesthetic.* There must, then, be such a science forming the first part of the transcendental doctrine of elements, in contradistinction to that part which contains the principles of pure thought, and which is called transcendental logic.

[Footnote: The Germans are the only people who at present use this word to indicate what others call the critique of taste. At the foundation of this term lies the disappointed hope, which the eminent analyst, Baumgarten, conceived, of subjecting the criticism of the beautiful to principles of reason, and so of elevating its rules into a science. But his endeavours were vain. For the said rules or criteria are, in respect to their chief sources, merely empirical, consequently never can serve as determinate laws a priori, by which our judgement in matters of taste is to be directed. It is rather our judgement which forms the proper test as to the correctness of the principles. On this account it is advisable to give up the use of the term as designating the critique of taste, and to apply it solely to that doctrine, which is true science — the science of the laws of sensibility — and thus come nearer to the language and the sense of the ancients in their well-known division of the objects of cognition into aiotheta kai noeta, or to share it with speculative philosophy, and employ it partly in a transcendental, partly in a psychological signification.]

In the science of transcendental aesthetic accordingly, we shall first isolate sensibility or the sensuous faculty, by separating from it all that is annexed to its perceptions by the conceptions of understanding, so that nothing be left but empirical intuition. In the next place we shall take away from this intuition all that belongs to sensation, so that nothing may remain but pure intuition, and the mere form of phenomena, which is all that the sensibility can afford a priori. From this investigation it will be found that there are two pure forms of sensuous intuition, as principles of knowledge a priori, namely, space and time. To the consideration of these we shall now proceed.

SECTION I. Of Space.

SS 2. Metaphysical Exposition of this Conception.

By means of the external sense (a property of the mind), we represent to ourselves objects as without

us, and these all in space. Herein alone are their shape, dimensions, and relations to each other determined or determinable. The internal sense, by means of which the mind contemplates itself or its internal state, gives, indeed, no intuition of the soul as an object; yet there is nevertheless a determinate form, under which alone the contemplation of our internal state is possible, so that all which relates to the inward determinations of the mind is represented in relations of time. Of time we cannot have any external intuition, any more than we can have an internal intuition of space. What then are time and space? Are they real existences? Or, are they merely relations or determinations of things, such, however, as would equally belong to these things in themselves, though they should never become objects of intuition; or, are they such as belong only to the form of intuition, and consequently to the subjective constitution of the mind, without which these predicates of time and space could not be attached to any object? In order to become informed on these points, we shall first give an exposition of the conception of space. By exposition, I mean the clear, though not detailed, representation of that which belongs to a conception; and an exposition is metaphysical when it contains that which represents the conception as given a priori.

1. Space is not a conception which has been derived from outward experiences. For, in order that certain sensations may relate to something without me (that is, to something which occupies a different part of space from that in which I am); in like manner, in order that I may represent them not merely as without, of, and near to each other, but also in separate places, the representation of space must already exist as a foundation. Consequently, the representation of space cannot be borrowed from the relations of external phenomena through experience; but, on the contrary, this external experience is itself only possible through the said antecedent representation.

2. Space then is a necessary representation a priori, which serves for the foundation of all external intuitions. We never can imagine or make a representation to ourselves of the non-existence of space, though we may easily enough think that no objects are found in it. It must, therefore, be considered as the condition of the possibility of phenomena, and by no means as a determination dependent on them, and is a representation a priori, which necessarily supplies the basis for external phenomena.

3. Space is no discursive, or as we say, general conception of the relations of things, but a pure intuition. For, in the first place, we can only represent to ourselves one space, and, when we talk of divers spaces, we mean only parts of one and the same space. Moreover, these parts cannot antecede this one all-embracing space, as the component parts from which the aggregate can be made up, but can be cogitated only as existing in it. Space is essentially one, and multiplicity in it, consequently the general notion of spaces, of this or that space, depends solely upon limitations. Hence it follows that an a priori intuition (which is not empirical) lies at the root of all our conceptions of space. Thus, moreover, the principles of geometry — for example, that "in a triangle, two sides together are greater than the third," are never deduced from general conceptions of line and triangle, but from intuition, and this a priori, with apodeictic certainty.

4. Space is represented as an infinite given quantity. Now every conception must indeed be considered as a representation which is contained in an infinite multitude of different possible representations, which, therefore, comprises these under itself; but no conception, as such, can be so conceived, as if it contained within itself an infinite multitude of representations. Nevertheless, space is so conceived of, for all parts of space are equally capable of being produced to infinity. Consequently, the original representation of space is an intuition a priori, and not a conception.

SS 3. Transcendental Exposition of the Conception of Space.

By a transcendental exposition, I mean the explanation of a conception, as a principle, whence can be discerned the possibility of other synthetical a priori cognitions. For this purpose, it is requisite, firstly, that such cognitions do really flow from the given conception; and, secondly, that the said cognitions are only possible under the presupposition of a given mode of explaining this conception.

Geometry is a science which determines the properties of space synthetically, and yet a priori. What,

then, must be our representation of space, in order that such a cognition of it may be possible? It must be originally intuition, for from a mere conception, no propositions can be deduced which go out beyond the conception, and yet this happens in geometry. (Introd. V.) But this intuition must be found in the mind a priori, that is, before any perception of objects, consequently must be pure, not empirical, intuition. For geometrical principles are always apodeictic, that is, united with the consciousness of their necessity, as: "Space has only three dimensions." But propositions of this kind cannot be empirical judgements, nor conclusions from them. (Introd. II.) Now, how can an external intuition anterior to objects themselves, and in which our conception of objects can be determined a priori, exist in the human mind? Obviously not otherwise than in so far as it has its seat in the subject only, as the formal capacity of the subject's being affected by objects, and thereby of obtaining immediate representation, that is, intuition; consequently, only as the form of the external sense in general.

Thus it is only by means of our explanation that the possibility of geometry, as a synthetical science a priori, becomes comprehensible. Every mode of explanation which does not show us this possibility, although in appearance it may be similar to ours, can with the utmost certainty be distinguished from it by these marks.

SS 4. Conclusions from the foregoing Conceptions.

(a) Space does not represent any property of objects as things in themselves, nor does it represent them in their relations to each other; in other words, space does not represent to us any determination of objects such as attaches to the objects themselves, and would remain, even though all subjective conditions of the intuition were abstracted. For neither absolute nor relative determinations of objects can be intuited prior to the existence of the things to which they belong, and therefore not a priori.

(b) Space is nothing else than the form of all phenomena of the external sense, that is, the subjective condition of the sensibility, under which alone external intuition is possible. Now, because the receptivity or capacity of the subject to be affected by objects necessarily antecedes all intuitions of these objects, it is easily understood how the form of all phenomena can be given in the mind previous to all actual perceptions, therefore a priori, and how it, as a pure intuition, in which all objects must be determined, can contain principles of the relations of these objects prior to all experience.

It is therefore from the human point of view only that we can speak of space, extended objects, etc. If we depart from the subjective condition, under which alone we can obtain external intuition, or, in other words, by means of which we are affected by objects, the representation of space has no meaning whatsoever. This predicate is only applicable to things in so far as they appear to us, that is, are objects of sensibility. The constant form of this receptivity, which we call sensibility, is a necessary condition of all relations in which objects can be intuited as existing without us, and when abstraction of these objects is made, is a pure intuition, to which we give the name of space. It is clear that we cannot make the special conditions of sensibility into conditions of the possibility of things, but only of the possibility of their existence as far as they are phenomena. And so we may correctly say that space contains all which can appear to us externally, but not all things considered as things in themselves, be they intuited or not, or by whatsoever subject one will. As to the intuitions of other thinking beings, we cannot judge whether they are or are not bound by the same conditions which limit our own intuition, and which for us are universally valid. If we join the limitation of a judgement to the conception of the subject, then the judgement will possess unconditioned validity. For example, the proposition, "All objects are beside each other in space," is valid only under the limitation that these things are taken as objects of our sensuous intuition. But if I join the condition to the conception and say, "All things, as external phenomena, are beside each other in space," then the rule is valid universally, and without any limitation. Our expositions, consequently, teach the reality (i.e., the objective validity) of space in regard of all which can be presented to us externally as object, and at the same time also the ideality of space in regard to objects when they are considered by means of reason as things in themselves, that is, without reference

to the constitution of our sensibility. We maintain, therefore, the empirical reality of space in regard to all possible external experience, although we must admit its transcendental ideality; in other words, that it is nothing, so soon as we withdraw the condition upon which the possibility of all experience depends and look upon space as something that belongs to things in themselves.

But, with the exception of space, there is no representation, subjective and referring to something external to us, which could be called objective a priori. For there are no other subjective representations from which we can deduce synthetical propositions a priori, as we can from the intuition of space. (See SS 3.) Therefore, to speak accurately, no ideality whatever belongs to these, although they agree in this respect with the representation of space, that they belong merely to the subjective nature of the mode of sensuous perception; such a mode, for example, as that of sight, of hearing, and of feeling, by means of the sensations of colour, sound, and heat, but which, because they are only sensations and not intuitions, do not of themselves give us the cognition of any object, least of all, an a priori cognition. My purpose, in the above remark, is merely this: to guard any one against illustrating the asserted ideality of space by examples quite insufficient, for example, by colour, taste, etc.; for these must be contemplated not as properties of things, but only as changes in the subject, changes which may be different in different men. For, in such a case, that which is originally a mere phenomenon, a rose, for example, is taken by the empirical understanding for a thing in itself, though to every different eye, in respect of its colour, it may appear different. On the contrary, the transcendental conception of phenomena in space is a critical admonition, that, in general, nothing which is intuited in space is a thing in itself, and that space is not a form which belongs as a property to things; but that objects are quite unknown to us in themselves, and what we call outward objects, are nothing else but mere representations of our sensibility, whose form is space, but whose real correlate, the thing in itself, is not known by means of these representations, nor ever can be, but respecting which, in experience, no inquiry is ever made.

SECTION II. Of Time.

SS 5. Metaphysical Exposition of this Conception.

1. Time is not an empirical conception. For neither coexistence nor succession would be perceived by us, if the representation of time did not exist as a foundation a priori. Without this presupposition we could not represent to ourselves that things exist together at one and the same time, or at different times, that is, contemporaneously, or in succession.

2. Time is a necessary representation, lying at the foundation of all our intuitions. With regard to phenomena in general, we cannot think away time from them, and represent them to ourselves as out of and unconnected with time, but we can quite well represent to ourselves time void of phenomena. Time is therefore given a priori. In it alone is all reality of phenomena possible. These may all be annihilated in thought, but time itself, as the universal condition of their possibility, cannot be so annulled.

3. On this necessity a priori is also founded the possibility of apodeictic principles of the relations of time, or axioms of time in general, such as: “Time has only one dimension,” “Different times are not coexistent but successive” (as different spaces are not successive but coexistent). These principles cannot be derived from experience, for it would give neither strict universality, nor apodeictic certainty. We should only be able to say, “so common experience teaches us,” but not “it must be so.” They are valid as rules, through which, in general, experience is possible; and they instruct us respecting experience, and not by means of it.

4. Time is not a discursive, or as it is called, general conception, but a pure form of the sensuous intuition. Different times are merely parts of one and the same time. But the representation which can only be given by a single object is an intuition. Besides, the proposition that different times cannot be coexistent could not be derived from a general conception. For this proposition is synthetical, and therefore cannot spring out of conceptions alone. It is therefore contained immediately in the intuition and representation of time.

5. The infinity of time signifies nothing more than that every determined quantity of time is possible only through limitations of one time lying at the foundation. Consequently, the original representation, time, must be given as unlimited. But as the determinate representation of the parts of time and of every quantity of an object can only be obtained by limitation, the complete representation of time must not be furnished by means of conceptions, for these contain only partial representations. Conceptions, on the contrary, must have immediate intuition for their basis.

SS 6 Transcendental Exposition of the Conception of Time.

I may here refer to what is said above (SS 5, 3), where, for or sake of brevity, I have placed under the head of metaphysical exposition, that which is properly transcendental. Here I shall add that the conception of change, and with it the conception of motion, as change of place, is possible only through and in the representation of time; that if this representation were not an intuition (internal) a priori, no conception, of whatever kind, could render comprehensible the possibility of change, in other words, of a conjunction of contradictorily opposed predicates in one and the same object, for example, the presence of a thing in a place and the non-presence of the same thing in the same place. It is only in time that it is possible to meet with two contradictorily opposed determinations in one thing, that is, after each other. Thus our conception of time explains the possibility of so much synthetical knowledge a priori, as is exhibited in the general doctrine of motion, which is not a little fruitful.

SS 7. Conclusions from the above Conceptions.

(a) Time is not something which subsists of itself, or which inheres in things as an objective determination, and therefore remains, when abstraction is made of the subjective conditions of the intuition of things. For in the former case, it would be something real, yet without presenting to any power of perception any real object. In the latter case, as an order or determination inherent in things themselves, it could not be antecedent to things, as their condition, nor discerned or intuited by means of synthetical propositions a priori. But all this is quite possible when we regard time as merely the subjective condition under which all our intuitions take place. For in that case, this form of the inward intuition can be represented prior to the objects, and consequently a priori.

(b) Time is nothing else than the form of the internal sense, that is, of the intuitions of self and of our internal state. For time cannot be any determination of outward phenomena. It has to do neither with shape nor position; on the contrary, it determines the relation of representations in our internal state. And precisely because this internal intuition presents to us no shape or form, we endeavour to supply this want by analogies, and represent the course of time by a line progressing to infinity, the content of which constitutes a series which is only of one dimension; and we conclude from the properties of this line as to all the properties of time, with this single exception, that the parts of the line are coexistent, whilst those of time are successive. From this it is clear also that the representation of time is itself an intuition, because all its relations can be expressed in an external intuition.

(c) Time is the formal condition a priori of all phenomena whatsoever. Space, as the pure form of external intuition, is limited as a condition a priori to external phenomena alone. On the other hand, because all representations, whether they have or have not external things for their objects, still in themselves, as determinations of the mind, belong to our internal state; and because this internal state is subject to the formal condition of the internal intuition, that is, to time — time is a condition a priori of all phenomena whatsoever — the immediate condition of all internal, and thereby the mediate condition of all external phenomena. If I can say a priori, “All outward phenomena are in space, and determined a priori according to the relations of space,” I can also, from the principle of the internal sense, affirm universally, “All phenomena in general, that is, all objects of the senses, are in time and stand necessarily in relations of time.”

If we abstract our internal intuition of ourselves and all external intuitions, possible only by virtue of this internal intuition and presented to us by our faculty of representation, and consequently take objects as

they are in themselves, then time is nothing. It is only of objective validity in regard to phenomena, because these are things which we regard as objects of our senses. It no longer objective we, make abstraction of the sensuousness of our intuition, in other words, of that mode of representation which is peculiar to us, and speak of things in general. Time is therefore merely a subjective condition of our (human) intuition (which is always sensuous, that is, so far as we are affected by objects), and in itself, independently of the mind or subject, is nothing. Nevertheless, in respect of all phenomena, consequently of all things which come within the sphere of our experience, it is necessarily objective. We cannot say, "All things are in time," because in this conception of things in general, we abstract and make no mention of any sort of intuition of things. But this is the proper condition under which time belongs to our representation of objects. If we add the condition to the conception, and say, "All things, as phenomena, that is, objects of sensuous intuition, are in time," then the proposition has its sound objective validity and universality a priori.

What we have now set forth teaches, therefore, the empirical reality of time; that is, its objective validity in reference to all objects which can ever be presented to our senses. And as our intuition is always sensuous, no object ever can be presented to us in experience, which does not come under the conditions of time. On the other hand, we deny to time all claim to absolute reality; that is, we deny that it, without having regard to the form of our sensuous intuition, absolutely inheres in things as a condition or property. Such properties as belong to objects as things in themselves never can be presented to us through the medium of the senses. Herein consists, therefore, the transcendental ideality of time, according to which, if we abstract the subjective conditions of sensuous intuition, it is nothing, and cannot be reckoned as subsisting or inhering in objects as things in themselves, independently of its relation to our intuition. This ideality, like that of space, is not to be proved or illustrated by fallacious analogies with sensations, for this reason — that in such arguments or illustrations, we make the presupposition that the phenomenon, in which such and such predicates inhere, has objective reality, while in this case we can only find such an objective reality as is itself empirical, that is, regards the object as a mere phenomenon. In reference to this subject, see the remark in Section I (SS 4)

SS 8. Elucidation.

Against this theory, which grants empirical reality to time, but denies to it absolute and transcendental reality, I have heard from intelligent men an objection so unanimously urged that I conclude that it must naturally present itself to every reader to whom these considerations are novel. It runs thus: "Changes are real" (this the continual change in our own representations demonstrates, even though the existence of all external phenomena, together with their changes, is denied). Now, changes are only possible in time, and therefore time must be something real. But there is no difficulty in answering this. I grant the whole argument. Time, no doubt, is something real, that is, it is the real form of our internal intuition. It therefore has subjective reality, in reference to our internal experience, that is, I have really the representation of time and of my determinations therein. Time, therefore, is not to be regarded as an object, but as the mode of representation of myself as an object. But if I could intuite myself, or be intuited by another being, without this condition of sensibility, then those very determinations which we now represent to ourselves as changes, would present to us a knowledge in which the representation of time, and consequently of change, would not appear. The empirical reality of time, therefore, remains, as the condition of all our experience. But absolute reality, according to what has been said above, cannot be granted it. Time is nothing but the form of our internal intuition.* If we take away from it the special condition of our sensibility, the conception of time also vanishes; and it inheres not in the objects themselves, but solely in the subject (or mind) which intuites them.

[Footnote: I can indeed say "my representations follow one another, or are successive"; but this means only that we are conscious of them as

in a succession, that is, according to the form of the internal sense. Time, therefore, is not a thing in itself, nor is it any objective determination pertaining to, or inherent in things.]

But the reason why this objection is so unanimously brought against our doctrine of time, and that too by disputants who cannot start any intelligible arguments against the doctrine of the ideality of space, is this — they have no hope of demonstrating apodeictically the absolute reality of space, because the doctrine of idealism is against them, according to which the reality of external objects is not capable of any strict proof. On the other hand, the reality of the object of our internal sense (that is, myself and my internal state) is clear immediately through consciousness. The former — external objects in space — might be a mere delusion, but the latter — the object of my internal perception — is undeniably real. They do not, however, reflect that both, without question of their reality as representations, belong only to the genus phenomenon, which has always two aspects, the one, the object considered as a thing in itself, without regard to the mode of intuiting it, and the nature of which remains for this very reason problematical, the other, the form of our intuition of the object, which must be sought not in the object as a thing in itself, but in the subject to which it appears — which form of intuition nevertheless belongs really and necessarily to the phenomenal object.

Time and space are, therefore, two sources of knowledge, from which, a priori, various synthetical cognitions can be drawn. Of this we find a striking example in the cognitions of space and its relations, which form the foundation of pure mathematics. They are the two pure forms of all intuitions, and thereby make synthetical propositions a priori possible. But these sources of knowledge being merely conditions of our sensibility, do therefore, and as such, strictly determine their own range and purpose, in that they do not and cannot present objects as things in themselves, but are applicable to them solely in so far as they are considered as sensuous phenomena. The sphere of phenomena is the only sphere of their validity, and if we venture out of this, no further objective use can be made of them. For the rest, this formal reality of time and space leaves the validity of our empirical knowledge unshaken; for our certainty in that respect is equally firm, whether these forms necessarily inhere in the things themselves, or only in our intuitions of them. On the other hand, those who maintain the absolute reality of time and space, whether as essentially subsisting, or only inhering, as modifications, in things, must find themselves at utter variance with the principles of experience itself. For, if they decide for the first view, and make space and time into substances, this being the side taken by mathematical natural philosophers, they must admit two self-subsisting nonentities, infinite and eternal, which exist (yet without there being anything real) for the purpose of containing in themselves everything that is real. If they adopt the second view of inherence, which is preferred by some metaphysical natural philosophers, and regard space and time as relations (contiguity in space or succession in time), abstracted from experience, though represented confusedly in this state of separation, they find themselves in that case necessitated to deny the validity of mathematical doctrines a priori in reference to real things (for example, in space) — at all events their apodeictic certainty. For such certainty cannot be found in an a posteriori proposition; and the conceptions a priori of space and time are, according to this opinion, mere creations of the imagination, having their source really in experience, inasmuch as, out of relations abstracted from experience, imagination has made up something which contains, indeed, general statements of these relations, yet of which no application can be made without the restrictions attached thereto by nature. The former of these parties gains this advantage, that they keep the sphere of phenomena free for mathematical science. On the other hand, these very conditions (space and time) embarrass them greatly, when the understanding endeavours to pass the limits of that sphere. The latter has, indeed, this advantage, that the representations of space and time do not come in their way when they wish to judge of objects, not as phenomena, but merely in their relation to the understanding. Devoid, however, of a true and objectively valid a priori intuition, they can neither

furnish any basis for the possibility of mathematical cognitions a priori, nor bring the propositions of experience into necessary accordance with those of mathematics. In our theory of the true nature of these two original forms of the sensibility, both difficulties are surmounted.

In conclusion, that transcendental aesthetic cannot contain any more than these two elements — space and time, is sufficiently obvious from the fact that all other conceptions appertaining to sensibility, even that of motion, which unites in itself both elements, presuppose something empirical. Motion, for example, presupposes the perception of something movable. But space considered in itself contains nothing movable, consequently motion must be something which is found in space only through experience — in other words, an empirical datum. In like manner, transcendental aesthetic cannot number the conception of change among its data a priori; for time itself does not change, but only something which is in time. To acquire the conception of change, therefore, the perception of some existing object and of the succession of its determinations, in one word, experience, is necessary.

SS 9. General Remarks on Transcendental Aesthetic.

I. In order to prevent any misunderstanding, it will be requisite, in the first place, to recapitulate, as clearly as possible, what our opinion is with respect to the fundamental nature of our sensuous cognition in general. We have intended, then, to say that all our intuition is nothing but the representation of phenomena; that the things which we intuite, are not in themselves the same as our representations of them in intuition, nor are their relations in themselves so constituted as they appear to us; and that if we take away the subject, or even only the subjective constitution of our senses in general, then not only the nature and relations of objects in space and time, but even space and time themselves disappear; and that these, as phenomena, cannot exist in themselves, but only in us. What may be the nature of objects considered as things in themselves and without reference to the receptivity of our sensibility is quite unknown to us. We know nothing more than our mode of perceiving them, which is peculiar to us, and which, though not of necessity pertaining to every animated being, is so to the whole human race. With this alone we have to do. Space and time are the pure forms thereof; sensation the matter. The former alone can we cognize a priori, that is, antecedent to all actual perception; and for this reason such cognition is called pure intuition. The latter is that in our cognition which is called cognition a posteriori, that is, empirical intuition. The former appertain absolutely and necessarily to our sensibility, of whatsoever kind our sensations may be; the latter may be of very diversified character. Supposing that we should carry our empirical intuition even to the very highest degree of clearness, we should not thereby advance one step nearer to a knowledge of the constitution of objects as things in themselves. For we could only, at best, arrive at a complete cognition of our own mode of intuition, that is of our sensibility, and this always under the conditions originally attaching to the subject, namely, the conditions of space and time; while the question: “What are objects considered as things in themselves?” remains unanswerable even after the most thorough examination of the phenomenal world.

To say, then, that all our sensibility is nothing but the confused representation of things containing exclusively that which belongs to them as things in themselves, and this under an accumulation of characteristic marks and partial representations which we cannot distinguish in consciousness, is a falsification of the conception of sensibility and phenomenization, which renders our whole doctrine thereof empty and useless. The difference between a confused and a clear representation is merely logical and has nothing to do with content. No doubt the conception of right, as employed by a sound understanding, contains all that the most subtle investigation could unfold from it, although, in the ordinary practical use of the word, we are not conscious of the manifold representations comprised in the conception. But we cannot for this reason assert that the ordinary conception is a sensuous one, containing a mere phenomenon, for right cannot appear as a phenomenon; but the conception of it lies in the understanding, and represents a property (the moral property) of actions, which belongs to them in themselves. On the other hand, the representation in intuition of a body contains nothing which could

belong to an object considered as a thing in itself, but merely the phenomenon or appearance of something, and the mode in which we are affected by that appearance; and this receptivity of our faculty of cognition is called sensibility, and remains toto caelo different from the cognition of an object in itself, even though we should examine the content of the phenomenon to the very bottom.

It must be admitted that the Leibnitz-Wolfian philosophy has assigned an entirely erroneous point of view to all investigations into the nature and origin of our cognitions, inasmuch as it regards the distinction between the sensuous and the intellectual as merely logical, whereas it is plainly transcendental, and concerns not merely the clearness or obscurity, but the content and origin of both. For the faculty of sensibility not only does not present us with an indistinct and confused cognition of objects as things in themselves, but, in fact, gives us no knowledge of these at all. On the contrary, so soon as we abstract in thought our own subjective nature, the object represented, with the properties ascribed to it by sensuous intuition, entirely disappears, because it was only this subjective nature that determined the form of the object as a phenomenon.

In phenomena, we commonly, indeed, distinguish that which essentially belongs to the intuition of them, and is valid for the sensuous faculty of every human being, from that which belongs to the same intuition accidentally, as valid not for the sensuous faculty in general, but for a particular state or organization of this or that sense. Accordingly, we are accustomed to say that the former is a cognition which represents the object itself, whilst the latter presents only a particular appearance or phenomenon thereof. This distinction, however, is only empirical. If we stop here (as is usual), and do not regard the empirical intuition as itself a mere phenomenon (as we ought to do), in which nothing that can appertain to a thing in itself is to be found, our transcendental distinction is lost, and we believe that we cognize objects as things in themselves, although in the whole range of the sensuous world, investigate the nature of its objects as profoundly as we may, we have to do with nothing but phenomena. Thus, we call the rainbow a mere appearance of phenomenon in a sunny shower, and the rain, the reality or thing in itself; and this is right enough, if we understand the latter conception in a merely physical sense, that is, as that which in universal experience, and under whatever conditions of sensuous perception, is known in intuition to be so and so determined, and not otherwise. But if we consider this empirical datum generally, and inquire, without reference to its accordance with all our senses, whether there can be discovered in it aught which represents an object as a thing in itself (the raindrops of course are not such, for they are, as phenomena, empirical objects), the question of the relation of the representation to the object is transcendental; and not only are the raindrops mere phenomena, but even their circular form, nay, the space itself through which they fall, is nothing in itself, but both are mere modifications or fundamental dispositions of our sensuous intuition, whilst the transcendental object remains for us utterly unknown.

The second important concern of our aesthetic is that it does not obtain favour merely as a plausible hypothesis, but possess as undoubted a character of certainty as can be demanded of any theory which is to serve for an organon. In order fully to convince the reader of this certainty, we shall select a case which will serve to make its validity apparent, and also to illustrate what has been said in SS 3.

Suppose, then, that space and time are in themselves objective, and conditions of the — possibility of objects as things in themselves. In the first place, it is evident that both present us, with very many apodeictic and synthetic propositions a priori, but especially space — and for this reason we shall prefer it for investigation at present. As the propositions of geometry are cognized synthetically a priori, and with apodeictic certainty, I inquire: Whence do you obtain propositions of this kind, and on what basis does the understanding rest, in order to arrive at such absolutely necessary and universally valid truths?

There is no other way than through intuitions or conceptions, as such; and these are given either a priori or a posteriori. The latter, namely, empirical conceptions, together with the empirical intuition on which they are founded, cannot afford any synthetical proposition, except such as is itself also empirical, that is, a proposition of experience. But an empirical proposition cannot possess the qualities of necessity and

absolute universality, which, nevertheless, are the characteristics of all geometrical propositions. As to the first and only means to arrive at such cognitions, namely, through mere conceptions or intuitions a priori, it is quite clear that from mere conceptions no synthetical cognitions, but only analytical ones, can be obtained. Take, for example, the proposition: "Two straight lines cannot enclose a space, and with these alone no figure is possible," and try to deduce it from the conception of a straight line and the number two; or take the proposition: "It is possible to construct a figure with three straight lines," and endeavour, in like manner, to deduce it from the mere conception of a straight line and the number three. All your endeavours are in vain, and you find yourself forced to have recourse to intuition, as, in fact, geometry always does. You therefore give yourself an object in intuition. But of what kind is this intuition? Is it a pure a priori, or is it an empirical intuition? If the latter, then neither an universally valid, much less an apodeictic proposition can arise from it, for experience never can give us any such proposition. You must, therefore, give yourself an object a priori in intuition, and upon that ground your synthetical proposition. Now if there did not exist within you a faculty of intuition a priori; if this subjective condition were not in respect to its form also the universal condition a priori under which alone the object of this external intuition is itself possible; if the object (that is, the triangle) were something in itself, without relation to you the subject; how could you affirm that that which lies necessarily in your subjective conditions in order to construct a triangle, must also necessarily belong to the triangle in itself? For to your conceptions of three lines, you could not add anything new (that is, the figure); which, therefore, must necessarily be found in the object, because the object is given before your cognition, and not by means of it. If, therefore, space (and time also) were not a mere form of your intuition, which contains conditions a priori, under which alone things can become external objects for you, and without which subjective conditions the objects are in themselves nothing, you could not construct any synthetical proposition whatsoever regarding external objects. It is therefore not merely possible or probable, but indubitably certain, that space and time, as the necessary conditions of all our external and internal experience, are merely subjective conditions of all our intuitions, in relation to which all objects are therefore mere phenomena, and not things in themselves, presented to us in this particular manner. And for this reason, in respect to the form of phenomena, much may be said a priori, whilst of the thing in itself, which may lie at the foundation of these phenomena, it is impossible to say anything.

II. In confirmation of this theory of the ideality of the external as well as internal sense, consequently of all objects of sense, as mere phenomena, we may especially remark that all in our cognition that belongs to intuition contains nothing more than mere relations. (The feelings of pain and pleasure, and the will, which are not cognitions, are excepted.) The relations, to wit, of place in an intuition (extension), change of place (motion), and laws according to which this change is determined (moving forces). That, however, which is present in this or that place, or any operation going on, or result taking place in the things themselves, with the exception of change of place, is not given to us by intuition. Now by means of mere relations, a thing cannot be known in itself; and it may therefore be fairly concluded, that, as through the external sense nothing but mere representations of relations are given us, the said external sense in its representation can contain only the relation of the object to the subject, but not the essential nature of the object as a thing in itself.

The same is the case with the internal intuition, not only because, in the internal intuition, the representation of the external senses constitutes the material with which the mind is occupied; but because time, in which we place, and which itself antecedes the consciousness of, these representations in experience, and which, as the formal condition of the mode according to which objects are placed in the mind, lies at the foundation of them, contains relations of the successive, the coexistent, and of that which always must be coexistent with succession, the permanent. Now that which, as representation, can antecede every exercise of thought (of an object), is intuition; and when it contains nothing but relations, it

is the form of the intuition, which, as it presents us with no representation, except in so far as something is placed in the mind, can be nothing else than the mode in which the mind is affected by its own activity, to wit — its presenting to itself representations, consequently the mode in which the mind is affected by itself; that is, it can be nothing but an internal sense in respect to its form. Everything that is represented through the medium of sense is so far phenomenal; consequently, we must either refuse altogether to admit an internal sense, or the subject, which is the object of that sense, could only be represented by it as phenomenon, and not as it would judge of itself, if its intuition were pure spontaneous activity, that is, were intellectual. The difficulty here lies wholly in the question: How can the subject have an internal intuition of itself? But this difficulty is common to every theory. The consciousness of self (apperception) is the simple representation of the "ego"; and if by means of that representation alone, all the manifold representations in the subject were spontaneously given, then our internal intuition would be intellectual. This consciousness in man requires an internal perception of the manifold representations which are previously given in the subject; and the manner in which these representations are given in the mind without spontaneity, must, on account of this difference (the want of spontaneity), be called sensibility. If the faculty of self-consciousness is to apprehend what lies in the mind, it must all act that and can in this way alone produce an intuition of self. But the form of this intuition, which lies in the original constitution of the mind, determines, in the representation of time, the manner in which the manifold representations are to combine themselves in the mind; since the subject intuites itself, not as it would represent itself immediately and spontaneously, but according to the manner in which the mind is internally affected, consequently, as it appears, and not as it is.

III. When we say that the intuition of external objects, and also the self-intuition of the subject, represent both, objects and subject, in space and time, as they affect our senses, that is, as they appear — this is by no means equivalent to asserting that these objects are mere illusory appearances. For when we speak of things as phenomena, the objects, nay, even the properties which we ascribe to them, are looked upon as really given; only that, in so far as this or that property depends upon the mode of intuition of the subject, in the relation of the given object to the subject, the object as phenomenon is to be distinguished from the object as a thing in itself. Thus I do not say that bodies seem or appear to be external to me, or that my soul seems merely to be given in my self-consciousness, although I maintain that the properties of space and time, in conformity to which I set both, as the condition of their existence, abide in my mode of intuition, and not in the objects in themselves. It would be my own fault, if out of that which I should reckon as phenomenon, I made mere illusory appearance.* But this will not happen, because of our principle of the ideality of all sensuous intuitions. On the contrary, if we ascribe objective reality to these forms of representation, it becomes impossible to avoid changing everything into mere appearance. For if we regard space and time as properties, which must be found in objects as things in themselves, as sine quibus non of the possibility of their existence, and reflect on the absurdities in which we then find ourselves involved, inasmuch as we are compelled to admit the existence of two infinite things, which are nevertheless not substances, nor anything really inhering in substances, nay, to admit that they are the necessary conditions of the existence of all things, and moreover, that they must continue to exist, although all existing things were annihilated — we cannot blame the good Berkeley for degrading bodies to mere illusory appearances. Nay, even our own existence, which would in this case depend upon the self-existent reality of such a mere nonentity as time, would necessarily be changed with it into mere appearance — an absurdity which no one has as yet been guilty of.

[Footnote: The predicates of the phenomenon can be affixed to the object itself in relation to our sensuous faculty; for example, the red colour or the perfume to the rose. But (illusory) appearance never can be attributed as a predicate to an object, for this very reason, that it attributes to this object in itself that which belongs to it only in relation to our sensuous faculty, or to the subject in general, e.g., the two handles which were formerly ascribed to Saturn. That which is never to be found in the object itself, but always in the relation of the object to the subject, and

which moreover is inseparable from our representation of the object, we denominate phenomenon. Thus the predicates of space and time are rightly attributed to objects of the senses as such, and in this there is no illusion. On the contrary, if I ascribe redness of the rose as a thing in itself, or to Saturn his handles, or extension to all external objects, considered as things in themselves, without regarding the determinate relation of these objects to the subject, and without limiting my judgement to that relation — then, and then only, arises illusion.]

IV. In natural theology, where we think of an object — God — which never can be an object of intuition to us, and even to himself can never be an object of sensuous intuition, we carefully avoid attributing to his intuition the conditions of space and time — and intuition all his cognition must be, and not thought, which always includes limitation. But with what right can we do this if we make them forms of objects as things in themselves, and such, moreover, as would continue to exist as a priori conditions of the existence of things, even though the things themselves were annihilated? For as conditions of all existence in general, space and time must be conditions of the existence of the Supreme Being also. But if we do not thus make them objective forms of all things, there is no other way left than to make them subjective forms of our mode of intuition — external and internal; which is called sensuous, because it is not primitive, that is, is not such as gives in itself the existence of the object of the intuition (a mode of intuition which, so far as we can judge, can belong only to the Creator), but is dependent on the existence of the object, is possible, therefore, only on condition that the representative faculty of the subject is affected by the object.

It is, moreover, not necessary that we should limit the mode of intuition in space and time to the sensuous faculty of man. It may well be that all finite thinking beings must necessarily in this respect agree with man (though as to this we cannot decide), but sensibility does not on account of this universality cease to be sensibility, for this very reason, that it is a deduced (intuitus derivativus), and not an original (intuitus originarius), consequently not an intellectual intuition, and this intuition, as such, for reasons above mentioned, seems to belong solely to the Supreme Being, but never to a being dependent, quoad its existence, as well as its intuition (which its existence determines and limits relatively to given objects). This latter remark, however, must be taken only as an illustration, and not as any proof of the truth of our aesthetical theory.

SS 10. Conclusion of the Transcendental Aesthetic.

We have now completely before us one part of the solution of the grand general problem of transcendental philosophy, namely, the question: “How are synthetical propositions a priori possible?” That is to say, we have shown that we are in possession of pure a priori intuitions, namely, space and time, in which we find, when in a judgement a priori we pass out beyond the given conception, something which is not discoverable in that conception, but is certainly found a priori in the intuition which corresponds to the conception, and can be united synthetically with it. But the judgements which these pure intuitions enable us to make, never reach farther than to objects of the senses, and are valid only for objects of possible experience.

SECOND PART. TRANSCENDENTAL LOGIC.

INTRODUCTION. Idea of a Transcendental Logic.

I. Of Logic in General.

Our knowledge springs from two main sources in the mind, first of which is the faculty or power of receiving representations (receptivity for impressions); the second is the power of cognizing by means of these representations (spontaneity in the production of conceptions). Through the first an object is given to us; through the second, it is, in relation to the representation (which is a mere determination of the mind), thought. Intuition and conceptions constitute, therefore, the elements of all our knowledge, so that neither conceptions without an intuition in some way corresponding to them, nor intuition without conceptions, can afford us a cognition. Both are either pure or empirical. They are empirical, when sensation (which presupposes the actual presence of the object) is contained in them; and pure, when no sensation is mixed with the representation. Sensations we may call the matter of sensuous cognition. Pure intuition consequently contains merely the form under which something is intuited, and pure conception only the form of the thought of an object. Only pure intuitions and pure conceptions are possible a priori; the empirical only a posteriori.

We apply the term sensibility to the receptivity of the mind for impressions, in so far as it is in some way affected; and, on the other hand, we call the faculty of spontaneously producing representations, or the spontaneity of cognition, understanding. Our nature is so constituted that intuition with us never can be other than sensuous, that is, it contains only the mode in which we are affected by objects. On the other hand, the faculty of thinking the object of sensuous intuition is the understanding. Neither of these faculties has a preference over the other. Without the sensuous faculty no object would be given to us, and without the understanding no object would be thought. Thoughts without content are void; intuitions without conceptions, blind. Hence it is as necessary for the mind to make its conceptions sensuous (that is, to join to them the object in intuition), as to make its intuitions intelligible (that is, to bring them under conceptions). Neither of these faculties can exchange its proper function. Understanding cannot intuite, and the sensuous faculty cannot think. In no other way than from the united operation of both, can knowledge arise. But no one ought, on this account, to overlook the difference of the elements contributed by each; we have rather great reason carefully to separate and distinguish them. We therefore distinguish the science of the laws of sensibility, that is, aesthetic, from the science of the laws of the understanding, that is, logic.

Now, logic in its turn may be considered as twofold — namely, as logic of the general, or of the particular use of the understanding. The first contains the absolutely necessary laws of thought, without which no use whatsoever of the understanding is possible, and gives laws therefore to the understanding, without regard to the difference of objects on which it may be employed. The logic of the particular use of the understanding contains the laws of correct thinking upon a particular class of objects. The former may be called elemental logic — the latter, the organon of this or that particular science. The latter is for the most part employed in the schools, as a propaedeutic to the sciences, although, indeed, according to the course of human reason, it is the last thing we arrive at, when the science has been already matured, and needs only the finishing touches towards its correction and completion; for our knowledge of the objects of our attempted science must be tolerably extensive and complete before we can indicate the laws by which a science of these objects can be established.

General logic is again either pure or applied. In the former, we abstract all the empirical conditions under which the understanding is exercised; for example, the influence of the senses, the play of the fantasy or imagination, the laws of the memory, the force of habit, of inclination, etc., consequently also, the sources of prejudice — in a word, we abstract all causes from which particular cognitions arise, because these causes regard the understanding under certain circumstances of its application, and, to the

knowledge of them experience is required. Pure general logic has to do, therefore, merely with pure a priori principles, and is a canon of understanding and reason, but only in respect of the formal part of their use, be the content what it may, empirical or transcendental. General logic is called applied, when it is directed to the laws of the use of the understanding, under the subjective empirical conditions which psychology teaches us. It has therefore empirical principles, although, at the same time, it is in so far general, that it applies to the exercise of the understanding, without regard to the difference of objects. On this account, moreover, it is neither a canon of the understanding in general, nor an organon of a particular science, but merely a cathartic of the human understanding.

In general logic, therefore, that part which constitutes pure logic must be carefully distinguished from that which constitutes applied (though still general) logic. The former alone is properly science, although short and dry, as the methodical exposition of an elemental doctrine of the understanding ought to be. In this, therefore, logicians must always bear in mind two rules:

1. As general logic, it makes abstraction of all content of the cognition of the understanding, and of the difference of objects, and has to do with nothing but the mere form of thought.

2. As pure logic, it has no empirical principles, and consequently draws nothing (contrary to the common persuasion) from psychology, which therefore has no influence on the canon of the understanding. It is a demonstrated doctrine, and everything in it must be certain completely a priori.

What I called applied logic (contrary to the common acceptation of this term, according to which it should contain certain exercises for the scholar, for which pure logic gives the rules), is a representation of the understanding, and of the rules of its necessary employment in concreto, that is to say, under the accidental conditions of the subject, which may either hinder or promote this employment, and which are all given only empirically. Thus applied logic treats of attention, its impediments and consequences, of the origin of error, of the state of doubt, hesitation, conviction, etc., and to it is related pure general logic in the same way that pure morality, which contains only the necessary moral laws of a free will, is related to practical ethics, which considers these laws under all the impediments of feelings, inclinations, and passions to which men are more or less subjected, and which never can furnish us with a true and demonstrated science, because it, as well as applied logic, requires empirical and psychological principles.

II. Of Transcendental Logic.

General logic, as we have seen, makes abstraction of all content of cognition, that is, of all relation of cognition to its object, and regards only the logical form in the relation of cognitions to each other, that is, the form of thought in general. But as we have both pure and empirical intuitions (as transcendental aesthetic proves), in like manner a distinction might be drawn between pure and empirical thought (of objects). In this case, there would exist a kind of logic, in which we should not make abstraction of all content of cognition; for or logic which should comprise merely the laws of pure thought (of an object), would of course exclude all those cognitions which were of empirical content. This kind of logic would also examine the origin of our cognitions of objects, so far as that origin cannot be ascribed to the objects themselves; while, on the contrary, general logic has nothing to do with the origin of our cognitions, but contemplates our representations, be they given primitively a priori in ourselves, or be they only of empirical origin, solely according to the laws which the understanding observes in employing them in the process of thought, in relation to each other. Consequently, general logic treats of the form of the understanding only, which can be applied to representations, from whatever source they may have arisen.

And here I shall make a remark, which the reader must bear well in mind in the course of the following considerations, to wit, that not every cognition a priori, but only those through which we cognize that and how certain representations (intuitions or conceptions) are applied or are possible only a priori; that is to say, the a priori possibility of cognition and the a priori use of it are transcendental. Therefore neither is space, nor any a priori geometrical determination of space, a transcendental Representation, but only the

knowledge that such a representation is not of empirical origin, and the possibility of its relating to objects of experience, although itself a priori, can be called transcendental. So also, the application of space to objects in general would be transcendental; but if it be limited to objects of sense it is empirical. Thus, the distinction of the transcendental and empirical belongs only to the critique of cognitions, and does not concern the relation of these to their object.

Accordingly, in the expectation that there may perhaps be conceptions which relate a priori to objects, not as pure or sensuous intuitions, but merely as acts of pure thought (which are therefore conceptions, but neither of empirical nor aesthetical origin) — in this expectation, I say, we form to ourselves, by anticipation, the idea of a science of pure understanding and rational cognition, by means of which we may cogitate objects entirely a priori. A science of this kind, which should determine the origin, the extent, and the objective validity of such cognitions, must be called transcendental logic, because it has not, like general logic, to do with the laws of understanding and reason in relation to empirical as well as pure rational cognitions without distinction, but concerns itself with these only in an a priori relation to objects.

III. Of the Division of General Logic into Analytic and Dialectic.

The old question with which people sought to push logicians into a corner, so that they must either have recourse to pitiful sophisms or confess their ignorance, and consequently the vanity of their whole art, is this: “What is truth?” The definition of the word truth, to wit, “the accordance of the cognition with its object,” is presupposed in the question; but we desire to be told, in the answer to it, what is the universal and secure criterion of the truth of every cognition.

To know what questions we may reasonably propose is in itself a strong evidence of sagacity and intelligence. For if a question be in itself absurd and unsusceptible of a rational answer, it is attended with the danger — not to mention the shame that falls upon the person who proposes it — of seducing the unguarded listener into making absurd answers, and we are presented with the ridiculous spectacle of one (as the ancients said) “milking the he-goat, and the other holding a sieve.”

If truth consists in the accordance of a cognition with its object, this object must be, ipso facto, distinguished from all others; for a cognition is false if it does not accord with the object to which it relates, although it contains something which may be affirmed of other objects. Now an universal criterion of truth would be that which is valid for all cognitions, without distinction of their objects. But it is evident that since, in the case of such a criterion, we make abstraction of all the content of a cognition (that is, of all relation to its object), and truth relates precisely to this content, it must be utterly absurd to ask for a mark of the truth of this content of cognition; and that, accordingly, a sufficient, and at the same time universal, test of truth cannot possibly be found. As we have already termed the content of a cognition its matter, we shall say: “Of the truth of our cognitions in respect of their matter, no universal test can be demanded, because such a demand is self-contradictory.”

On the other hand, with regard to our cognition in respect of its mere form (excluding all content), it is equally manifest that logic, in so far as it exhibits the universal and necessary laws of the understanding, must in these very laws present us with criteria of truth. Whatever contradicts these rules is false, because thereby the understanding is made to contradict its own universal laws of thought; that is, to contradict itself. These criteria, however, apply solely to the form of truth, that is, of thought in general, and in so far they are perfectly accurate, yet not sufficient. For although a cognition may be perfectly accurate as to logical form, that is, not self-contradictory, it is notwithstanding quite possible that it may not stand in agreement with its object. Consequently, the merely logical criterion of truth, namely, the accordance of a cognition with the universal and formal laws of understanding and reason, is nothing more than the conditio sine qua non, or negative condition of all truth. Farther than this logic cannot go, and the error which depends not on the form, but on the content of the cognition, it has no test to discover.

General logic, then, resolves the whole formal business of understanding and reason into its elements,

and exhibits them as principles of all logical judging of our cognitions. This part of logic may, therefore, be called analytic, and is at least the negative test of truth, because all cognitions must first of an be estimated and tried according to these laws before we proceed to investigate them in respect of their content, in order to discover whether they contain positive truth in regard to their object. Because, however, the mere form of a cognition, accurately as it may accord with logical laws, is insufficient to supply us with material (objective) truth, no one, by means of logic alone, can venture to predicate anything of or decide concerning objects, unless he has obtained, independently of logic, well-grounded information about them, in order afterwards to examine, according to logical laws, into the use and connection, in a cohering whole, of that information, or, what is still better, merely to test it by them. Notwithstanding, there lies so seductive a charm in the possession of a specious art like this — an art which gives to all our cognitions the form of the understanding, although with respect to the content thereof we may be sadly deficient — that general logic, which is merely a canon of judgement, has been employed as an organon for the actual production, or rather for the semblance of production, of objective assertions, and has thus been grossly misapplied. Now general logic, in its assumed character of organon, is called dialectic.

Different as are the significations in which the ancients used this term for a science or an art, we may safely infer, from their actual employment of it, that with them it was nothing else than a logic of illusion — a sophistical art for giving ignorance, nay, even intentional sophistries, the colouring of truth, in which the thoroughness of procedure which logic requires was imitated, and their topic employed to cloak the empty pretensions. Now it may be taken as a safe and useful warning, that general logic, considered as an organon, must always be a logic of illusion, that is, be dialectical, for, as it teaches us nothing whatever respecting the content of our cognitions, but merely the formal conditions of their accordance with the understanding, which do not relate to and are quite indifferent in respect of objects, any attempt to employ it as an instrument (organon) in order to extend and enlarge the range of our knowledge must end in mere prating; any one being able to maintain or oppose, with some appearance of truth, any single assertion whatever.

Such instruction is quite unbecoming the dignity of philosophy. For these reasons we have chosen to denominate this part of logic dialectic, in the sense of a critique of dialectical illusion, and we wish the term to be so understood in this place.

IV. Of the Division of Transcendental Logic into Transcendental Analytic and Dialectic.

In transcendental logic we isolate the understanding (as in transcendental aesthetic the sensibility) and select from our cognition merely that part of thought which has its origin in the understanding alone. The exercise of this pure cognition, however, depends upon this as its condition, that objects to which it may be applied be given to us in intuition, for without intuition the whole of our cognition is without objects, and is therefore quite void. That part of transcendental logic, then, which treats of the elements of pure cognition of the understanding, and of the principles without which no object at all can be thought, is transcendental analytic, and at the same time a logic of truth. For no cognition can contradict it, without losing at the same time all content, that is, losing all reference to an object, and therefore all truth. But because we are very easily seduced into employing these pure cognitions and principles of the understanding by themselves, and that even beyond the boundaries of experience, which yet is the only source whence we can obtain matter (objects) on which those pure conceptions may be employed — understanding runs the risk of making, by means of empty sophisms, a material and objective use of the mere formal principles of the pure understanding, and of passing judgements on objects without distinction — objects which are not given to us, nay, perhaps cannot be given to us in any way. Now, as it ought properly to be only a canon for judging of the empirical use of the understanding, this kind of logic is misused when we seek to employ it as an organon of the universal and unlimited exercise of the

understanding, and attempt with the pure understanding alone to judge synthetically, affirm, and determine respecting objects in general. In this case the exercise of the pure understanding becomes dialectical. The second part of our transcendental logic must therefore be a critique of dialectical illusion, and this critique we shall term transcendental dialectic — not meaning it as an art of producing dogmatically such illusion (an art which is unfortunately too current among the practitioners of metaphysical juggling), but as a critique of understanding and reason in regard to their hyperphysical use. This critique will expose the groundless nature of the pretensions of these two faculties, and invalidate their claims to the discovery and enlargement of our cognitions merely by means of transcendental principles, and show that the proper employment of these faculties is to test the judgements made by the pure understanding, and to guard it from sophistical delusion.

TRANSCENDENTAL LOGIC. FIRST DIVISION. TRANSCENDENTAL ANALYTIC. SS I.

Transcendental analytic is the dissection of the whole of our a priori knowledge into the elements of the pure cognition of the understanding. In order to effect our purpose, it is necessary: (1) That the conceptions be pure and not empirical; (2) That they belong not to intuition and sensibility, but to thought and understanding; (3) That they be elementary conceptions, and as such, quite different from deduced or compound conceptions; (4) That our table of these elementary conceptions be complete, and fill up the whole sphere of the pure understanding. Now this completeness of a science cannot be accepted with confidence on the guarantee of a mere estimate of its existence in an aggregate formed only by means of repeated experiments and attempts. The completeness which we require is possible only by means of an idea of the totality of the a priori cognition of the understanding, and through the thereby determined division of the conceptions which form the said whole; consequently, only by means of their connection in a system. Pure understanding distinguishes itself not merely from everything empirical, but also completely from all sensibility. It is a unity self-subsistent, self-sufficient, and not to be enlarged by any additions from without. Hence the sum of its cognition constitutes a system to be determined by and comprised under an idea; and the completeness and articulation of this system can at the same time serve as a test of the correctness and genuineness of all the parts of cognition that belong to it. The whole of this part of transcendental logic consists of two books, of which the one contains the conceptions, and the other the principles of pure understanding.

BOOK I.

SS 2. Analytic of Conceptions.

By the term Analytic of Conceptions, I do not understand the analysis of these, or the usual process in philosophical investigations of dissecting the conceptions which present themselves, according to their content, and so making them clear; but I mean the hitherto little attempted dissection of the faculty of understanding itself, in order to investigate the possibility of conceptions a priori, by looking for them in the understanding alone, as their birthplace, and analysing the pure use of this faculty. For this is the proper duty of a transcendental philosophy; what remains is the logical treatment of the conceptions in philosophy in general. We shall therefore follow up the pure conceptions even to their germs and beginnings in the human understanding, in which they lie, until they are developed on occasions presented by experience, and, freed by the same understanding from the empirical conditions attaching to them, are set forth in their unalloyed purity.

CHAPTER I. Of the Transcendental Clue to the Discovery of all Pure

Conceptions of the Understanding.

SS 3. Introductory.

When we call into play a faculty of cognition, different conceptions manifest themselves according to the different circumstances, and make known this faculty, and assemble themselves into a more or less extensive collection, according to the time or penetration that has been applied to the consideration of them. Where this process, conducted as it is mechanically, so to speak, will end, cannot be determined with certainty. Besides, the conceptions which we discover in this haphazard manner present themselves by no means in order and systematic unity, but are at last coupled together only according to resemblances to each other, and arranged in series, according to the quantity of their content, from the simpler to the more complex — series which are anything but systematic, though not altogether without a certain kind of method in their construction.

Transcendental philosophy has the advantage, and moreover the duty, of searching for its conceptions according to a principle; because these conceptions spring pure and unmixed out of the understanding as an absolute unity, and therefore must be connected with each other according to one conception or idea. A connection of this kind, however, furnishes us with a ready prepared rule, by which its proper place may be assigned to every pure conception of the understanding, and the completeness of the system of all be determined a priori — both which would otherwise have been dependent on mere choice or chance.

SS 4. SECTION 1. Of defined above Use of understanding in General.

The understanding was defined above only negatively, as a non-sensuous faculty of cognition. Now, independently of sensibility, we cannot possibly have any intuition; consequently, the understanding is no faculty of intuition. But besides intuition there is no other mode of cognition, except through conceptions; consequently, the cognition of every, at least of every human, understanding is a cognition through conceptions — not intuitive, but discursive. All intuitions, as sensuous, depend on affections; conceptions, therefore, upon functions. By the word function I understand the unity of the act of arranging diverse representations under one common representation. Conceptions, then, are based on the spontaneity of thought, as sensuous intuitions are on the receptivity of impressions. Now, the understanding cannot make any other use of these conceptions than to judge by means of them. As no representation, except an intuition, relates immediately to its object, a conception never relates immediately to an object, but only to some other representation thereof, be that an intuition or itself a conception. A judgement, therefore, is the mediate cognition of an object, consequently the representation of a representation of it. In every judgement there is a conception which applies to, and is valid for many other conceptions, and which among these comprehends also a given representation, this last being immediately connected with an object. For example, in the judgement— “All bodies are divisible,” our conception of divisible applies to various other conceptions; among these, however, it is here particularly applied to the conception of body, and this conception of body relates to certain phenomena which occur to us. These objects, therefore, are mediately represented by the conception of divisibility. All judgements, accordingly, are functions of unity in our representations, inasmuch as, instead of an immediate, a higher representation, which comprises this and various others, is used for our cognition of the object, and thereby many possible cognitions are collected into one. But we can reduce all acts of the understanding to judgements, so that understanding may be represented as the faculty of judging. For it is, according to what has been said above, a faculty of thought. Now thought is cognition by means of conceptions. But conceptions, as predicates of possible judgements, relate to some representation of a yet undetermined object. Thus the conception of body indicates something — for example, metal — which can be cognized by means of that conception. It is therefore a conception, for the reason alone that other representations are contained under it, by means of which it can relate to objects. It is therefore the predicate to a possible judgement; for example: “Every

metal is a body." All the functions of the understanding therefore can be discovered, when we can completely exhibit the functions of unity in judgements. And that this may be effected very easily, the following section will show.

SS 5. SECTION II. Of the Logical Function of the Understanding in Judgements.

If we abstract all the content of a judgement, and consider only the intellectual form thereof, we find that the function of thought in a judgement can be brought under four heads, of which each contains three momenta. These may be conveniently represented in the following table:

1
Quantity of judgements
Universal
Particular
Singular

2	3
Quality	Relation
Affirmative	Categorical
Negative	Hypothetical
Infinite	Disjunctive

4
Modality
Problematical
Assertorical
Apodeictical

As this division appears to differ in some, though not essential points, from the usual technique of logicians, the following observations, for the prevention of otherwise possible misunderstanding, will not be without their use.

1. Logicians say, with justice, that in the use of judgements in syllogisms, singular judgements may be treated like universal ones. For, precisely because a singular judgement has no extent at all, its predicate cannot refer to a part of that which is contained in the conception of the subject and be excluded from the rest. The predicate is valid for the whole conception just as if it were a general conception, and had extent, to the whole of which the predicate applied. On the other hand, let us compare a singular with a general judgement, merely as a cognition, in regard to quantity. The singular judgement relates to the general one, as unity to infinity, and is therefore in itself essentially different. Thus, if we estimate a singular judgement (judicium singulare) not merely according to its intrinsic validity as a judgement, but also as a cognition generally, according to its quantity in comparison with that of other cognitions, it is then entirely different from a general judgement (judicium commune), and in a complete table of the momenta of thought deserves a separate place — though, indeed, this would not be necessary in a logic limited merely to the consideration of the use of judgements in reference to each other.

2. In like manner, in transcendental logic, infinite must be distinguished from affirmative judgements, although in general logic they are rightly enough classed under affirmative. General logic abstracts all content of the predicate (though it be negative), and only considers whether the said predicate be affirmed or denied of the subject. But transcendental logic considers also the worth or content of this logical affirmation — an affirmation by means of a merely negative predicate, and inquires how much the sum total of our cognition gains by this affirmation. For example, if I say of the soul, "It is not mortal" — by this negative judgement I should at least ward off error. Now, by the proposition, "The soul is not mortal," I have, in respect of the logical form, really affirmed, inasmuch as I thereby place the soul in the unlimited

sphere of immortal beings. Now, because of the whole sphere of possible existences, the mortal occupies one part, and the immortal the other, neither more nor less is affirmed by the proposition than that the soul is one among the infinite multitude of things which remain over, when I take away the whole mortal part. But by this proceeding we accomplish only this much, that the infinite sphere of all possible existences is in so far limited that the mortal is excluded from it, and the soul is placed in the remaining part of the extent of this sphere. But this part remains, notwithstanding this exception, infinite, and more and more parts may be taken away from the whole sphere, without in the slightest degree thereby augmenting or affirmatively determining our conception of the soul. These judgements, therefore, infinite in respect of their logical extent, are, in respect of the content of their cognition, merely limitative; and are consequently entitled to a place in our transcendental table of all the momenta of thought in judgements, because the function of the understanding exercised by them may perhaps be of importance in the field of its pure a priori cognition.

3. All relations of thought in judgements are those (a) of the predicate to the subject; (b) of the principle to its consequence; (c) of the divided cognition and all the members of the division to each other. In the first of these three classes, we consider only two conceptions; in the second, two judgements; in the third, several judgements in relation to each other. The hypothetical proposition, “If perfect justice exists, the obstinately wicked are punished,” contains properly the relation to each other of two propositions, namely, “Perfect justice exists,” and “The obstinately wicked are punished.” Whether these propositions are in themselves true is a question not here decided. Nothing is cogitated by means of this judgement except a certain consequence. Finally, the disjunctive judgement contains a relation of two or more propositions to each other — a relation not of consequence, but of logical opposition, in so far as the sphere of the one proposition excludes that of the other. But it contains at the same time a relation of community, in so far as all the propositions taken together fill up the sphere of the cognition. The disjunctive judgement contains, therefore, the relation of the parts of the whole sphere of a cognition, since the sphere of each part is a complemental part of the sphere of the other, each contributing to form the sum total of the divided cognition. Take, for example, the proposition, “The world exists either through blind chance, or through internal necessity, or through an external cause.” Each of these propositions embraces a part of the sphere of our possible cognition as to the existence of a world; all of them taken together, the whole sphere. To take the cognition out of one of these spheres, is equivalent to placing it in one of the others; and, on the other hand, to place it in one sphere is equivalent to taking it out of the rest. There is, therefore, in a disjunctive judgement a certain community of cognitions, which consists in this, that they mutually exclude each other, yet thereby determine, as a whole, the true cognition, inasmuch as, taken together, they make up the complete content of a particular given cognition. And this is all that I find necessary, for the sake of what follows, to remark in this place.

4. The modality of judgements is a quite peculiar function, with this distinguishing characteristic, that it contributes nothing to the content of a judgement (for besides quantity, quality, and relation, there is nothing more that constitutes the content of a judgement), but concerns itself only with the value of the copula in relation to thought in general. Problematical judgements are those in which the affirmation or negation is accepted as merely possible (ad libitum). In the assertorical, we regard the proposition as real (true); in the apodeictical, we look on it as necessary.* Thus the two judgements (antecedens et consequens), the relation of which constitutes a hypothetical judgement, likewise those (the members of the division) in whose reciprocity the disjunctive consists, are only problematical. In the example above given the proposition, “There exists perfect justice,” is not stated assertorically, but as an ad libitum judgement, which someone may choose to adopt, and the consequence alone is assertorical. Hence such judgements may be obviously false, and yet, taken problematically, be conditions of our cognition of the truth. Thus the proposition, “The world exists only by blind chance,” is in the disjunctive judgement of problematical import only: that is to say, one may accept it for the moment, and it helps us (like the

indication of the wrong road among all the roads that one can take) to find out the true proposition. The problematical proposition is, therefore, that which expresses only logical possibility (which is not objective); that is, it expresses a free choice to admit the validity of such a proposition — a merely arbitrary reception of it into the understanding. The assertorical speaks of logical reality or truth; as, for example, in a hypothetical syllogism, the antecedens presents itself in a problematical form in the major, in an assertorical form in the minor, and it shows that the proposition is in harmony with the laws of the understanding. The apodeictical proposition cogitates the assertorical as determined by these very laws of the understanding, consequently as affirming a priori, and in this manner it expresses logical necessity. Now because all is here gradually incorporated with the understanding — inasmuch as in the first place we judge problematically; then accept assertorically our judgement as true; lastly, affirm it as inseparably united with the understanding, that is, as necessary and apodeictical — we may safely reckon these three functions of modality as so many momenta of thought.

[Footnote: Just as if thought were in the first instance a function of the understanding; in the second, of judgement; in the third, of reason. A remark which will be explained in the sequel.]

SS 6. SECTION III. Of the Pure Conceptions of the Understanding, or Categories.

General logic, as has been repeatedly said, makes abstraction of all content of cognition, and expects to receive representations from some other quarter, in order, by means of analysis, to convert them into conceptions. On the contrary, transcendental logic has lying before it the manifold content of a priori sensibility, which transcendental aesthetic presents to it in order to give matter to the pure conceptions of the understanding, without which transcendental logic would have no content, and be therefore utterly void. Now space and time contain an infinite diversity of determinations of pure a priori intuition, but are nevertheless the condition of the mind's receptivity, under which alone it can obtain representations of objects, and which, consequently, must always affect the conception of these objects. But the spontaneity of thought requires that this diversity be examined after a certain manner, received into the mind, and connected, in order afterwards to form a cognition out of it. This Process I call synthesis.

By the word synthesis, in its most general signification, I understand the process of joining different representations to each other and of comprehending their diversity in one cognition. This synthesis is pure when the diversity is not given empirically but a priori (as that in space and time). Our representations must be given previously to any analysis of them; and no conceptions can arise, quoad their content, analytically. But the synthesis of a diversity (be it given a priori or empirically) is the first requisite for the production of a cognition, which in its beginning, indeed, may be crude and confused, and therefore in need of analysis — still, synthesis is that by which alone the elements of our cognitions are collected and united into a certain content, consequently it is the first thing on which we must fix our attention, if we wish to investigate the origin of our knowledge.

Synthesis, generally speaking, is, as we shall afterwards see, the mere operation of the imagination — a blind but indispensable function of the soul, without which we should have no cognition whatever, but of the working of which we are seldom even conscious. But to reduce this synthesis to conceptions is a function of the understanding, by means of which we attain to cognition, in the proper meaning of the term.

Pure synthesis, represented generally, gives us the pure conception of the understanding. But by this pure synthesis, I mean that which rests upon a basis of a priori synthetical unity. Thus, our numeration (and this is more observable in large numbers) is a synthesis according to conceptions, because it takes place according to a common basis of unity (for example, the decade). By means of this conception, therefore, the unity in the synthesis of the manifold becomes necessary.

By means of analysis different representations are brought under one conception — an operation of

which general logic treats. On the other hand, the duty of transcendental logic is to reduce to conceptions, not representations, but the pure synthesis of representations. The first thing which must be given to us for the sake of the a priori cognition of all objects, is the diversity of the pure intuition; the synthesis of this diversity by means of the imagination is the second; but this gives, as yet, no cognition. The conceptions which give unity to this pure synthesis, and which consist solely in the representation of this necessary synthetical unity, furnish the third requisite for the cognition of an object, and these conceptions are given by the understanding.

The same function which gives unity to the different representation in a judgement, gives also unity to the mere synthesis of different representations in an intuition; and this unity we call the pure conception of the understanding. Thus, the same understanding, and by the same operations, whereby in conceptions, by means of analytical unity, it produced the logical form of a judgement, introduces, by means of the synthetical unity of the manifold in intuition, a transcendental content into its representations, on which account they are called pure conceptions of the understanding, and they apply a priori to objects, a result not within the power of general logic.

In this manner, there arise exactly so many pure conceptions of the understanding, applying a priori to objects of intuition in general, as there are logical functions in all possible judgements. For there is no other function or faculty existing in the understanding besides those enumerated in that table. These conceptions we shall, with Aristotle, call categories, our purpose being originally identical with his, notwithstanding the great difference in the execution.

Table of the Categories.

I. *Of Quantity.*	II. *Of Quality.*
Unity.	Reality.
Plurality.	Negation.
Totality.	Limitation.

III.
Of Relation.

Of Inherence and Subsistence (substantia et accidens).
Of Causality and Dependence (cause and effect).
Of Community (reciprocity between the agent and patient).

IV.
Of Modality.

Possibility.—Impossibility.
Existence.—Non-existence.
Necessity.—Contingence.

This, then, is a catalogue of all the originally pure conceptions of the synthesis which the understanding contains a priori, and these conceptions alone entitle it to be called a pure understanding; inasmuch as only by them it can render the manifold of intuition conceivable, in other words, think an object of intuition. This division is made systematically from a common principle, namely the faculty of judgement (which is just the same as the power of thought), and has not arisen rhapsodically from a search at haphazard after pure conceptions, respecting the full number of which we never could be certain,

inasmuch as we employ induction alone in our search, without considering that in this way we can never understand wherefore precisely these conceptions, and none others, abide in the pure understanding. It was a design worthy of an acute thinker like Aristotle, to search for these fundamental conceptions. Destitute, however, of any guiding principle, he picked them up just as they occurred to him, and at first hunted out ten, which he called categories (predicaments). Afterwards be believed that he had discovered five others, which were added under the name of post predicaments. But his catalogue still remained defective. Besides, there are to be found among them some of the modes of pure sensibility (quando, ubi, situs, also prius, simul), and likewise an empirical conception (motus) — which can by no means belong to this genealogical register of the pure understanding. Moreover, there are deduced conceptions (actio, passio) enumerated among the original conceptions, and, of the latter, some are entirely wanting.

With regard to these, it is to be remarked, that the categories, as the true primitive conceptions of the pure understanding, have also their pure deduced conceptions, which, in a complete system of transcendental philosophy, must by no means be passed over; though in a merely critical essay we must be contented with the simple mention of the fact.

Let it be allowed me to call these pure, but deduced conceptions of the understanding, the predicables of the pure understanding, in contradistinction to predicaments. If we are in possession of the original and primitive, the deduced and subsidiary conceptions can easily be added, and the genealogical tree of the understanding completely delineated. As my present aim is not to set forth a complete system, but merely the principles of one, I reserve this task for another time. It may be easily executed by any one who will refer to the ontological manuals, and subordinate to the category of causality, for example, the predicables of force, action, passion; to that of community, those of presence and resistance; to the categories of modality, those of origination, extinction, change; and so with the rest. The categories combined with the modes of pure sensibility, or with one another, afford a great number of deduced a priori conceptions; a complete enumeration of which would be a useful and not unpleasant, but in this place a perfectly dispensable, occupation.

I purposely omit the definitions of the categories in this treatise. I shall analyse these conceptions only so far as is necessary for the doctrine of method, which is to form a part of this critique. In a system of pure reason, definitions of them would be with justice demanded of me, but to give them here would only bide from our view the main aim of our investigation, at the same time raising doubts and objections, the consideration of which, without injustice to our main purpose, may be very well postponed till another opportunity. Meanwhile, it ought to be sufficiently clear, from the little we have already said on this subject, that the formation of a complete vocabulary of pure conceptions, accompanied by all the requisite explanations, is not only a possible, but an easy undertaking. The compartments already exist; it is only necessary to fill them up; and a systematic topic like the present, indicates with perfect precision the proper place to which each conception belongs, while it readily points out any that have not yet been filled up.

SS 7.

Our table of the categories suggests considerations of some importance, which may perhaps have significant results in regard to the scientific form of all rational cognitions. For, that this table is useful in the theoretical part of philosophy, nay, indispensable for the sketching of the complete plan of a science, so far as that science rests upon conceptions a priori, and for dividing it mathematically, according to fixed principles, is most manifest from the fact that it contains all the elementary conceptions of the understanding, nay, even the form of a system of these in the understanding itself, and consequently indicates all the momenta, and also the internal arrangement of a projected speculative science, as I have elsewhere shown. [Footnote: In the Metaphysical Principles of Natural Science.] Here follow some of these observations.

I. This table, which contains four classes of conceptions of the understanding, may, in the first instance, be divided into two classes, the first of which relates to objects of intuition — pure as well as empirical; the second, to the existence of these objects, either in relation to one another, or to the understanding.

The former of these classes of categories I would entitle the mathematical, and the latter the dynamical categories. The former, as we see, has no correlates; these are only to be found in the second class. This difference must have a ground in the nature of the human understanding.

II. The number of the categories in each class is always the same, namely, three — a fact which also demands some consideration, because in all other cases division a priori through conceptions is necessarily dichotomy. It is to be added, that the third category in each triad always arises from the combination of the second with the first.

Thus totality is nothing else but plurality contemplated as unity; limitation is merely reality conjoined with negation; community is the causality of a substance, reciprocally determining, and determined by other substances; and finally, necessity is nothing but existence, which is given through the possibility itself. Let it not be supposed, however, that the third category is merely a deduced, and not a primitive conception of the pure understanding. For the conjunction of the first and second, in order to produce the third conception, requires a particular function of the understanding, which is by no means identical with those which are exercised in the first and second. Thus, the conception of a number (which belongs to the category of totality) is not always possible, where the conceptions of multitude and unity exist (for example, in the representation of the infinite). Or, if I conjoin the conception of a cause with that of a substance, it does not follow that the conception of influence, that is, how one substance can be the cause of something in another substance, will be understood from that. Thus it is evident that a particular act of the understanding is here necessary; and so in the other instances.

III. With respect to one category, namely, that of community, which is found in the third class, it is not so easy as with the others to detect its accordance with the form of the disjunctive judgement which corresponds to it in the table of the logical functions.

In order to assure ourselves of this accordance, we must observe that in every disjunctive judgement, the sphere of the judgement (that is, the complex of all that is contained in it) is represented as a whole divided into parts; and, since one part cannot be contained in the other, they are cogitated as co-ordinated with, not subordinated to each other, so that they do not determine each other unilaterally, as in a linear series, but reciprocally, as in an aggregate — (if one member of the division is posited, all the rest are excluded; and conversely).

Now a like connection is cogitated in a whole of things; for one thing is not subordinated, as effect, to another as cause of its existence, but, on the contrary, is co-ordinated contemporaneously and reciprocally, as a cause in relation to the determination of the others (for example, in a body — the parts of which mutually attract and repel each other). And this is an entirely different kind of connection from that which we find in the mere relation of the cause to the effect (the principle to the consequence), for in such a connection the consequence does not in its turn determine the principle, and therefore does not constitute, with the latter, a whole — just as the Creator does not with the world make up a whole. The process of understanding by which it represents to itself the sphere of a divided conception, is employed also when we think of a thing as divisible; and in the same manner as the members of the division in the former exclude one another, and yet are connected in one sphere, so the understanding represents to itself the parts of the latter, as having — each of them — an existence (as substances), independently of the others, and yet as united in one whole.

SS 8.

In the transcendental philosophy of the ancients there exists one more leading division, which contains pure conceptions of the understanding, and which, although not numbered among the categories, ought, according to them, as conceptions a priori, to be valid of objects. But in this case they would augment the

number of the categories; which cannot be. These are set forth in the proposition, so renowned among the schoolmen— "Quodlibet ens est UNUM, VERUM, BONUM." Now, though the inferences from this principle were mere tautological propositions, and though it is allowed only by courtesy to retain a place in modern metaphysics, yet a thought which maintained itself for such a length of time, however empty it seems to be, deserves an investigation of its origin, and justifies the conjecture that it must be grounded in some law of the understanding, which, as is often the case, has only been erroneously interpreted. These pretended transcendental predicates are, in fact, nothing but logical requisites and criteria of all cognition of objects, and they employ, as the basis for this cognition, the categories of quantity, namely, unity, plurality, and totality. But these, which must be taken as material conditions, that is, as belonging to the possibility of things themselves, they employed merely in a formal signification, as belonging to the logical requisites of all cognition, and yet most unguardedly changed these criteria of thought into properties of objects, as things in themselves. Now, in every cognition of an object, there is unity of conception, which may be called qualitative unity, so far as by this term we understand only the unity in our connection of the manifold; for example, unity of the theme in a play, an oration, or a story. Secondly, there is truth in respect of the deductions from it. The more true deductions we have from a given conception, the more criteria of its objective reality. This we might call the qualitative plurality of characteristic marks, which belong to a conception as to a common foundation, but are not cogitated as a quantity in it. Thirdly, there is perfection — which consists in this, that the plurality falls back upon the unity of the conception, and accords completely with that conception and with no other. This we may denominate qualitative completeness. Hence it is evident that these logical criteria of the possibility of cognition are merely the three categories of quantity modified and transformed to suit an unauthorized manner of applying them. That is to say, the three categories, in which the unity in the production of the quantum must be homogeneous throughout, are transformed solely with a view to the connection of heterogeneous parts of cognition in one act of consciousness, by means of the quality of the cognition, which is the principle of that connection. Thus the criterion of the possibility of a conception (not of its object) is the definition of it, in which the unity of the conception, the truth of all that may be immediately deduced from it, and finally, the completeness of what has been thus deduced, constitute the requisites for the reproduction of the whole conception. Thus also, the criterion or test of an hypothesis is the intelligibility of the received principle of explanation, or its unity (without help from any subsidiary hypothesis) — the truth of our deductions from it (consistency with each other and with experience) — and lastly, the completeness of the principle of the explanation of these deductions, which refer to neither more nor less than what was admitted in the hypothesis, restoring analytically and a posteriori, what was cogitated synthetically and a priori. By the conceptions, therefore, of unity, truth, and perfection, we have made no addition to the transcendental table of the categories, which is complete without them. We have, on the contrary, merely employed the three categories of quantity, setting aside their application to objects of experience, as general logical laws of the consistency of cognition with itself.

CHAPTER II Of the Deduction of the Pure Conceptions of the

Understanding.

SS 9. SECTION I Of the Principles of a Transcendental Deduction in general.

Teachers of jurisprudence, when speaking of rights and claims, distinguish in a cause the question of right (quid juris) from the question of fact (quid facti), and while they demand proof of both, they give to the proof of the former, which goes to establish right or claim in law, the name of deduction. Now we make use of a great number of empirical conceptions, without opposition from any one; and consider ourselves, even without any attempt at deduction, justified in attaching to them a sense, and a supposititious signification, because we have always experience at hand to demonstrate their objective reality. There exist also, however, usurped conceptions, such as fortune, fate, which circulate with almost universal indulgence, and yet are occasionally challenged by the question, “quid juris?” In such cases, we have great difficulty in discovering any deduction for these terms, inasmuch as we cannot produce any manifest ground of right, either from experience or from reason, on which the claim to employ them can be founded.

Among the many conceptions, which make up the very variegated web of human cognition, some are destined for pure use a priori, independent of all experience; and their title to be so employed always requires a deduction, inasmuch as, to justify such use of them, proofs from experience are not sufficient; but it is necessary to know how these conceptions can apply to objects without being derived from experience. I term, therefore, an examination of the manner in which conceptions can apply a priori to objects, the transcendental deduction of conceptions, and I distinguish it from the empirical deduction, which indicates the mode in which conception is obtained through experience and reflection thereon; consequently, does not concern itself with the right, but only with the fact of our obtaining conceptions in such and such a manner. We have already seen that we are in possession of two perfectly different kinds of conceptions, which nevertheless agree with each other in this, that they both apply to objects completely a priori. These are the conceptions of space and time as forms of sensibility, and the categories as pure conceptions of the understanding. To attempt an empirical deduction of either of these classes would be labour in vain, because the distinguishing characteristic of their nature consists in this, that they apply to their objects, without having borrowed anything from experience towards the representation of them. Consequently, if a deduction of these conceptions is necessary, it must always be transcendental.

Meanwhile, with respect to these conceptions, as with respect to all our cognition, we certainly may discover in experience, if not the principle of their possibility, yet the occasioning causes of their production. It will be found that the impressions of sense give the first occasion for bringing into action the whole faculty of cognition, and for the production of experience, which contains two very dissimilar elements, namely, a matter for cognition, given by the senses, and a certain form for the arrangement of this matter, arising out of the inner fountain of pure intuition and thought; and these, on occasion given by sensuous impressions, are called into exercise and produce conceptions. Such an investigation into the first efforts of our faculty of cognition to mount from particular perceptions to general conceptions is undoubtedly of great utility; and we have to thank the celebrated Locke for having first opened the way for this inquiry. But a deduction of the pure a priori conceptions of course never can be made in this way, seeing that, in regard to their future employment, which must be entirely independent of experience, they must have a far different certificate of birth to show from that of a descent from experience. This attempted physiological derivation, which cannot properly be called deduction, because it relates merely to a quaestio facti, I shall entitle an explanation of the possession of a pure cognition. It is therefore

manifest that there can only be a transcendental deduction of these conceptions and by no means an empirical one; also, that all attempts at an empirical deduction, in regard to pure a priori conceptions, are vain, and can only be made by one who does not understand the altogether peculiar nature of these cognitions.

But although it is admitted that the only possible deduction of pure a priori cognition is a transcendental deduction, it is not, for that reason, perfectly manifest that such a deduction is absolutely necessary. We have already traced to their sources the conceptions of space and time, by means of a transcendental deduction, and we have explained and determined their objective validity a priori. Geometry, nevertheless, advances steadily and securely in the province of pure a priori cognitions, without needing to ask from philosophy any certificate as to the pure and legitimate origin of its fundamental conception of space. But the use of the conception in this science extends only to the external world of sense, the pure form of the intuition of which is space; and in this world, therefore, all geometrical cognition, because it is founded upon a priori intuition, possesses immediate evidence, and the objects of this cognition are given a priori (as regards their form) in intuition by and through the cognition itself. With the pure conceptions of understanding, on the contrary, commences the absolute necessity of seeking a transcendental deduction, not only of these conceptions themselves, but likewise of space, because, inasmuch as they make affirmations concerning objects not by means of the predicates of intuition and sensibility, but of pure thought a priori, they apply to objects without any of the conditions of sensibility. Besides, not being founded on experience, they are not presented with any object in a priori intuition upon which, antecedently to experience, they might base their synthesis. Hence results, not only doubt as to the objective validity and proper limits of their use, but that even our conception of space is rendered equivocal; inasmuch as we are very ready with the aid of the categories, to carry the use of this conception beyond the conditions of sensuous intuition — and, for this reason, we have already found a transcendental deduction of it needful. The reader, then, must be quite convinced of the absolute necessity of a transcendental deduction, before taking a single step in the field of pure reason; because otherwise he goes to work blindly, and after he has wondered about in all directions, returns to the state of utter ignorance from which he started. He ought, moreover, clearly to recognize beforehand the unavoidable difficulties in his undertaking, so that he may not afterwards complain of the obscurity in which the subject itself is deeply involved, or become too soon impatient of the obstacles in his path; because we have a choice of only two things — either at once to give up all pretensions to knowledge beyond the limits of possible experience, or to bring this critical investigation to completion.

We have been able, with very little trouble, to make it comprehensible how the conceptions of space and time, although a priori cognitions, must necessarily apply to external objects, and render a synthetical cognition of these possible, independently of all experience. For inasmuch as only by means of such pure form of sensibility an object can appear to us, that is, be an object of empirical intuition, space and time are pure intuitions, which contain a priori the condition of the possibility of objects as phenomena, and an a priori synthesis in these intuitions possesses objective validity.

On the other hand, the categories of the understanding do not represent the conditions under which objects are given to us in intuition; objects can consequently appear to us without necessarily connecting themselves with these, and consequently without any necessity binding on the understanding to contain a priori the conditions of these objects. Thus we find ourselves involved in a difficulty which did not present itself in the sphere of sensibility, that is to say, we cannot discover how the subjective conditions of thought can have objective validity, in other words, can become conditions of the possibility of all cognition of objects; for phenomena may certainly be given to us in intuition without any help from the functions of the understanding. Let us take, for example, the conception of cause, which indicates a peculiar kind of synthesis, namely, that with something, A, something entirely different, B, is connected according to a law. It is not a priori manifest why phenomena should contain anything of this kind (we are

of course debarred from appealing for proof to experience, for the objective validity of this conception must be demonstrated a priori), and it hence remains doubtful a priori, whether such a conception be not quite void and without any corresponding object among phenomena. For that objects of sensuous intuition must correspond to the formal conditions of sensibility existing a priori in the mind is quite evident, from the fact that without these they could not be objects for us; but that they must also correspond to the conditions which understanding requires for the synthetical unity of thought is an assertion, the grounds for which are not so easily to be discovered. For phenomena might be so constituted as not to correspond to the conditions of the unity of thought; and all things might lie in such confusion that, for example, nothing could be met with in the sphere of phenomena to suggest a law of synthesis, and so correspond to the conception of cause and effect; so that this conception would be quite void, null, and without significance. Phenomena would nevertheless continue to present objects to our intuition; for mere intuition does not in any respect stand in need of the functions of thought.

If we thought to free ourselves from the labour of these investigations by saying: “Experience is constantly offering us examples of the relation of cause and effect in phenomena, and presents us with abundant opportunity of abstracting the conception of cause, and so at the same time of corroborating the objective validity of this conception”; we should in this case be overlooking the fact, that the conception of cause cannot arise in this way at all; that, on the contrary, it must either have an a priori basis in the understanding, or be rejected as a mere chimera. For this conception demands that something, A, should be of such a nature that something else, B, should follow from it necessarily, and according to an absolutely universal law. We may certainly collect from phenomena a law, according to which this or that usually happens, but the element of necessity is not to be found in it. Hence it is evident that to the synthesis of cause and effect belongs a dignity, which is utterly wanting in any empirical synthesis; for it is no mere mechanical synthesis, by means of addition, but a dynamical one; that is to say, the effect is not to be cogitated as merely annexed to the cause, but as posited by and through the cause, and resulting from it. The strict universality of this law never can be a characteristic of empirical laws, which obtain through induction only a comparative universality, that is, an extended range of practical application. But the pure conceptions of the understanding would entirely lose all their peculiar character, if we treated them merely as the productions of experience.

SS 10. Transition to the Transcendental Deduction of the Categories.

There are only two possible ways in which synthetical representation and its objects can coincide with and relate necessarily to each other, and, as it were, meet together. Either the object alone makes the representation possible, or the representation alone makes the object possible. In the former case, the relation between them is only empirical, and an a priori representation is impossible. And this is the case with phenomena, as regards that in them which is referable to mere sensation. In the latter case — although representation alone (for of its causality, by means of the will, we do not here speak) does not produce the object as to its existence, it must nevertheless be a priori determinative in regard to the object, if it is only by means of the representation that we can cognize anything as an object. Now there are only two conditions of the possibility of a cognition of objects; firstly, intuition, by means of which the object, though only as phenomenon, is given; secondly, conception, by means of which the object which corresponds to this intuition is thought. But it is evident from what has been said on aesthetic that the first condition, under which alone objects can be intuited, must in fact exist, as a formal basis for them, a priori in the mind. With this formal condition of sensibility, therefore, all phenomena necessarily correspond, because it is only through it that they can be phenomena at all; that is, can be empirically intuited and given. Now the question is whether there do not exist, a priori in the mind, conceptions of understanding also, as conditions under which alone something, if not intuited, is yet thought as object. If this question be answered in the affirmative, it follows that all empirical cognition of objects is necessarily conformable to such conceptions, since, if they are not presupposed, it is impossible that

anything can be an object of experience. Now all experience contains, besides the intuition of the senses through which an object is given, a conception also of an object that is given in intuition. Accordingly, conceptions of objects in general must lie as a priori conditions at the foundation of all empirical cognition; and consequently, the objective validity of the categories, as a priori conceptions, will rest upon this, that experience (as far as regards the form of thought) is possible only by their means. For in that case they apply necessarily and a priori to objects of experience, because only through them can an object of experience be thought.

The whole aim of the transcendental deduction of all a priori conceptions is to show that these conceptions are a priori conditions of the possibility of all experience. Conceptions which afford us the objective foundation of the possibility of experience are for that very reason necessary. But the analysis of the experiences in which they are met with is not deduction, but only an illustration of them, because from experience they could never derive the attribute of necessity. Without their original applicability and relation to all possible experience, in which all objects of cognition present themselves, the relation of the categories to objects, of whatever nature, would be quite incomprehensible.

The celebrated Locke, for want of due reflection on these points, and because he met with pure conceptions of the understanding in experience, sought also to deduce them from experience, and yet proceeded so inconsequently as to attempt, with their aid, to arrive it cognitions which lie far beyond the limits of all experience. David Hume perceived that, to render this possible, it was necessary that the conceptions should have an a priori origin. But as he could not explain how it was possible that conceptions which are not connected with each other in the understanding must nevertheless be thought as necessarily connected in the object — and it never occurred to him that the understanding itself might, perhaps, by means of these conceptions, be the author of the experience in which its objects were presented to it — he was forced to drive these conceptions from experience, that is, from a subjective necessity arising from repeated association of experiences erroneously considered to be objective — in one word, from habit. But he proceeded with perfect consequence and declared it to be impossible, with such conceptions and the principles arising from them, to overstep the limits of experience. The empirical derivation, however, which both of these philosophers attributed to these conceptions, cannot possibly be reconciled with the fact that we do possess scientific a priori cognitions, namely, those of pure mathematics and general physics.

The former of these two celebrated men opened a wide door to extravagance — (for if reason has once undoubted right on its side, it will not allow itself to be confined to set limits, by vague recommendations of moderation); the latter gave himself up entirely to scepticism — a natural consequence, after having discovered, as he thought, that the faculty of cognition was not trustworthy. We now intend to make a trial whether it be not possible safely to conduct reason between these two rocks, to assign her determinate limits, and yet leave open for her the entire sphere of her legitimate activity.

I shall merely premise an explanation of what the categories are. They are conceptions of an object in general, by means of which its intuition is contemplated as determined in relation to one of the logical functions of judgement. The following will make this plain. The function of the categorical judgement is that of the relation of subject to predicate; for example, in the proposition: “All bodies are divisible.” But in regard to the merely logical use of the understanding, it still remains undetermined to which Of these two conceptions belongs the function Of subject and to which that of predicate. For we could also say: “Some divisible is a body.” But the category of substance, when the conception of a body is brought under it, determines that; and its empirical intuition in experience must be contemplated always as subject and never as mere predicate. And so with all the other categories.

SS 11. SECTION II Transcendental Deduction of the pure Conceptions of the Understanding.

Of the Possibility of a Conjunction of the manifold representations given by Sense.

The manifold content in our representations can be given in an intuition which is merely sensuous — in

other words, is nothing but susceptibility; and the form of this intuition can exist a priori in our faculty of representation, without being anything else but the mode in which the subject is affected. But the conjunction (conjunctio) of a manifold in intuition never can be given us by the senses; it cannot therefore be contained in the pure form of sensuous intuition, for it is a spontaneous act of the faculty of representation. And as we must, to distinguish it from sensibility, entitle this faculty understanding; so all conjunction whether conscious or unconscious, be it of the manifold in intuition, sensuous or non-sensuous, or of several conceptions — is an act of the understanding. To this act we shall give the general appellation of synthesis, thereby to indicate, at the same time, that we cannot represent anything as conjoined in the object without having previously conjoined it ourselves. Of all mental notions, that of conjunction is the only one which cannot be given through objects, but can be originated only by the subject itself, because it is an act of its purely spontaneous activity. The reader will easily enough perceive that the possibility of conjunction must be grounded in the very nature of this act, and that it must be equally valid for all conjunction, and that analysis, which appears to be its contrary, must, nevertheless, always presuppose it; for where the understanding has not previously conjoined, it cannot dissect or analyse, because only as conjoined by it, must that which is to be analysed have been given to our faculty of representation.

But the conception of conjunction includes, besides the conception of the manifold and of the synthesis of it, that of the unity of it also. Conjunction is the representation of the synthetical unity of the manifold.* This idea of unity, therefore, cannot arise out of that of conjunction; much rather does that idea, by combining itself with the representation of the manifold, render the conception of conjunction possible. This unity, which a priori precedes all conceptions of conjunction, is not the category of unity (SS 6); for all the categories are based upon logical functions of judgement, and in these functions we already have conjunction, and consequently unity of given conceptions. It is therefore evident that the category of unity presupposes conjunction. We must therefore look still higher for this unity (as qualitative, SS 8), in that, namely, which contains the ground of the unity of diverse conceptions in judgements, the ground, consequently, of the possibility of the existence of the understanding, even in regard to its logical use.

[Footnote: Whether the representations are in themselves identical, and consequently whether one can be thought analytically by means of and through the other, is a question which we need not at present consider. Our Consciousness of the one, when we speak of the manifold, is always distinguishable from our consciousness of the other; and it is only respecting the synthesis of this (possible) consciousness that we here treat.]

SS 12. Of the Originally Synthetical Unity of Apperception.

The “I think” must accompany all my representations, for otherwise something would be represented in me which could not be thought; in other words, the representation would either be impossible, or at least be, in relation to me, nothing. That representation which can be given previously to all thought is called intuition. All the diversity or manifold content of intuition, has, therefore, a necessary relation to the “I think,” in the subject in which this diversity is found. But this representation, “I think,” is an act of spontaneity; that is to say, it cannot be regarded as belonging to mere sensibility. I call it pure apperception, in order to distinguish it from empirical; or primitive apperception, because it is self-consciousness which, whilst it gives birth to the representation “I think,” must necessarily be capable of accompanying all our representations. It is in all acts of consciousness one and the same, and unaccompanied by it, no representation can exist for me. The unity of this apperception I call the transcendental unity of self-consciousness, in order to indicate the possibility of a priori cognition arising from it. For the manifold representations which are given in an intuition would not all of them be my representations, if they did not all belong to one self-consciousness, that is, as my representations (even

although I am not conscious of them as such), they must conform to the condition under which alone they can exist together in a common self-consciousness, because otherwise they would not all without exception belong to me. From this primitive conjunction follow many important results.

For example, this universal identity of the apperception of the manifold given in intuition contains a synthesis of representations and is possible only by means of the consciousness of this synthesis. For the empirical consciousness which accompanies different representations is in itself fragmentary and disunited, and without relation to the identity of the subject. This relation, then, does not exist because I accompany every representation with consciousness, but because I join one representation to another, and am conscious of the synthesis of them. Consequently, only because I can connect a variety of given representations in one consciousness, is it possible that I can represent to myself the identity of consciousness in these representations; in other words, the analytical unity of apperception is possible only under the presupposition of a synthetical unity.* The thought, “These representations given in intuition belong all of them to me,” is accordingly just the same as, “I unite them in one self-consciousness, or can at least so unite them”; and although this thought is not itself the consciousness of the synthesis of representations, it presupposes the possibility of it; that is to say, for the reason alone that I can comprehend the variety of my representations in one consciousness, do I call them my representations, for otherwise I must have as many-coloured and various a self as are the representations of which I am conscious. Synthetical unity of the manifold in intuitions, as given a priori, is therefore the foundation of the identity of apperception itself, which antecedes a priori all determinate thought. But the conjunction of representations into a conception is not to be found in objects themselves, nor can it be, as it were, borrowed from them and taken up into the understanding by perception, but it is on the contrary an operation of the understanding itself, which is nothing more than the faculty of conjoining a priori and of bringing the variety of given representations under the unity of apperception. This principle is the highest in all human cognition.

[Footnote: All general conceptions — as such — depend, for their existence, on the analytical unity of consciousness. For example, when I think of red in general, I thereby think to myself a property which (as a characteristic mark) can be discovered somewhere, or can be united with other representations; consequently, it is only by means of a forethought possible synthetical unity that I can think to myself the analytical. A representation which is cogitated as common to different representations, is regarded as belonging to such as, besides this common representation, contain something different; consequently it must be previously thought in synthetical unity with other although only possible representations, before I can think in it the analytical unity of consciousness which makes it a conceptas communis. And thus the synthetical unity of apperception is the highest point with which we must connect every operation of the understanding, even the whole of logic, and after it our transcendental philosophy; indeed, this faculty is the understanding itself.]

This fundamental principle of the necessary unity of apperception is indeed an identical, and therefore analytical, proposition; but it nevertheless explains the necessity for a synthesis of the manifold given in an intuition, without which the identity of self-consciousness would be incogitable. For the ego, as a simple representation, presents us with no manifold content; only in intuition, which is quite different from the representation ego, can it be given us, and by means of conjunction it is cogitated in one self-consciousness. An understanding, in which all the manifold should be given by means of consciousness itself, would be intuitive; our understanding can only think and must look for its intuition to sense. I am, therefore, conscious of my identical self, in relation to all the variety of representations given to me in an intuition, because I call all of them my representations. In other words, I am conscious myself of a necessary a priori synthesis of my representations, which is called the original synthetical unity of apperception, under which rank all the representations presented to me, but that only by means of a synthesis.

SS 13. The Principle of the Synthetical Unity of Apperception is the highest Principle of all exercise of

the Understanding.

The supreme principle of the possibility of all intuition in relation to sensibility was, according to our transcendental aesthetic, that all the manifold in intuition be subject to the formal conditions of space and time. The supreme principle of the possibility of it in relation to the understanding is that all the manifold in it be subject to conditions of the originally synthetical unity or apperception.* To the former of these two principles are subject all the various representations of intuition, in so far as they are given to us; to the latter, in so far as they must be capable of conjunction in one consciousness; for without this nothing can be thought or cognized, because the given representations would not have in common the act Of the apperception "I think" and therefore could not be connected in one self-consciousness.

[Footnote: Space and time, and all portions thereof, are intuitions; consequently are, with a manifold for their content, single representations. (See the Transcendental Aesthetic.) Consequently, they are not pure conceptions, by means of which the same consciousness is found in a great number of representations; but, on the contrary, they are many representations contained in one, the consciousness of which is, so to speak, compounded. The unity of consciousness is nevertheless synthetical and, therefore, primitive. From this peculiar character of consciousness follow many important consequences. (See SS 21.)]

Understanding is, to speak generally, the faculty Of cognitions. These consist in the determined relation of given representation to an object. But an object is that, in the conception of which the manifold in a given intuition is united. Now all union of representations requires unity of consciousness in the synthesis of them. Consequently, it is the unity of consciousness alone that constitutes the possibility of representations relating to an object, and therefore of their objective validity, and of their becoming cognitions, and consequently, the possibility of the existence of the understanding itself.

The first pure cognition of understanding, then, upon which is founded all its other exercise, and which is at the same time perfectly independent of all conditions of mere sensuous intuition, is the principle of the original synthetical unity of apperception. Thus the mere form of external sensuous intuition, namely, space, affords us, per se, no cognition; it merely contributes the manifold in a priori intuition to a possible cognition. But, in order to cognize something in space (for example, a line), I must draw it, and thus produce synthetically a determined conjunction of the given manifold, so that the unity of this act is at the same time the unity of consciousness (in the conception of a line), and by this means alone is an object (a determinate space) cognized. The synthetical unity of consciousness is, therefore, an objective condition of all cognition, which I do not merely require in order to cognize an object, but to which every intuition must necessarily be subject, in order to become an object for me; because in any other way, and without this synthesis, the manifold in intuition could not be united in one consciousness.

This proposition is, as already said, itself analytical, although it constitutes the synthetical unity, the condition of all thought; for it states nothing more than that all my representations in any given intuition must be subject to the condition which alone enables me to connect them, as my representation with the identical self, and so to unite them synthetically in one apperception, by means of the general expression, "I think."

But this principle is not to be regarded as a principle for every possible understanding, but only for the understanding by means of whose pure apperception in the thought I am, no manifold content is given. The understanding or mind which contained the manifold in intuition, in and through the act itself of its own self-consciousness, in other words, an understanding by and in the representation of which the objects of the representation should at the same time exist, would not require a special act of synthesis of the manifold as the condition of the unity of its consciousness, an act of which the human understanding, which thinks only and cannot intuite, has absolute need. But this principle is the first principle of all the operations of our understanding, so that we cannot form the least conception of any other possible understanding, either of one such as should be itself intuition, or possess a sensuous intuition, but with

forms different from those of space and time.

SS 14. What Objective Unity of Self-consciousness is.

It is by means of the transcendental unity of apperception that all the manifold, given in an intuition is united into a conception of the object. On this account it is called objective, and must be distinguished from the subjective unity of consciousness, which is a determination of the internal sense, by means of which the said manifold in intuition is given empirically to be so united. Whether I can be empirically conscious of the manifold as coexistent or as successive, depends upon circumstances, or empirical conditions. Hence the empirical unity of consciousness by means of association of representations, itself relates to a phenomenal world and is wholly contingent. On the contrary, the pure form of intuition in time, merely as an intuition, which contains a given manifold, is subject to the original unity of consciousness, and that solely by means of the necessary relation of the manifold in intuition to the “I think,” consequently by means of the pure synthesis of the understanding, which lies a priori at the foundation of all empirical synthesis. The transcendental unity of apperception is alone objectively valid; the empirical which we do not consider in this essay, and which is merely a unity deduced from the former under given conditions in concreto, possesses only subjective validity. One person connects the notion conveyed in a word with one thing, another with another thing; and the unity of consciousness in that which is empirical, is, in relation to that which is given by experience, not necessarily and universally valid.

SS 15. The Logical Form of all Judgements consists in the Objective Unity of Apperception of the Conceptions contained therein.

I could never satisfy myself with the definition which logicians give of a judgement. It is, according to them, the representation of a relation between two conceptions. I shall not dwell here on the faultiness of this definition, in that it suits only for categorical and not for hypothetical or disjunctive judgements, these latter containing a relation not of conceptions but of judgements themselves — a blunder from which many evil results have followed.* It is more important for our present purpose to observe, that this definition does not determine in what the said relation consists.

[Footnote: The tedious doctrine of the four syllogistic figures concerns only categorical syllogisms; and although it is nothing more than an artifice by surreptitiously introducing immediate conclusions (consequentiae immediatae) among the premises of a pure syllogism, to give ism’ give rise to an appearance of more modes of drawing a conclusion than that in the first figure, the artifice would not have had much success, had not its authors succeeded in bringing categorical judgements into exclusive respect, as those to which all others must be referred — a doctrine, however, which, according to SS 5, is utterly false.]

But if I investigate more closely the relation of given cognitions in every judgement, and distinguish it, as belonging to the understanding, from the relation which is produced according to laws of the reproductive imagination (which has only subjective validity), I find that judgement is nothing but the mode of bringing given cognitions under the objective unit of apperception. This is plain from our use of the term of relation is in judgements, in order to distinguish the objective unity of given representations from the subjective unity. For this term indicates the relation of these representations to the original apperception, and also their necessary unity, even although the judgement is empirical, therefore contingent, as in the judgement: “All bodies are heavy.” I do not mean by this, that these representations do necessarily belong to each other in empirical intuition, but that by means of the necessary unity of appreciation they belong to each other in the synthesis of intuitions, that is to say, they belong to each other according to principles of the objective determination of all our representations, in so far as cognition can arise from them, these principles being all deduced from the main principle of the transcendental unity of apperception. In this way alone can there arise from this relation a judgement, that is, a relation which has objective validity, and is perfectly distinct from that relation of the very same representations which has

only subjective validity — a relation, to wit, which is produced according to laws of association. According to these laws, I could only say: “When I hold in my hand or carry a body, I feel an impression of weight”; but I could not say: “It, the body, is heavy”; for this is tantamount to saying both these representations are conjoined in the object, that is, without distinction as to the condition of the subject, and do not merely stand together in my perception, however frequently the perceptive act may be repeated.

SS 16. All Sensuous Intuitions are subject to the Categories, as Conditions under which alone the manifold Content of them can be united in one Consciousness.

The manifold content given in a sensuous intuition comes necessarily under the original synthetical unity of apperception, because thereby alone is the unity of intuition possible (SS 13). But that act of the understanding, by which the manifold content of given representations (whether intuitions or conceptions) is brought under one apperception, is the logical function of judgements (SS 15). All the manifold, therefore, in so far as it is given in one empirical intuition, is determined in relation to one of the logical functions of judgement, by means of which it is brought into union in one consciousness. Now the categories are nothing else than these functions of judgement so far as the manifold in a given intuition is determined in relation to them (SS 9). Consequently, the manifold in a given intuition is necessarily subject to the categories of the understanding.

SS 17. Observation.

The manifold in an intuition, which I call mine, is represented by means of the synthesis of the understanding, as belonging to the necessary unity of self-consciousness, and this takes place by means of the category.* The category indicates accordingly that the empirical consciousness of a given manifold in an intuition is subject to a pure self-consciousness a priori, in the same manner as an empirical intuition is subject to a pure sensuous intuition, which is also a priori. In the above proposition, then, lies the beginning of a deduction of the pure conceptions of the understanding. Now, as the categories have their origin in the understanding alone, independently of sensibility, I must in my deduction make abstraction of the mode in which the manifold of an empirical intuition is given, in order to fix my attention exclusively on the unity which is brought by the understanding into the intuition by means of the category. In what follows (SS 22), it will be shown, from the mode in which the empirical intuition is given in the faculty of sensibility, that the unity which belongs to it is no other than that which the category (according to SS 16) imposes on the manifold in a given intuition, and thus, its a priori validity in regard to all objects of sense being established, the purpose of our deduction will be fully attained.

[Footnote: The proof of this rests on the represented unity of intuition, by means of which an object is given, and which always includes in itself a synthesis of the manifold to be intuited, and also the relation of this latter to unity of apperception.]

But there is one thing in the above demonstration of which I could not make abstraction, namely, that the manifold to be intuited must be given previously to the synthesis of the understanding, and independently of it. How this takes place remains here undetermined. For if I cogitate an understanding which was itself intuitive (as, for example, a divine understanding which should not represent given objects, but by whose representation the objects themselves should be given or produced), the categories would possess no significance in relation to such a faculty of cognition. They are merely rules for an understanding, whose whole power consists in thought, that is, in the act of submitting the synthesis of the manifold which is presented to it in intuition from a very different quarter, to the unity of apperception; a faculty, therefore, which cognizes nothing per se, but only connects and arranges the material of cognition, the intuition, namely, which must be presented to it by means of the object. But to show reasons for this peculiar character of our understandings, that it produces unity of apperception a priori only by means of

categories, and a certain kind and number thereof, is as impossible as to explain why we are endowed with precisely so many functions of judgement and no more, or why time and space are the only forms of our intuition.

SS 18. In Cognition, its Application to Objects of Experience is the only legitimate use of the Category.

To think an object and to cognize an object are by no means the same thing. In cognition there are two elements: firstly, the conception, whereby an object is cogitated (the category); and, secondly, the intuition, whereby the object is given. For supposing that to the conception a corresponding intuition could not be given, it would still be a thought as regards its form, but without any object, and no cognition of anything would be possible by means of it, inasmuch as, so far as I knew, there existed and could exist nothing to which my thought could be applied. Now all intuition possible to us is sensuous; consequently, our thought of an object by means of a pure conception of the understanding, can become cognition for us only in so far as this conception is applied to objects of the senses. Sensuous intuition is either pure intuition (space and time) or empirical intuition — of that which is immediately represented in space and time by means of sensation as real. Through the determination of pure intuition we obtain a priori cognitions of objects, as in mathematics, but only as regards their form as phenomena; whether there can exist things which must be intuited in this form is not thereby established. All mathematical conceptions, therefore, are not per se cognition, except in so far as we presuppose that there exist things which can only be represented conformably to the form of our pure sensuous intuition. But things in space and time are given only in so far as they are perceptions (representations accompanied with sensation), therefore only by empirical representation. Consequently the pure conceptions of the understanding, even when they are applied to intuitions a priori (as in mathematics), produce cognition only in so far as these (and therefore the conceptions of the understanding by means of them) can be applied to empirical intuitions. Consequently the categories do not, even by means of pure intuition afford us any cognition of things; they can only do so in so far as they can be applied to empirical intuition. That is to say, the categories serve only to render empirical cognition possible. But this is what we call experience. Consequently, in cognition, their application to objects of experience is the only legitimate use of the categories.

SS 19.

The foregoing proposition is of the utmost importance, for it determines the limits of the exercise of the pure conceptions of the understanding in regard to objects, just as transcendental aesthetic determined the limits of the exercise of the pure form of our sensuous intuition. Space and time, as conditions of the possibility of the presentation of objects to us, are valid no further than for objects of sense, consequently, only for experience. Beyond these limits they represent to us nothing, for they belong only to sense, and have no reality apart from it. The pure conceptions of the understanding are free from this limitation, and extend to objects of intuition in general, be the intuition like or unlike to ours, provided only it be sensuous, and not intellectual. But this extension of conceptions beyond the range of our intuition is of no advantage; for they are then mere empty conceptions of objects, as to the possibility or impossibility of the existence of which they furnish us with no means of discovery. They are mere forms of thought, without objective reality, because we have no intuition to which the synthetical unity of apperception, which alone the categories contain, could be applied, for the purpose of determining an object. Our sensuous and empirical intuition can alone give them significance and meaning.

If, then, we suppose an object of a non-sensuous intuition to be given we can in that case represent it by all those predicates which are implied in the presupposition that nothing appertaining to sensuous intuition belongs to it; for example, that it is not extended, or in space; that its duration is not time; that in it no change (the effect of the determinations in time) is to be met with, and so on. But it is no proper knowledge if I merely indicate what the intuition of the object is not, without being able to say what is contained in it, for I have not shown the possibility of an object to which my pure conception of understanding could be applicable, because I have not been able to furnish any intuition corresponding to

it, but am only able to say that our intuition is not valid for it. But the most important point is this, that to a something of this kind not one category can be found applicable. Take, for example, the conception of substance, that is, something that can exist as subject, but never as mere predicate; in regard to this conception I am quite ignorant whether there can really be anything to correspond to such a determination of thought, if empirical intuition did not afford me the occasion for its application. But of this more in the sequel.

SS 20. Of the Application of the Categories to Objects of the Senses in general.

The pure conceptions of the understanding apply to objects of intuition in general, through the understanding alone, whether the intuition be our own or some other, provided only it be sensuous, but are, for this very reason, mere forms of thought, by means of which alone no determined object can be cognized. The synthesis or conjunction of the manifold in these conceptions relates, we have said, only to the unity of apperception, and is for this reason the ground of the possibility of a priori cognition, in so far as this cognition is dependent on the understanding. This synthesis is, therefore, not merely transcendental, but also purely intellectual. But because a certain form of sensuous intuition exists in the mind a priori which rests on the receptivity of the representative faculty (sensibility), the understanding, as a spontaneity, is able to determine the internal sense by means of the diversity of given representations, conformably to the synthetical unity of apperception, and thus to cogitate the synthetical unity of the apperception of the manifold of sensuous intuition a priori, as the condition to which must necessarily be submitted all objects of human intuition. And in this manner the categories as mere forms of thought receive objective reality, that is, application to objects which are given to us in intuition, but that only as phenomena, for it is only of phenomena that we are capable of a priori intuition.

This synthesis of the manifold of sensuous intuition, which is possible and necessary a priori, may be called figurative (synthesis speciosa), in contradistinction to that which is cogitated in the mere category in regard to the manifold of an intuition in general, and is called connection or conjunction of the understanding (synthesis intellectualis). Both are transcendental, not merely because they themselves precede a priori all experience, but also because they form the basis for the possibility of other cognition a priori.

But the figurative synthesis, when it has relation only to the originally synthetical unity of apperception, that is to the transcendental unity cogitated in the categories, must, to be distinguished from the purely intellectual conjunction, be entitled the transcendental synthesis of imagination. Imagination is the faculty of representing an object even without its presence in intuition. Now, as all our intuition is sensuous, imagination, by reason of the subjective condition under which alone it can give a corresponding intuition to the conceptions of the understanding, belongs to sensibility. But in so far as the synthesis of the imagination is an act of spontaneity, which is determinative, and not, like sense, merely determinable, and which is consequently able to determine sense a priori, according to its form, conformably to the unity of apperception, in so far is the imagination a faculty of determining sensibility a priori, and its synthesis of intuitions according to the categories must be the transcendental synthesis of the imagination. It is an operation of the understanding on sensibility, and the first application of the understanding to objects of possible intuition, and at the same time the basis for the exercise of the other functions of that faculty. As figurative, it is distinguished from the merely intellectual synthesis, which is produced by the understanding alone, without the aid of imagination. Now, in so far as imagination is spontaneity, I sometimes call it also the productive imagination, and distinguish it from the reproductive, the synthesis of which is subject entirely to empirical laws, those of association, namely, and which, therefore, contributes nothing to the explanation of the possibility of a priori cognition, and for this reason belongs not to transcendental philosophy, but to psychology.

We have now arrived at the proper place for explaining the paradox which must have struck every one in our exposition of the internal sense (SS 6), namely — how this sense represents us to our own

consciousness, only as we appear to ourselves, not as we are in ourselves, because, to wit, we intuite ourselves only as we are inwardly affected. Now this appears to be contradictory, inasmuch as we thus stand in a passive relation to ourselves; and therefore in the systems of psychology, the internal sense is commonly held to be one with the faculty of apperception, while we, on the contrary, carefully distinguish them.

That which determines the internal sense is the understanding, and its original power of conjoining the manifold of intuition, that is, of bringing this under an apperception (upon which rests the possibility of the understanding itself). Now, as the human understanding is not in itself a faculty of intuition, and is unable to exercise such a power, in order to conjoin, as it were, the manifold of its own intuition, the synthesis of understanding is, considered per se, nothing but the unity of action, of which, as such, it is self-conscious, even apart from sensibility, by which, moreover, it is able to determine our internal sense in respect of the manifold which may be presented to it according to the form of sensuous intuition. Thus, under the name of a transcendental synthesis of imagination, the understanding exercises an activity upon the passive subject, whose faculty it is; and so we are right in saying that the internal sense is affected thereby. Apperception and its synthetical unity are by no means one and the same with the internal sense. The former, as the source of all our synthetical conjunction, applies, under the name of the categories, to the manifold of intuition in general, prior to all sensuous intuition of objects. The internal sense, on the contrary, contains merely the form of intuition, but without any synthetical conjunction of the manifold therein, and consequently does not contain any determined intuition, which is possible only through consciousness of the determination of the manifold by the transcendental act of the imagination (synthetical influence of the understanding on the internal sense), which I have named figurative synthesis.

This we can indeed always perceive in ourselves. We cannot cogitate a geometrical line without drawing it in thought, nor a circle without describing it, nor represent the three dimensions of space without drawing three lines from the same point perpendicular to one another. We cannot even cogitate time, unless, in drawing a straight line (which is to serve as the external figurative representation of time), we fix our attention on the act of the synthesis of the manifold, whereby we determine successively the internal sense, and thus attend also to the succession of this determination. Motion as an act of the subject (not as a determination of an object),* consequently the synthesis of the manifold in space, if we make abstraction of space and attend merely to the act by which we determine the internal sense according to its form, is that which produces the conception of succession. The understanding, therefore, does by no means find in the internal sense any such synthesis of the manifold, but produces it, in that it affects this sense. At the same time, how “I who think” is distinct from the “I” which intuites itself (other modes of intuition being cogitable as at least possible), and yet one and the same with this latter as the same subject; how, therefore, I am able to say: “I, as an intelligence and thinking subject, cognize myself as an object thought, so far as I am, moreover, given to myself in intuition — only, like other phenomena, not as I am in myself, and as considered by the understanding, but merely as I appear” — is a question that has in it neither more nor less difficulty than the question— “How can I be an object to myself?” or this— “How I can be an object of my own intuition and internal perceptions?” But that such must be the fact, if we admit that space is merely a pure form of the phenomena of external sense, can be clearly proved by the consideration that we cannot represent time, which is not an object of external intuition, in any other way than under the image of a line, which we draw in thought, a mode of representation without which we could not cognize the unity of its dimension, and also that we are necessitated to take our determination of periods of time, or of points of time, for all our internal perceptions from the changes which we perceive in outward things. It follows that we must arrange the determinations of the internal sense, as phenomena in time, exactly in the same manner as we arrange those of the external senses in space. And consequently, if we grant, respecting this latter, that by means of them we know objects only in so far as we are affected externally, we must also confess, with regard to the internal sense, that by means of it we intuite ourselves

only as we are internally affected by ourselves; in other words, as regards internal intuition, we cognize our own subject only as phenomenon, and not as it is in itself.* *

[Footnote: Motion of an object in space does not belong to a pure science, consequently not to geometry; because, that a thing is movable cannot be known a priori, but only from experience. But motion, considered as the description of a space, is a pure act of the successive synthesis of the manifold in external intuition by means of productive imagination, and belongs not only to geometry, but even to transcendental philosophy.]

[Footnote: I do not see why so much difficulty should be found in admitting that our internal sense is affected by ourselves. Every act of attention exemplifies it. In such an act the understanding determines the internal sense by the synthetical conjunction which it cogitates, conformably to the internal intuition which corresponds to the manifold in the synthesis of the understanding. How much the mind is usually affected thereby every one will be able to perceive in himself.]

SS 21.

On the other hand, in the transcendental synthesis of the manifold content of representations, consequently in the synthetical unity of apperception, I am conscious of myself, not as I appear to myself, nor as I am in myself, but only that "I am." This representation is a thought, not an intuition. Now, as in order to cognize ourselves, in addition to the act of thinking, which subjects the manifold of every possible intuition to the unity of apperception, there is necessary a determinate mode of intuition, whereby this manifold is given; although my own existence is certainly not mere phenomenon (much less mere illusion), the determination of my existence* Can only take place conformably to the form of the internal sense, according to the particular mode in which the manifold which I conjoin is given in internal intuition, and I have therefore no knowledge of myself as I am, but merely as I appear to myself. The consciousness of self is thus very far from a knowledge of self, in which I do not use the categories, whereby I cogitate an object, by means of the conjunction of the manifold in one apperception. In the same way as I require, for the sake of the cognition of an object distinct from myself, not only the thought of an object in general (in the category), but also an intuition by which to determine that general conception, in the same way do I require, in order to the cognition of myself, not only the consciousness of myself or the thought that I think myself, but in addition an intuition of the manifold in myself, by which to determine this thought. It is true that I exist as an intelligence which is conscious only of its faculty of conjunction or synthesis, but subjected in relation to the manifold which this intelligence has to conjoin to a limitative conjunction called the internal sense. My intelligence (that is, I) can render that conjunction or synthesis perceptible only according to the relations of time, which are quite beyond the proper sphere of the conceptions of the understanding and consequently cognize itself in respect to an intuition (which cannot possibly be intellectual, nor given by the understanding), only as it appears to itself, and not as it would cognize itself, if its intuition were intellectual.

[Footnote: The "I think" expresses the act of determining my own existence. My existence is thus already given by the act of consciousness; but the mode in which I must determine my existence, that is, the mode in which I must place the manifold belonging to my existence, is not thereby given. For this purpose intuition of self is required, and this intuition possesses a form given a priori, namely, time, which is sensuous, and belongs to our receptivity of the determinable. Now, as I do not possess another intuition of self which gives the determining in me (of the spontaneity of which I am conscious), prior to the act of determination, in the same manner as time gives the determinable, it is clear that I am unable to determine my own existence as that of a spontaneous being, but I am only able to represent to myself the spontaneity of my thought, that is, of my determination, and my existence remains ever determinable in a purely sensuous manner, that is to say, like the existence of a phenomenon. But it is because of this spontaneity that I call myself an intelligence.]

SS 22. Transcendental Deduction of the universally possible employment in experience of the Pure Conceptions of the Understanding.

In the metaphysical deduction, the a priori origin of categories was proved by their complete accordance with the general logical of thought; in the transcendental deduction was exhibited the possibility of the categories as a priori cognitions of objects of an intuition in general (SS 16 and 17).At present we are about to explain the possibility of cognizing, a priori, by means of the categories, all objects which can possibly be presented to our senses, not, indeed, according to the form of their intuition, but according to the laws of their conjunction or synthesis, and thus, as it were, of prescribing laws to nature and even of rendering nature possible. For if the categories were inadequate to this task, it would not be evident to us why everything that is presented to our senses must be subject to those laws which have an a priori origin in the understanding itself.

I premise that by the term synthesis of apprehension I understand the combination of the manifold in an empirical intuition, whereby perception, that is, empirical consciousness of the intuition (as phenomenon), is possible.

We have a priori forms of the external and internal sensuous intuition in the representations of space and time, and to these must the synthesis of apprehension of the manifold in a phenomenon be always comformable, because the synthesis itself can only take place according to these forms. But space and time are not merely forms of sensuous intuition, but intuitions themselves (which contain a manifold), and therefore contain a priori the determination of the unity of this manifold.* (See the Transcendent Aesthetic.) Therefore is unity of the synthesis of the manifold without or within us, consequently also a conjunction to which all that is to be represented as determined in space or time must correspond, given a priori along with (not in) these intuitions, as the condition of the synthesis of all apprehension of them. But this synthetical unity can be no other than that of the conjunction of the manifold of a given intuition in general, in a primitive act of consciousness, according to the categories, but applied to our sensuous intuition. Consequently all synthesis, whereby alone is even perception possible, is subject to the categories. And, as experience is cognition by means of conjoined perceptions, the categories are conditions of the possibility of experience and are therefore valid a priori for all objects of experience.

[Footnote: Space represented as an object (as geometry really requires it to be) contains more than the mere form of the intuition; namely, a combination of the manifold given according to the form of sensibility into a representation that can be intuited; so that the form of the intuition gives us merely the manifold, but the formal intuition gives unity of representation. In the aesthetic, I regarded this unity as belonging entirely to sensibility, for the purpose of indicating that it antecedes all conceptions, although it presupposes a synthesis which does not belong to sense, through which alone, however, all our conceptions of space and time are possible. For as by means of this unity alone (the understanding determining the sensibility) space and time are given as intuitions, it follows that the unity of this intuition a priori belongs to space and time, and not to the conception of the understanding (SS 20).]

When, then, for example, I make the empirical intuition of a house by apprehension of the manifold contained therein into a perception, the necessary unity of space and of my external sensuous intuition lies at the foundation of this act, and I, as it were, draw the form of the house conformably to this synthetical unity of the manifold in space. But this very synthetical unity remains, even when I abstract the form of space, and has its seat in the understanding, and is in fact the category of the synthesis of the homogeneous in an intuition; that is to say, the category of quantity, to which the aforesaid synthesis of apprehension, that is, the perception, must be completely conformable.*

[Footnote: In this manner it is proved, that the synthesis of apprehension, which is empirical, must necessarily be conformable to the synthesis of apperception, which is intellectual, and contained a priori in the category. It is one and the same spontaneity which at one time, under the

name of imagination, at another under that of understanding, produces conjunction in the manifold of intuition.]

To take another example, when I perceive the freezing of water, I apprehend two states (fluidity and solidity), which, as such, stand toward each other mutually in a relation of time. But in the time, which I place as an internal intuition, at the foundation of this phenomenon, I represent to myself synthetical unity of the manifold, without which the aforesaid relation could not be given in an intuition as determined (in regard to the succession of time). Now this synthetical unity, as the a priori condition under which I conjoin the manifold of an intuition, is, if I make abstraction of the permanent form of my internal intuition (that is to say, of time), the category of cause, by means of which, when applied to my sensibility, I determine everything that occurs according to relations of time. Consequently apprehension in such an event, and the event itself, as far as regards the possibility of its perception, stands under the conception of the relation of cause and effect: and so in all other cases.

Categories are conceptions which prescribe laws a priori to phenomena, consequently to nature as the complex of all phenomena (natura materialiter spectata). And now the question arises — inasmuch as these categories are not derived from nature, and do not regulate themselves according to her as their model (for in that case they would be empirical) — how it is conceivable that nature must regulate herself according to them, in other words, how the categories can determine a priori the synthesis of the manifold of nature, and yet not derive their origin from her. The following is the solution of this enigma.

It is not in the least more difficult to conceive how the laws of the phenomena of nature must harmonize with the understanding and with its a priori form — that is, its faculty of conjoining the manifold — than it is to understand how the phenomena themselves must correspond with the a priori form of our sensuous intuition. For laws do not exist in the phenomena any more than the phenomena exist as things in themselves. Laws do not exist except by relation to the subject in which the phenomena inhere, in so far as it possesses understanding, just as phenomena have no existence except by relation to the same existing subject in so far as it has senses. To things as things in themselves, conformability to law must necessarily belong independently of an understanding to cognize them. But phenomena are only representations of things which are utterly unknown in respect to what they are in themselves. But as mere representations, they stand under no law of conjunction except that which the conjoining faculty prescribes. Now that which conjoins the manifold of sensuous intuition is imagination, a mental act to which understanding contributes unity of intellectual synthesis, and sensibility, manifoldness of apprehension. Now as all possible perception depends on the synthesis of apprehension, and this empirical synthesis itself on the transcendental, consequently on the categories, it is evident that all possible perceptions, and therefore everything that can attain to empirical consciousness, that is, all phenomena of nature, must, as regards their conjunction, be subject to the categories. And nature (considered merely as nature in general) is dependent on them, as the original ground of her necessary conformability to law (as natura formaliter spectata). But the pure faculty (of the understanding) of prescribing laws a priori to phenomena by means of mere categories, is not competent to enounce other or more laws than those on which a nature in general, as a conformability to law of phenomena of space and time, depends. Particular laws, inasmuch as they concern empirically determined phenomena, cannot be entirely deduced from pure laws, although they all stand under them. Experience must be superadded in order to know these particular laws; but in regard to experience in general, and everything that can be cognized as an object thereof, these a priori laws are our only rule and guide.

SS 23. Result of this Deduction of the Conceptions of the Understanding.

We cannot think any object except by means of the categories; we cannot cognize any thought except by means of intuitions corresponding to these conceptions. Now all our intuitions are sensuous, and our cognition, in so far as the object of it is given, is empirical. But empirical cognition is experience;

consequently no a priori cognition is possible for us, except of objects of possible experience.*

[Footnote: Lest my readers should stumble at this assertion, and the conclusions that may be too rashly drawn from it, I must remind them that the categories in the act of thought are by no means limited by the conditions of our sensuous intuition, but have an unbounded sphere of action. It is only the cognition of the object of thought, the determining of the object, which requires intuition. In the absence of intuition, our thought of an object may still have true and useful consequences in regard to the exercise of reason by the subject. But as this exercise of reason is not always directed on the determination of the object, in other words, on cognition thereof, but also on the determination of the subject and its volition, I do not intend to treat of it in this place.]

But this cognition, which is limited to objects of experience, is not for that reason derived entirely, from, experience, but — and this is asserted of the pure intuitions and the pure conceptions of the understanding — there are, unquestionably, elements of cognition, which exist in the mind a priori. Now there are only two ways in which a necessary harmony of experience with the conceptions of its objects can be cogitated. Either experience makes these conceptions possible, or the conceptions make experience possible. The former of these statements will not bold good with respect to the categories (nor in regard to pure sensuous intuition), for they are a priori conceptions, and therefore independent of experience. The assertion of an empirical origin would attribute to them a sort of generatio aequivoca. Consequently, nothing remains but to adopt the second alternative (which presents us with a system, as it were, of the epigenesis of pure reason), namely, that on the part of the understanding the categories do contain the grounds of the possibility of all experience. But with respect to the questions how they make experience possible, and what are the principles of the possibility thereof with which they present us in their application to phenomena, the following section on the transcendental exercise of the faculty of judgement will inform the reader.

It is quite possible that someone may propose a species of preformation-system of pure reason — a middle way between the two — to wit, that the categories are neither innate and first a priori principles of cognition, nor derived from experience, but are merely subjective aptitudes for thought implanted in us contemporaneously with our existence, which were so ordered and disposed by our Creator, that their exercise perfectly harmonizes with the laws of nature which regulate experience. Now, not to mention that with such an hypothesis it is impossible to say at what point we must stop in the employment of predetermined aptitudes, the fact that the categories would in this case entirely lose that character of necessity which is essentially involved in the very conception of them, is a conclusive objection to it. The conception of cause, for example, which expresses the necessity of an effect under a presupposed condition, would be false, if it rested only upon such an arbitrary subjective necessity of uniting certain empirical representations according to such a rule of relation. I could not then say— “The effect is connected with its cause in the object (that is, necessarily),” but only, “I am so constituted that I can think this representation as so connected, and not otherwise.” Now this is just what the sceptic wants. For in this case, all our knowledge, depending on the supposed objective validity of our judgement, is nothing but mere illusion; nor would there be wanting people who would deny any such subjective necessity in respect to themselves, though they must feel it. At all events, we could not dispute with any one on that which merely depends on the manner in which his subject is organized.

Short view of the above Deduction.

The foregoing deduction is an exposition of the pure conceptions of the understanding (and with them of all theoretical a priori cognition), as principles of the possibility of experience, but of experience as the determination of all phenomena in space and time in general — of experience, finally, from the principle of the original synthetical unity of apperception, as the form of the understanding in relation to time and space as original forms of sensibility.

I consider the division by paragraphs to be necessary only up to this point, because we had to treat of

the elementary conceptions. As we now proceed to the exposition of the employment of these, I shall not designate the chapters in this manner any further.

BOOK II.

Analytic of Principles.

General logic is constructed upon a plan which coincides exactly with the division of the higher faculties of cognition. These are, understanding, judgement, and reason. This science, accordingly, treats in its analytic of conceptions, judgements, and conclusions in exact correspondence with the functions and order of those mental powers which we include generally under the generic denomination of understanding.

As this merely formal logic makes abstraction of all content of cognition, whether pure or empirical, and occupies itself with the mere form of thought (discursive cognition), it must contain in its analytic a canon for reason. For the form of reason has its law, which, without taking into consideration the particular nature of the cognition about which it is employed, can be discovered a priori, by the simple analysis of the action of reason into its momenta.

Transcendental logic, limited as it is to a determinate content, that of pure a priori cognitions, to wit, cannot imitate general logic in this division. For it is evident that the transcendental employment of reason is not objectively valid, and therefore does not belong to the logic of truth (that is, to analytic), but as a logic of illusion, occupies a particular department in the scholastic system under the name of transcendental dialectic.

Understanding and judgement accordingly possess in transcendental logic a canon of objectively valid, and therefore true exercise, and are comprehended in the analytical department of that logic. But reason, in her endeavours to arrive by a priori means at some true statement concerning objects and to extend cognition beyond the bounds of possible experience, is altogether dialectic, and her illusory assertions cannot be constructed into a canon such as an analytic ought to contain.

Accordingly, the analytic of principles will be merely a canon for the faculty of judgement, for the instruction of this faculty in its application to phenomena of the pure conceptions of the understanding, which contain the necessary condition for the establishment of a priori laws. On this account, although the subject of the following chapters is the especial principles of understanding, I shall make use of the term Doctrine of the faculty of judgement, in order to define more particularly my present purpose.

INTRODUCTION. Of the Transcendental Faculty of judgement in General.

If understanding in general be defined as the faculty of laws or rules, the faculty of judgement may be termed the faculty of subsumption under these rules; that is, of distinguishing whether this or that does or does not stand under a given rule (casus datae legis). General logic contains no directions or precepts for the faculty of judgement, nor can it contain any such. For as it makes abstraction of all content of cognition, no duty is left for it, except that of exposing analytically the mere form of cognition in conceptions, judgements, and conclusions, and of thereby establishing formal rules for all exercise of the understanding. Now if this logic wished to give some general direction how we should subsume under these rules, that is, how we should distinguish whether this or that did or did not stand under them, this again could not be done otherwise than by means of a rule. But this rule, precisely because it is a rule, requires for itself direction from the faculty of judgement. Thus, it is evident that the understanding is capable of being instructed by rules, but that the judgement is a peculiar talent, which does not, and cannot require tuition, but only exercise. This faculty is therefore the specific quality of the so-called mother wit, the want of which no scholastic discipline can compensate.

For although education may furnish, and, as it were, engraft upon a limited understanding rules borrowed from other minds, yet the power of employing these rules correctly must belong to the pupil himself; and no rule which we can prescribe to him with this purpose is, in the absence or deficiency of this gift of nature, secure from misuse.* A physician therefore, a judge or a statesman, may have in his head many admirable pathological, juridical, or political rules, in a degree that may enable him to be a profound teacher in his particular science, and yet in the application of these rules he may very possibly blunder — either because he is wanting in natural judgement (though not in understanding) and, whilst he can comprehend the general in abstracto, cannot distinguish whether a particular case in concreto ought to rank under the former; or because his faculty of judgement has not been sufficiently exercised by examples and real practice. Indeed, the grand and only use of examples, is to sharpen the judgement. For as regards the correctness and precision of the insight of the understanding, examples are commonly injurious rather than otherwise, because, as casus in terminis they seldom adequately fulfil the conditions of the rule. Besides, they often weaken the power of our understanding to apprehend rules or laws in their universality, independently of particular circumstances of experience; and hence, accustom us to employ them more as formulae than as principles. Examples are thus the go-cart of the judgement, which he who is naturally deficient in that faculty cannot afford to dispense with.

[Footnote: Deficiency in judgement is properly that which is called stupidity; and for such a failing we know no remedy. A dull or narrow-minded person, to whom nothing is wanting but a proper degree of understanding, may be improved by tuition, even so far as to deserve the epithet of learned. But as such persons frequently labour under a deficiency in the faculty of judgement, it is not uncommon to find men extremely learned who in the application of their science betray a lamentable degree this irremediable want.]

But although general logic cannot give directions to the faculty of judgement, the case is very different as regards transcendental logic, insomuch that it appears to be the especial duty of the latter to secure and direct, by means of determinate rules, the faculty of judgement in the employment of the pure understanding. For, as a doctrine, that is, as an endeavour to enlarge the sphere of the understanding in regard to pure a priori cognitions, philosophy is worse than useless, since from all the attempts hitherto made, little or no ground has been gained. But, as a critique, in order to guard against the mistakes of the

faculty of judgement (lapsus judicii) in the employment of the few pure conceptions of the understanding which we possess, although its use is in this case purely negative, philosophy is called upon to apply all its acuteness and penetration.

But transcendental philosophy has this peculiarity, that besides indicating the rule, or rather the general condition for rules, which is given in the pure conception of the understanding, it can, at the same time, indicate a priori the case to which the rule must be applied. The cause of the superiority which, in this respect, transcendental philosophy possesses above all other sciences except mathematics, lies in this: it treats of conceptions which must relate a priori to their objects, whose objective validity consequently cannot be demonstrated a posteriori, and is, at the same time, under the obligation of presenting in general but sufficient tests, the conditions under which objects can be given in harmony with those conceptions; otherwise they would be mere logical forms, without content, and not pure conceptions of the understanding.

Our transcendental doctrine of the faculty of judgement will contain two chapters. The first will treat of the sensuous condition under which alone pure conceptions of the understanding can be employed — that is, of the schematism of the pure understanding. The second will treat of those synthetical judgements which are derived a priori from pure conceptions of the understanding under those conditions, and which lie a priori at the foundation of all other cognitions, that is to say, it will treat of the principles of the pure understanding.

TRANSCENDENTAL DOCTRINE OF THE FACULTY OF JUDGEMENT OR, ANALYTIC OF PRINCIPLES.

CHAPTER I. Of the Schematism at of the Pure Conceptions of the

Understanding.

In all subsumptions of an object under a conception, the representation of the object must be homogeneous with the conception; in other words, the conception must contain that which is represented in the object to be subsumed under it. For this is the meaning of the expression: “An object is contained under a conception.” Thus the empirical conception of a plate is homogeneous with the pure geometrical conception of a circle, inasmuch as the roundness which is cogitated in the former is intuited in the latter.

But pure conceptions of the understanding, when compared with empirical intuitions, or even with sensuous intuitions in general, are quite heterogeneous, and never can be discovered in any intuition. How then is the subsumption of the latter under the former, and consequently the application of the categories to phenomena, possible? — For it is impossible to say, for example: “Causality can be intuited through the senses and is contained in the phenomenon.” — This natural and important question forms the real cause of the necessity of a transcendental doctrine of the faculty of judgement, with the purpose, to wit, of showing how pure conceptions of the understanding can be applied to phenomena. In all other sciences, where the conceptions by which the object is thought in the general are not so different and heterogeneous from those which represent the object in concreto — as it is given, it is quite unnecessary to institute any special inquiries concerning the application of the former to the latter.

Now it is quite clear that there must be some third thing, which on the one side is homogeneous with the category, and with the phenomenon on the other, and so makes the application of the former to the latter possible. This mediating representation must be pure (without any empirical content), and yet must on the one side be intellectual, on the other sensuous. Such a representation is the transcendental schema.

The conception of the understanding contains pure synthetical unity of the manifold in general. Time, as the formal condition of the manifold of the internal sense, consequently of the conjunction of all representations, contains a priori a manifold in the pure intuition. Now a transcendental determination of time is so far homogeneous with the category, which constitutes the unity thereof, that it is universal and rests upon a rule a priori. On the other hand, it is so far homogeneous with the phenomenon, inasmuch as time is contained in every empirical representation of the manifold. Thus an application of the category to phenomena becomes possible, by means of the transcendental determination of time, which, as the schema of the conceptions of the understanding, mediates the subsumption of the latter under the former.

After what has been proved in our deduction of the categories, no one, it is to be hoped, can hesitate as to the proper decision of the question, whether the employment of these pure conceptions of the understanding ought to be merely empirical or also transcendental; in other words, whether the categories, as conditions of a possible experience, relate a priori solely to phenomena, or whether, as conditions of the possibility of things in general, their application can be extended to objects as things in themselves. For we have there seen that conceptions are quite impossible, and utterly without signification, unless either to them, or at least to the elements of which they consist, an object be given; and that, consequently, they cannot possibly apply to objects as things in themselves without regard to the question whether and how these may be given to us; and, further, that the only manner in which objects can be given to us is by means of the modification of our sensibility; and, finally, that pure a priori conceptions, in addition to the function of the understanding in the category, must contain a priori formal conditions of sensibility (of the internal sense, namely), which again contain the general condition under which alone the category can be applied to any object. This formal and pure condition of sensibility, to which the conception of the understanding is restricted in its employment, we shall name the schema of the conception of the

understanding, and the procedure of the understanding with these schemata we shall call the schematism of the pure understanding.

The schema is, in itself, always a mere product of the imagination. But, as the synthesis of imagination has for its aim no single intuition, but merely unity in the determination of sensibility, the schema is clearly distinguishable from the image. Thus, if I place five points one after another.... this is an image of the number five. On the other hand, if I only think a number in general, which may be either five or a hundred, this thought is rather the representation of a method of representing in an image a sum (e.g., a thousand) in conformity with a conception, than the image itself, an image which I should find some little difficulty in reviewing, and comparing with the conception. Now this representation of a general procedure of the imagination to present its image to a conception, I call the schema of this conception.

In truth, it is not images of objects, but schemata, which lie at the foundation of our pure sensuous conceptions. No image could ever be adequate to our conception of a triangle in general. For the generalness of the conception it never could attain to, as this includes under itself all triangles, whether right-angled, acute-angled, etc., whilst the image would always be limited to a single part of this sphere. The schema of the triangle can exist nowhere else than in thought, and it indicates a rule of the synthesis of the imagination in regard to pure figures in space. Still less is an object of experience, or an image of the object, ever to the empirical conception. On the contrary, the conception always relates immediately to the schema of the imagination, as a rule for the determination of our intuition, in conformity with a certain general conception. The conception of a dog indicates a rule, according to which my imagination can delineate the figure of a four-footed animal in general, without being limited to any particular individual form which experience presents to me, or indeed to any possible image that I can represent to myself in concreto. This schematism of our understanding in regard to phenomena and their mere form, is an art, hidden in the depths of the human soul, whose true modes of action we shall only with difficulty discover and unveil. Thus much only can we say: “The image is a product of the empirical faculty of the productive imagination — the schema of sensuous conceptions (of figures in space, for example) is a product, and, as it were, a monogram of the pure imagination a priori, whereby and according to which images first become possible, which, however, can be connected with the conception only mediately by means of the schema which they indicate, and are in themselves never fully adequate to it.” On the other hand, the schema of a pure conception of the understanding is something that cannot be reduced into any image — it is nothing else than the pure synthesis expressed by the category, conformably, to a rule of unity according to conceptions. It is a transcendental product of the imagination, a product which concerns the determination of the internal sense, according to conditions of its form (time) in respect to all representations, in so far as these representations must be conjoined a priori in one conception, conformably to the unity of apperception.

Without entering upon a dry and tedious analysis of the essential requisites of transcendental schemata of the pure conceptions of the understanding, we shall rather proceed at once to give an explanation of them according to the order of the categories, and in connection therewith.

For the external sense the pure image of all quantities (quantorum) is space; the pure image of all objects of sense in general, is time. But the pure schema of quantity (quantitatis) as a conception of the understanding, is number, a representation which comprehends the successive addition of one to one (homogeneous quantities). Thus, number is nothing else than the unity of the synthesis of the manifold in a homogeneous intuition, by means of my generating time itself in my apprehension of the intuition.

Reality, in the pure conception of the understanding, is that which corresponds to a sensation in general; that, consequently, the conception of which indicates a being (in time). Negation is that the conception of which represents a not-being (in time). The opposition of these two consists therefore in the difference of one and the same time, as a time filled or a time empty. Now as time is only the form of intuition, consequently of objects as phenomena, that which in objects corresponds to sensation is the

transcendental matter of all objects as things in themselves (Sachheit, reality). Now every sensation has a degree or quantity by which it can fill time, that is to say, the internal sense in respect of the representation of an object, more or less, until it vanishes into nothing (= 0 = negatio). Thus there is a relation and connection between reality and negation, or rather a transition from the former to the latter, which makes every reality representable to us as a quantum; and the schema of a reality as the quantity of something in so far as it fills time, is exactly this continuous and uniform generation of the reality in time, as we descend in time from the sensation which has a certain degree, down to the vanishing thereof, or gradually ascend from negation to the quantity thereof.

The schema of substance is the permanence of the real in time; that is, the representation of it as a substratum of the empirical determination of time; a substratum which therefore remains, whilst all else changes. (Time passes not, but in it passes the existence of the changeable. To time, therefore, which is itself unchangeable and permanent, corresponds that which in the phenomenon is unchangeable in existence, that is, substance, and it is only by it that the succession and coexistence of phenomena can be determined in regard to time.)

The schema of cause and of the causality of a thing is the real which, when posited, is always followed by something else. It consists, therefore, in the succession of the manifold, in so far as that succession is subjected to a rule.

The schema of community (reciprocity of action and reaction), or the reciprocal causality of substances in respect of their accidents, is the coexistence of the determinations of the one with those of the other, according to a general rule.

The schema of possibility is the accordance of the synthesis of different representations with the conditions of time in general (as, for example, opposites cannot exist together at the same time in the same thing, but only after each other), and is therefore the determination of the representation of a thing at any time.

The schema of reality is existence in a determined time.

The schema of necessity is the existence of an object in all time.

It is clear, from all this, that the schema of the category of quantity contains and represents the generation (synthesis) of time itself, in the successive apprehension of an object; the schema of quality the synthesis of sensation with the representation of time, or the filling up of time; the schema of relation the relation of perceptions to each other in all time (that is, according to a rule of the determination of time): and finally, the schema of modality and its categories, time itself, as the correlative of the determination of an object — whether it does belong to time, and how. The schemata, therefore, are nothing but a priori determinations of time according to rules, and these, in regard to all possible objects, following the arrangement of the categories, relate to the series in time, the content in time, the order in time, and finally, to the complex or totality in time.

Hence it is apparent that the schematism of the understanding, by means of the transcendental synthesis of the imagination, amounts to nothing else than the unity of the manifold of intuition in the internal sense, and thus indirectly to the unity of apperception, as a function corresponding to the internal sense (a receptivity). Thus, the schemata of the pure conceptions of the understanding are the true and only conditions whereby our understanding receives an application to objects, and consequently significance. Finally, therefore, the categories are only capable of empirical use, inasmuch as they serve merely to subject phenomena to the universal rules of synthesis, by means of an a priori necessary unity (on account of the necessary union of all consciousness in one original apperception); and so to render them susceptible of a complete connection in one experience. But within this whole of possible experience lie all our cognitions, and in the universal relation to this experience consists transcendental truth, which antecedes all empirical truth, and renders the latter possible.

It is, however, evident at first sight, that although the schemata of sensibility are the sole agents in

realizing the categories, they do, nevertheless, also restrict them, that is, they limit the categories by conditions which lie beyond the sphere of understanding — namely, in sensibility. Hence the schema is properly only the phenomenon, or the sensuous conception of an object in harmony with the category. (Numerus est quantitas phaenomenon — sensatio realitas phaenomenon; constans et perdurabile rerum substantia phaenomenon — aeternitas, necessitas, phaenomena, etc.) Now, if we remove a restrictive condition, we thereby amplify, it appears, the formerly limited conception. In this way, the categories in their pure signification, free from all conditions of sensibility, ought to be valid of things as they are, and not, as the schemata represent them, merely as they appear; and consequently the categories must have a significance far more extended, and wholly independent of all schemata. In truth, there does always remain to the pure conceptions of the understanding, after abstracting every sensuous condition, a value and significance, which is, however, merely logical. But in this case, no object is given them, and therefore they have no meaning sufficient to afford us a conception of an object. The notion of substance, for example, if we leave out the sensuous determination of permanence, would mean nothing more than a something which can be cogitated as subject, without the possibility of becoming a predicate to anything else. Of this representation I can make nothing, inasmuch as it does not indicate to me what determinations the thing possesses which must thus be valid as premier subject. Consequently, the categories, without schemata are merely functions of the understanding for the production of conceptions, but do not represent any object. This significance they derive from sensibility, which at the same time realizes the understanding and restricts it.

CHAPTER II. System of all Principles of the Pure Understanding.

In the foregoing chapter we have merely considered the general conditions under which alone the transcendental faculty of judgement is justified in using the pure conceptions of the understanding for synthetical judgements. Our duty at present is to exhibit in systematic connection those judgements which the understanding really produces a priori. For this purpose, our table of the categories will certainly afford us the natural and safe guidance. For it is precisely the categories whose application to possible experience must constitute all pure a priori cognition of the understanding; and the relation of which to sensibility will, on that very account, present us with a complete and systematic catalogue of all the transcendental principles of the use of the understanding.

Principles a priori are so called, not merely because they contain in themselves the grounds of other judgements, but also because they themselves are not grounded in higher and more general cognitions. This peculiarity, however, does not raise them altogether above the need of a proof. For although there could be found no higher cognition, and therefore no objective proof, and although such a principle rather serves as the foundation for all cognition of the object, this by no means hinders us from drawing a proof from the subjective sources of the possibility of the cognition of an object. Such a proof is necessary, moreover, because without it the principle might be liable to the imputation of being a mere gratuitous assertion.

In the second place, we shall limit our investigations to those principles which relate to the categories. For as to the principles of transcendental aesthetic, according to which space and time are the conditions of the possibility of things as phenomena, as also the restriction of these principles, namely, that they cannot be applied to objects as things in themselves — these, of course, do not fall within the scope of our present inquiry. In like manner, the principles of mathematical science form no part of this system, because they are all drawn from intuition, and not from the pure conception of the understanding. The possibility of these principles, however, will necessarily be considered here, inasmuch as they are synthetical judgements a priori, not indeed for the purpose of proving their accuracy and apodeictic certainty, which is unnecessary, but merely to render conceivable and deduce the possibility of such evident a priori cognitions.

But we shall have also to speak of the principle of analytical judgements, in opposition to synthetical judgements, which is the proper subject of our inquiries, because this very opposition will free the theory of the latter from all ambiguity, and place it clearly before our eyes in its true nature.

SYSTEM OF THE PRINCIPLES OF THE PURE UNDERSTANDING.

SECTION I. Of the Supreme Principle of all Analytical Judgements.

Whatever may be the content of our cognition, and in whatever manner our cognition may be related to its object, the universal, although only negative conditions of all our judgements is that they do not contradict themselves; otherwise these judgements are in themselves (even without respect to the object) nothing. But although there may exist no contradiction in our judgement, it may nevertheless connect conceptions in such a manner that they do not correspond to the object, or without any grounds either a priori or a posteriori for arriving at such a judgement, and thus, without being self-contradictory, a judgement may nevertheless be either false or groundless.

Now, the proposition: “No subject can have a predicate that contradicts it,” is called the principle of contradiction, and is a universal but purely negative criterion of all truth. But it belongs to logic alone, because it is valid of cognitions, merely as cognitions and without respect to their content, and declares that the contradiction entirely nullifies them. We can also, however, make a positive use of this principle,

that is, not merely to banish falsehood and error (in so far as it rests upon contradiction), but also for the cognition of truth. For if the judgement is analytical, be it affirmative or negative, its truth must always be recognizable by means of the principle of contradiction. For the contrary of that which lies and is cogitated as conception in the cognition of the object will be always properly negatived, but the conception itself must always be affirmed of the object, inasmuch as the contrary thereof would be in contradiction to the object.

We must therefore hold the principle of contradiction to be the universal and fully sufficient Principle of all analytical cognition. But as a sufficient criterion of truth, it has no further utility or authority. For the fact that no cognition can be at variance with this principle without nullifying itself, constitutes this principle the sine qua non, but not the determining ground of the truth of our cognition. As our business at present is properly with the synthetical part of our knowledge only, we shall always be on our guard not to transgress this inviolable principle; but at the same time not to expect from it any direct assistance in the establishment of the truth of any synthetical proposition.

There exists, however, a formula of this celebrated principle — a principle merely formal and entirely without content — which contains a synthesis that has been inadvertently and quite unnecessarily mixed up with it. It is this: "It is impossible for a thing to be and not to be at the same time." Not to mention the superfluousness of the addition of the word impossible to indicate the apodeictic certainty, which ought to be self-evident from the proposition itself, the proposition is affected by the condition of time, and as it were says: "A thing = A, which is something = B, cannot at the same time be non-B." But both, B as well as non-B, may quite well exist in succession. For example, a man who is young cannot at the same time be old; but the same man can very well be at one time young, and at another not young, that is, old. Now the principle of contradiction as a merely logical proposition must not by any means limit its application merely to relations of time, and consequently a formula like the preceding is quite foreign to its true purpose. The misunderstanding arises in this way. We first of all separate a predicate of a thing from the conception of the thing, and afterwards connect with this predicate its opposite, and hence do not establish any contradiction with the subject, but only with its predicate, which has been conjoined with the subject synthetically — a contradiction, moreover, which obtains only when the first and second predicate are affirmed in the same time. If I say: "A man who is ignorant is not learned," the condition "at the same time" must be added, for he who is at one time ignorant, may at another be learned. But if I say: "No ignorant man is a learned man," the proposition is analytical, because the characteristic ignorance is now a constituent part of the conception of the subject; and in this case the negative proposition is evident immediately from the proposition of contradiction, without the necessity of adding the condition "the same time." This is the reason why I have altered the formula of this principle — an alteration which shows very clearly the nature of an analytical proposition.

SECTION II. Of the Supreme Principle of all Synthetical Judgements.

The explanation of the possibility of synthetical judgements is a task with which general logic has nothing to do; indeed she needs not even be acquainted with its name. But in transcendental logic it is the most important matter to be dealt with — indeed the only one, if the question is of the possibility of synthetical judgements a priori, the conditions and extent of their validity. For when this question is fully decided, it can reach its aim with perfect ease, the determination, to wit, of the extent and limits of the pure understanding.

In an analytical judgement I do not go beyond the given conception, in order to arrive at some decision respecting it. If the judgement is affirmative, I predicate of the conception only that which was already cogitated in it; if negative, I merely exclude from the conception its contrary. But in synthetical judgements, I must go beyond the given conception, in order to cogitate, in relation with it, something quite different from that which was cogitated in it, a relation which is consequently never one either of identity or contradiction, and by means of which the truth or error of the judgement cannot be discerned

merely from the judgement itself.

Granted, then, that we must go out beyond a given conception, in order to compare it synthetically with another, a third thing is necessary, in which alone the synthesis of two conceptions can originate. Now what is this tertium quid that is to be the medium of all synthetical judgements? It is only a complex in which all our representations are contained, the internal sense to wit, and its form a priori, time.

The synthesis of our representations rests upon the imagination; their synthetical unity (which is requisite to a judgement), upon the unity of apperception. In this, therefore, is to be sought the possibility of synthetical judgements, and as all three contain the sources of a priori representations, the possibility of pure synthetical judgements also; nay, they are necessary upon these grounds, if we are to possess a knowledge of objects, which rests solely upon the synthesis of representations.

If a cognition is to have objective reality, that is, to relate to an object, and possess sense and meaning in respect to it, it is necessary that the object be given in some way or another. Without this, our conceptions are empty, and we may indeed have thought by means of them, but by such thinking we have not, in fact, cognized anything, we have merely played with representation. To give an object, if this expression be understood in the sense of "to present" the object, not mediately but immediately in intuition, means nothing else than to apply the representation of it to experience, be that experience real or only possible. Space and time themselves, pure as these conceptions are from all that is empirical, and certain as it is that they are represented fully a priori in the mind, would be completely without objective validity, and without sense and significance, if their necessary use in the objects of experience were not shown. Nay, the representation of them is a mere schema, that always relates to the reproductive imagination, which calls up the objects of experience, without which they have no meaning. And so it is with all conceptions without distinction.

The possibility of experience is, then, that which gives objective reality to all our a priori cognitions. Now experience depends upon the synthetical unity of phenomena, that is, upon a synthesis according to conceptions of the object of phenomena in general, a synthesis without which experience never could become knowledge, but would be merely a rhapsody of perceptions, never fitting together into any connected text, according to rules of a thoroughly united (possible) consciousness, and therefore never subjected to the transcendental and necessary unity of apperception. Experience has therefore for a foundation, a priori principles of its form, that is to say, general rules of unity in the synthesis of phenomena, the objective reality of which rules, as necessary conditions even of the possibility of experience can which rules, as necessary conditions — even of the possibility of experience — can always be shown in experience. But apart from this relation, a priori synthetical propositions are absolutely impossible, because they have no third term, that is, no pure object, in which the synthetical unity can exhibit the objective reality of its conceptions.

Although, then, respecting space, or the forms which productive imagination describes therein, we do cognize much a priori in synthetical judgements, and are really in no need of experience for this purpose, such knowledge would nevertheless amount to nothing but a busy trifling with a mere chimera, were not space to be considered as the condition of the phenomena which constitute the material of external experience. Hence those pure synthetical judgements do relate, though but mediately, to possible experience, or rather to the possibility of experience, and upon that alone is founded the objective validity of their synthesis.

While then, on the one hand, experience, as empirical synthesis, is the only possible mode of cognition which gives reality to all other synthesis; on the other hand, this latter synthesis, as cognition a priori, possesses truth, that is, accordance with its object, only in so far as it contains nothing more than what is necessary to the synthetical unity of experience.

Accordingly, the supreme principle of all synthetical judgements is: "Every object is subject to the necessary conditions of the synthetical unity of the manifold of intuition in a possible experience."

A priori synthetical judgements are possible when we apply the formal conditions of the a priori intuition, the synthesis of the imagination, and the necessary unity of that synthesis in a transcendental apperception, to a possible cognition of experience, and say: “The conditions of the possibility of experience in general are at the same time conditions of the possibility of the objects of experience, and have, for that reason, objective validity in an a priori synthetical judgement.”

SECTION III. Systematic Representation of all Synthetical Principles of the Pure Understanding.

That principles exist at all is to be ascribed solely to the pure understanding, which is not only the faculty of rules in regard to that which happens, but is even the source of principles according to which everything that can be presented to us as an object is necessarily subject to rules, because without such rules we never could attain to cognition of an object. Even the laws of nature, if they are contemplated as principles of the empirical use of the understanding, possess also a characteristic of necessity, and we may therefore at least expect them to be determined upon grounds which are valid a priori and antecedent to all experience. But all laws of nature, without distinction, are subject to higher principles of the understanding, inasmuch as the former are merely applications of the latter to particular cases of experience. These higher principles alone therefore give the conception, which contains the necessary condition, and, as it were, the exponent of a rule; experience, on the other hand, gives the case which comes under the rule.

There is no danger of our mistaking merely empirical principles for principles of the pure understanding, or conversely; for the character of necessity, according to conceptions which distinguish the latter, and the absence of this in every empirical proposition, how extensively valid soever it may be, is a perfect safeguard against confounding them. There are, however, pure principles a priori, which nevertheless I should not ascribe to the pure understanding — for this reason, that they are not derived from pure conceptions, but (although by the mediation of the understanding) from pure intuitions. But understanding is the faculty of conceptions. Such principles mathematical science possesses, but their application to experience, consequently their objective validity, nay the possibility of such a priori synthetical cognitions (the deduction thereof) rests entirely upon the pure understanding.

On this account, I shall not reckon among my principles those of mathematics; though I shall include those upon the possibility and objective validity a priori, of principles of the mathematical science, which, consequently, are to be looked upon as the principle of these, and which proceed from conceptions to intuition, and not from intuition to conceptions.

In the application of the pure conceptions of the understanding to possible experience, the employment of their synthesis is either mathematical or dynamical, for it is directed partly on the intuition alone, partly on the existence of a phenomenon. But the a priori conditions of intuition are in relation to a possible experience absolutely necessary, those of the existence of objects of a possible empirical intuition are in themselves contingent. Hence the principles of the mathematical use of the categories will possess a character of absolute necessity, that is, will be apodeictic; those, on the other hand, of the dynamical use, the character of an a priori necessity indeed, but only under the condition of empirical thought in an experience, therefore only mediately and indirectly. Consequently they will not possess that immediate evidence which is peculiar to the former, although their application to experience does not, for that reason, lose its truth and certitude. But of this point we shall be better able to judge at the conclusion of this system of principles.

The table of the categories is naturally our guide to the table of principles, because these are nothing else than rules for the objective employment of the former. Accordingly, all principles of the pure understanding are:

	1 Axioms of Intuition	
2 Anticipations of Perception		3 Analogies of Experience
	4 Postulates of Empirical Thought in general	

These appellations I have chosen advisedly, in order that we might not lose sight of the distinctions in respect of the evidence and the employment of these principles. It will, however, soon appear that — a fact which concerns both the evidence of these principles, and the a priori determination of phenomena — according to the categories of quantity and quality (if we attend merely to the form of these), the principles of these categories are distinguishable from those of the two others, in as much as the former are possessed of an intuitive, but the latter of a merely discursive, though in both instances a complete, certitude. I shall therefore call the former mathematical, and the latter dynamical principles.* It must be observed, however, that by these terms I mean just as little in the one case the principles of mathematics as those of general (physical) dynamics in the other. I have here in view merely the principles of the pure understanding, in their application to the internal sense (without distinction of the representations given therein), by means of which the sciences of mathematics and dynamics become possible. Accordingly, I have named these principles rather with reference to their application than their content; and I shall now proceed to consider them in the order in which they stand in the table.

[Footnote: All combination (conjunctio) is either composition (compositio) or connection (nexus). The former is the synthesis of a manifold, the parts of which do not necessarily belong to each other. For example, the two triangles into which a square is divided by a diagonal, do not necessarily belong to each other, and of this kind is the synthesis of the homogeneous in everything that can be mathematically considered. This synthesis can be divided into those of aggregation and coalition, the former of which is applied to extensive, the latter to intensive quantities. The second sort of combination (nexus) is the synthesis of a manifold, in so far as its parts do belong necessarily to each other; for example, the accident to a substance, or the effect to the cause. Consequently it is a synthesis of that which though heterogeneous, is represented as connected a priori. This combination — not an arbitrary one — I entitle dynamical because it concerns the connection of the existence of the manifold. This, again, may be divided into the physical synthesis, of the phenomena divided among each other, and the metaphysical synthesis, or the connection of phenomena a priori in the faculty of cognition.]

1. AXIOMS OF INTUITION.

The principle of these is: All Intuitions are Extensive Quantities.

PROOF.

All phenomena contain, as regards their form, an intuition in space and time, which lies a priori at the foundation of all without exception. Phenomena, therefore, cannot be apprehended, that is, received into empirical consciousness otherwise than through the synthesis of a manifold, through which the representations of a determinate space or time are generated; that is to say, through the composition of the homogeneous and the consciousness of the synthetical unity of this manifold (homogeneous). Now the consciousness of a homogeneous manifold in intuition, in so far as thereby the representation of an object is rendered possible, is the conception of a quantity (quanti). Consequently, even the perception of an object as phenomenon is possible only through the same synthetical unity of the manifold of the given sensuous intuition, through which the unity of the composition of the homogeneous manifold in the conception of a quantity is cogitated; that is to say, all phenomena are quantities, and extensive quantities, because as intuitions in space or time they must be represented by means of the same synthesis through which space and time themselves are determined.

An extensive quantity I call that wherein the representation of the parts renders possible (and therefore necessarily antecedes) the representation of the whole. I cannot represent to myself any line, however small, without drawing it in thought, that is, without generating from a point all its parts one after another, and in this way alone producing this intuition. Precisely the same is the case with every, even the smallest, portion of time. I cogitate therein only the successive progress from one moment to another, and hence, by means of the different portions of time and the addition of them, a determinate quantity of time is produced. As the pure intuition in all phenomena is either time or space, so is every phenomenon in its character of intuition an extensive quantity, inasmuch as it can only be cognized in our apprehension by successive synthesis (from part to part). All phenomena are, accordingly, to be considered as aggregates, that is, as a collection of previously given parts; which is not the case with every sort of quantities, but only with those which are represented and apprehended by us as extensive.

On this successive synthesis of the productive imagination, in the generation of figures, is founded the mathematics of extension, or geometry, with its axioms, which express the conditions of sensuous intuition a priori, under which alone the schema of a pure conception of external intuition can exist; for example, "be tween two points only one straight line is possible," "two straight lines cannot enclose a space," etc. These are the axioms which properly relate only to quantities (quanta) as such.

But, as regards the quantity of a thing (quantitas), that is to say, the answer to the question: "How large is this or that object?" although, in respect to this question, we have various propositions synthetical and immediately certain (indemonstrabilia); we have, in the proper sense of the term, no axioms. For example, the propositions: "If equals be added to equals, the wholes are equal"; "If equals be taken from equals, the remainders are equal"; are analytical, because I am immediately conscious of the identity of the production of the one quantity with the production of the other; whereas axioms must be a priori synthetical propositions. On the other hand, the self-evident propositions as to the relation of numbers, are certainly synthetical but not universal, like those of geometry, and for this reason cannot be called axioms, but numerical formulae. That 7 + 5 = 12 is not an analytical proposition. For neither in the representation of seven, nor of five, nor of the composition of the two numbers, do I cogitate the number twelve. (Whether I cogitate the number in the addition of both, is not at present the question; for in the case of an analytical proposition, the only point is whether I really cogitate the predicate in the representation of the subject.) But although the proposition is synthetical, it is nevertheless only a singular proposition. In so far as regard is here had merely to the synthesis of the homogeneous (the units), it cannot take place except in one manner, although our use of these numbers is afterwards general. If I say: "A triangle can be constructed with three lines, any two of which taken together are greater than the third," I exercise merely the pure function of the productive imagination, which may draw the lines longer or shorter and construct

the angles at its pleasure. On the contrary, the number seven is possible only in one manner, and so is likewise the number twelve, which results from the synthesis of seven and five. Such propositions, then, cannot be termed axioms (for in that case we should have an infinity of these), but numerical formulae.

This transcendental principle of the mathematics of phenomena greatly enlarges our a priori cognition. For it is by this principle alone that pure mathematics is rendered applicable in all its precision to objects of experience, and without it the validity of this application would not be so self-evident; on the contrary, contradictions and confusions have often arisen on this very point. Phenomena are not things in themselves. Empirical intuition is possible only through pure intuition (of space and time); consequently, what geometry affirms of the latter, is indisputably valid of the former. All evasions, such as the statement that objects of sense do not conform to the rules of construction in space (for example, to the rule of the infinite divisibility of lines or angles), must fall to the ground. For, if these objections hold good, we deny to space, and with it to all mathematics, objective validity, and no longer know wherefore, and how far, mathematics can be applied to phenomena. The synthesis of spaces and times as the essential form of all intuition, is that which renders possible the apprehension of a phenomenon, and therefore every external experience, consequently all cognition of the objects of experience; and whatever mathematics in its pure use proves of the former, must necessarily hold good of the latter. All objections are but the chicaneries of an ill-instructed reason, which erroneously thinks to liberate the objects of sense from the formal conditions of our sensibility, and represents these, although mere phenomena, as things in themselves, presented as such to our understanding. But in this case, no a priori synthetical cognition of them could be possible, consequently not through pure conceptions of space and the science which determines these conceptions, that is to say, geometry, would itself be impossible.

2. ANTICIPATIONS OF PERCEPTION.

The principle of these is: In all phenomena the Real, that which is an object of sensation, has Intensive Quantity, that is, has a Degree.

PROOF.

Perception is empirical consciousness, that is to say, a consciousness which contains an element of sensation. Phenomena as objects of perception are not pure, that is, merely formal intuitions, like space and time, for they cannot be perceived in themselves.

[Footnote: They can be perceived only as phenomena, and some part of them must always belong to the non-ego; whereas pure intuitions are entirely the products of the mind itself, and as such are coguized IN THEMSELVES. — Tr]

They contain, then, over and above the intuition, the materials for an object (through which is represented something existing in space or time), that is to say, they contain the real of sensation, as a representation merely subjective, which gives us merely the consciousness that the subject is affected, and which we refer to some external object. Now, a gradual transition from empirical consciousness to pure consciousness is possible, inasmuch as the real in this consciousness entirely vanishes, and there remains a merely formal consciousness (a priori) of the manifold in time and space; consequently there is possible a synthesis also of the production of the quantity of a sensation from its commencement, that is, from the pure intuition = 0 onwards up to a certain quantity of the sensation. Now as sensation in itself is not an objective representation, and in it is to be found neither the intuition of space nor of time, it cannot possess any extensive quantity, and yet there does belong to it a quantity (and that by means of its apprehension, in which empirical consciousness can within a certain time rise from nothing = 0 up to its given amount), consequently an intensive quantity. And thus we must ascribe intensive quantity, that is, a degree of influence on sense to all objects of perception, in so far as this perception contains sensation.

All cognition, by means of which I am enabled to cognize and determine a priori what belongs to

empirical cognition, may be called an anticipation; and without doubt this is the sense in which Epicurus employed his expression prholepsis. But as there is in phenomena something which is never cognized a priori, which on this account constitutes the proper difference between pure and empirical cognition, that is to say, sensation (as the matter of perception), it follows, that sensation is just that element in cognition which cannot be at all anticipated. On the other hand, we might very well term the pure determinations in space and time, as well in regard to figure as to quantity, anticipations of phenomena, because they represent a priori that which may always be given a posteriori in experience. But suppose that in every sensation, as sensation in general, without any particular sensation being thought of, there existed something which could be cognized a priori, this would deserve to be called anticipation in a special sense — special, because it may seem surprising to forestall experience, in that which concerns the matter of experience, and which we can only derive from itself. Yet such really is the case here.

Apprehension*, by means of sensation alone, fills only one moment, that is, if I do not take into consideration a succession of many sensations. As that in the phenomenon, the apprehension of which is not a successive synthesis advancing from parts to an entire representation, sensation has therefore no extensive quantity; the want of sensation in a moment of time would represent it as empty, consequently = 0. That which in the empirical intuition corresponds to sensation is reality (realitas phaenomenon); that which corresponds to the absence of it, negation = 0. Now every sensation is capable of a diminution, so that it can decrease, and thus gradually disappear. Therefore, between reality in a phenomenon and negation, there exists a continuous concatenation of many possible intermediate sensations, the difference of which from each other is always smaller than that between the given sensation and zero, or complete negation. That is to say, the real in a phenomenon has always a quantity, which however is not discoverable in apprehension, inasmuch as apprehension take place by means of mere sensation in one instant, and not by the successive synthesis of many sensations, and therefore does not progress from parts to the whole. Consequently, it has a quantity, but not an extensive quantity.

[Footnote: Apprehension is the Kantian word for preception, in the largest sense in which we employ that term. It is the genus which includes under i, as species, perception proper and sensation proper — Tr]

Now that quantity which is apprehended only as unity, and in which plurality can be represented only by approximation to negation = O, I term intensive quantity. Consequently, reality in a phenomenon has intensive quantity, that is, a degree. If we consider this reality as cause (be it of sensation or of another reality in the phenomenon, for example, a change), we call the degree of reality in its character of cause a momentum, for example, the momentum of weight; and for this reason, that the degree only indicates that quantity the apprehension of which is not successive, but instantaneous. This, however, I touch upon only in passing, for with causality I have at present nothing to do.

Accordingly, every sensation, consequently every reality in phenomena, however small it may be, has a degree, that is, an intensive quantity, which may always be lessened, and between reality and negation there exists a continuous connection of possible realities, and possible smaller perceptions. Every colour — for example, red — has a degree, which, be it ever so small, is never the smallest, and so is it always with heat, the momentum of weight, etc.

This property of quantities, according to which no part of them is the smallest possible (no part simple), is called their continuity. Space and time are quanta continua, because no part of them can be given, without enclosing it within boundaries (points and moments), consequently, this given part is itself a space or a time. Space, therefore, consists only of spaces, and time of times. Points and moments are only boundaries, that is, the mere places or positions of their limitation. But places always presuppose intuitions which are to limit or determine them; and we cannot conceive either space or time composed of constituent parts which are given before space or time. Such quantities may also be called flowing,

because synthesis (of the productive imagination) in the production of these quantities is a progression in time, the continuity of which we are accustomed to indicate by the expression flowing.

All phenomena, then, are continuous quantities, in respect both to intuition and mere perception (sensation, and with it reality). In the former case they are extensive quantities; in the latter, intensive. When the synthesis of the manifold of a phenomenon is interrupted, there results merely an aggregate of several phenomena, and not properly a phenomenon as a quantity, which is not produced by the mere continuation of the productive synthesis of a certain kind, but by the repetition of a synthesis always ceasing. For example, if I call thirteen dollars a sum or quantity of money, I employ the term quite correctly, inasmuch as I understand by thirteen dollars the value of a mark in standard silver, which is, to be sure, a continuous quantity, in which no part is the smallest, but every part might constitute a piece of money, which would contain material for still smaller pieces. If, however, by the words thirteen dollars I understand so many coins (be their value in silver what it may), it would be quite erroneous to use the expression a quantity of dollars; on the contrary, I must call them aggregate, that is, a number of coins. And as in every number we must have unity as the foundation, so a phenomenon taken as unity is a quantity, and as such always a continuous quantity (quantum continuum).

Now, seeing all phenomena, whether considered as extensive or intensive, are continuous quantities, the proposition: "All change (transition of a thing from one state into another) is continuous," might be proved here easily, and with mathematical evidence, were it not that the causality of a change lies, entirely beyond the bounds of a transcendental philosophy, and presupposes empirical principles. For of the possibility of a cause which changes the condition of things, that is, which determines them to the contrary to a certain given state, the understanding gives us a priori no knowledge; not merely because it has no insight into the possibility of it (for such insight is absent in several a priori cognitions), but because the notion of change concerns only certain determinations of phenomena, which experience alone can acquaint us with, while their cause lies in the unchangeable. But seeing that we have nothing which we could here employ but the pure fundamental conceptions of all possible experience, among which of course nothing empirical can be admitted, we dare not, without injuring the unity of our system, anticipate general physical science, which is built upon certain fundamental experiences.

Nevertheless, we are in no want of proofs of the great influence which the principle above developed exercises in the anticipation of perceptions, and even in supplying the want of them, so far as to shield us against the false conclusions which otherwise we might rashly draw.

If all reality in perception has a degree, between which and negation there is an endless sequence of ever smaller degrees, and if, nevertheless, every sense must have a determinate degree of receptivity for sensations; no perception, and consequently no experience is possible, which can prove, either immediately or mediately, an entire absence of all reality in a phenomenon; in other words, it is impossible ever to draw from experience a proof of the existence of empty space or of empty time. For in the first place, an entire absence of reality in a sensuous intuition cannot of course be an object of perception; secondly, such absence cannot be deduced from the contemplation of any single phenomenon, and the difference of the degrees in its reality; nor ought it ever to be admitted in explanation of any phenomenon. For if even the complete intuition of a determinate space or time is thoroughly real, that is, if no part thereof is empty, yet because every reality has its degree, which, with the extensive quantity of the phenomenon unchanged, can diminish through endless gradations down to nothing (the void), there must be infinitely graduated degrees, with which space or time is filled, and the intensive quantity in different phenomena may be smaller or greater, although the extensive quantity of the intuition remains equal and unaltered.

We shall give an example of this. Almost all natural philosophers, remarking a great difference in the quantity of the matter of different kinds in bodies with the same volume (partly on account of the momentum of gravity or weight, partly on account of the momentum of resistance to other bodies in

motion), conclude unanimously that this volume (extensive quantity of the phenomenon) must be void in all bodies, although in different proportion. But who would suspect that these for the most part mathematical and mechanical inquirers into nature should ground this conclusion solely on a metaphysical hypothesis — a sort of hypothesis which they profess to disparage and avoid? Yet this they do, in assuming that the real in space (I must not here call it impenetrability or weight, because these are empirical conceptions) is always identical, and can only be distinguished according to its extensive quantity, that is, multiplicity. Now to this presupposition, for which they can have no ground in experience, and which consequently is merely metaphysical, I oppose a transcendental demonstration, which it is true will not explain the difference in the filling up of spaces, but which nevertheless completely does away with the supposed necessity of the above-mentioned presupposition that we cannot explain the said difference otherwise than by the hypothesis of empty spaces. This demonstration, moreover, has the merit of setting the understanding at liberty to conceive this distinction in a different manner, if the explanation of the fact requires any such hypothesis. For we perceive that although two equal spaces may be completely filled by matters altogether different, so that in neither of them is there left a single point wherein matter is not present, nevertheless, every reality has its degree (of resistance or of weight), which, without diminution of the extensive quantity, can become less and less ad infinitum, before it passes into nothingness and disappears. Thus an expansion which fills a space — for example, caloric, or any other reality in the phenomenal world — can decrease in its degrees to infinity, yet without leaving the smallest part of the space empty; on the contrary, filling it with those lesser degrees as completely as another phenomenon could with greater. My intention here is by no means to maintain that this is really the case with the difference of matters, in regard to their specific gravity; I wish only to prove, from a principle of the pure understanding, that the nature of our perceptions makes such a mode of explanation possible, and that it is erroneous to regard the real in a phenomenon as equal quoad its degree, and different only quoad its aggregation and extensive quantity, and this, too, on the pretended authority of an a priori principle of the understanding.

Nevertheless, this principle of the anticipation of perception must somewhat startle an inquirer whom initiation into transcendental philosophy has rendered cautious. We must naturally entertain some doubt whether or not the understanding can enounce any such synthetical proposition as that respecting the degree of all reality in phenomena, and consequently the possibility of the internal difference of sensation itself — abstraction being made of its empirical quality. Thus it is a question not unworthy of solution: “How the understanding can pronounce synthetically and a priori respecting phenomena, and thus anticipate these, even in that which is peculiarly and merely empirical, that, namely, which concerns sensation itself?”

The quality of sensation is in all cases merely empirical, and cannot be represented a priori (for example, colours, taste, etc.). But the real — that which corresponds to sensation — in opposition to negation = 0, only represents something the conception of which in itself contains a being (ein seyn), and signifies nothing but the synthesis in an empirical consciousness. That is to say, the empirical consciousness in the internal sense can be raised from 0 to every higher degree, so that the very same extensive quantity of intuition, an illuminated surface, for example, excites as great a sensation as an aggregate of many other surfaces less illuminated. We can therefore make complete abstraction of the extensive quantity of a phenomenon, and represent to ourselves in the mere sensation in a certain momentum, a synthesis of homogeneous ascension from 0 up to the given empirical consciousness, All sensations therefore as such are given only a posteriori, but this property thereof, namely, that they have a degree, can be known a priori. It is worthy of remark, that in respect to quantities in general, we can cognize a priori only a single quality, namely, continuity; but in respect to all quality (the real in phenomena), we cannot cognize a priori anything more than the intensive quantity thereof, namely, that they have a degree. All else is left to experience.

3. ANALOGIES OF EXPERIENCE.

The principle of these is: Experience is possible only through the representation of a necessary connection of Perceptions.

PROOF.

Experience is an empirical cognition; that is to say, a cognition which determines an object by means of perceptions. It is therefore a synthesis of perceptions, a synthesis which is not itself contained in perception, but which contains the synthetical unity of the manifold of perception in a consciousness; and this unity constitutes the essential of our cognition of objects of the senses, that is, of experience (not merely of intuition or sensation). Now in experience our perceptions come together contingently, so that no character of necessity in their connection appears, or can appear from the perceptions themselves, because apprehension is only a placing together of the manifold of empirical intuition, and no representation of a necessity in the connected existence of the phenomena which apprehension brings together, is to be discovered therein. But as experience is a cognition of objects by means of perceptions, it follows that the relation of the existence of the existence of the manifold must be represented in experience not as it is put together in time, but as it is objectively in time. And as time itself cannot be perceived, the determination of the existence of objects in time can only take place by means of their connection in time in general, consequently only by means of a priori connecting conceptions. Now as these conceptions always possess the character of necessity, experience is possible only by means of a representation of the necessary connection of perception.

The three modi of time are permanence, succession, and coexistence. Accordingly, there are three rules of all relations of time in phenomena, according to which the existence of every phenomenon is determined in respect of the unity of all time, and these antecede all experience and render it possible.

The general principle of all three analogies rests on the necessary unity of apperception in relation to all possible empirical consciousness (perception) at every time, consequently, as this unity lies a priori at the foundation of all mental operations, the principle rests on the synthetical unity of all phenomena according to their relation in time. For the original apperception relates to our internal sense (the complex of all representations), and indeed relates a priori to its form, that is to say, the relation of the manifold empirical consciousness in time. Now this manifold must be combined in original apperception according to relations of time — a necessity imposed by the a priori transcendental unity of apperception, to which is subjected all that can belong to my (i.e., my own) cognition, and therefore all that can become an object for me. This synthetical and a priori determined unity in relation of perceptions in time is therefore the rule: “All empirical determinations of time must be subject to rules of the general determination of time”; and the analogies of experience, of which we are now about to treat, must be rules of this nature.

These principles have this peculiarity, that they do not concern phenomena, and the synthesis of the empirical intuition thereof, but merely the existence of phenomena and their relation to each other in regard to this existence. Now the mode in which we apprehend a thing in a phenomenon can be determined a priori in such a manner that the rule of its synthesis can give, that is to say, can produce this a priori intuition in every empirical example. But the existence of phenomena cannot be known a priori, and although we could arrive by this path at a conclusion of the fact of some existence, we could not cognize that existence determinately, that is to say, we should be incapable of anticipating in what respect the empirical intuition of it would be distinguishable from that of others.

The two principles above mentioned, which I called mathematical, in consideration of the fact of their authorizing the application of mathematic phenomena, relate to these phenomena only in regard to their possibility, and instruct us how phenomena, as far as regards their intuition or the real in their perception, can be generated according to the rules of a mathematical synthesis. Consequently, numerical quantities, and with them the determination of a phenomenon as a quantity, can be employed in the one case as well as in the other. Thus, for example, out of 200,000 illuminations by the moon, I might compose and give a

priori, that is construct, the degree of our sensations of the sun-light.* We may therefore entitle these two principles constitutive.

[Footnote: Kant's meaning is: The two principles enunciated under the heads of "Axioms of Intuition," and "Anticipations of Perception," authorize the application to phenomena of determinations of size and number, that is of mathematic. For example, I may compute the light of the sun, and say that its quantity is a certain number of times greater than that of the moon. In the same way, heat is measured by the comparison of its different effects on water, &c., and on mercury in a thermometer. — Tr]

The case is very different with those principles whose province it is to subject the existence of phenomena to rules a priori. For as existence does not admit of being constructed, it is clear that they must only concern the relations of existence and be merely regulative principles. In this case, therefore, neither axioms nor anticipations are to be thought of. Thus, if a perception is given us, in a certain relation of time to other (although undetermined) perceptions, we cannot then say a priori, what and how great (in quantity) the other perception necessarily connected with the former is, but only how it is connected, quoad its existence, in this given modus of time. Analogies in philosophy mean something very different from that which they represent in mathematics. In the latter they are formulae, which enounce the equality of two relations of quantity, and are always constitutive, so that if two terms of the proportion are given, the third is also given, that is, can be constructed by the aid of these formulae. But in philosophy, analogy is not the equality of two quantitative but of two qualitative relations. In this case, from three given terms, I can give a priori and cognize the relation to a fourth member, but not this fourth term itself, although I certainly possess a rule to guide me in the search for this fourth term in experience, and a mark to assist me in discovering it. An analogy of experience is therefore only a rule according to which unity of experience must arise out of perceptions in respect to objects (phenomena) not as a constitutive, but merely as a regulative principle. The same holds good also of the postulates of empirical thought in general, which relate to the synthesis of mere intuition (which concerns the form of phenomena), the synthesis of perception (which concerns the matter of phenomena), and the synthesis of experience (which concerns the relation of these perceptions). For they are only regulative principles, and clearly distinguishable from the mathematical, which are constitutive, not indeed in regard to the certainty which both possess a priori, but in the mode of evidence thereof, consequently also in the manner of demonstration.

But what has been observed of all synthetical propositions, and must be particularly remarked in this place, is this, that these analogies possess significance and validity, not as principles of the transcendental, but only as principles of the empirical use of the understanding, and their truth can therefore be proved only as such, and that consequently the phenomena must not be subjoined directly under the categories, but only under their schemata. For if the objects to which those principles must be applied were things in themselves, it would be quite impossible to cognize aught concerning them synthetically a priori. But they are nothing but phenomena; a complete knowledge of which — a knowledge to which all principles a priori must at last relate — is the only possible experience. It follows that these principles can have nothing else for their aim than the conditions of the empirical cognition in the unity of synthesis of phenomena. But this synthesis is cogitated only in the schema of the pure conception of the understanding, of whose unity, as that of a synthesis in general, the category contains the function unrestricted by any sensuous condition. These principles will therefore authorize us to connect phenomena according to an analogy, with the logical and universal unity of conceptions, and consequently to employ the categories in the principles themselves; but in the application of them to experience, we shall use only their schemata, as the key to their proper application, instead of the categories, or rather the latter as restricting conditions, under the title of "formulae" of the former.

A. FIRST ANALOGY.

Principle of the Permanence of Substance.

In all changes of phenomena, substance is permanent, and the quantum thereof in nature is neither increased nor diminished.

PROOF.

All phenomena exist in time, wherein alone as substratum, that is, as the permanent form of the internal intuition, coexistence and succession can be represented. Consequently time, in which all changes of phenomena must be cogitated, remains and changes not, because it is that in which succession and coexistence can be represented only as determinations thereof. Now, time in itself cannot be an object of perception. It follows that in objects of perception, that is, in phenomena, there must be found a substratum which represents time in general, and in which all change or coexistence can be perceived by means of the relation of phenomena to it. But the substratum of all reality, that is, of all that pertains to the existence of things, is substance; all that pertains to existence can be cogitated only as a determination of substance. Consequently, the permanent, in relation to which alone can all relations of time in phenomena be determined, is substance in the world of phenomena, that is, the real in phenomena, that which, as the substratum of all change, remains ever the same. Accordingly, as this cannot change in existence, its quantity in nature can neither be increased nor diminished.

Our apprehension of the manifold in a phenomenon is always successive, is Consequently always changing. By it alone we could, therefore, never determine whether this manifold, as an object of experience, is coexistent or successive, unless it had for a foundation something fixed and permanent, of the existence of which all succession and coexistence are nothing but so many modes (modi of time). Only in the permanent, then, are relations of time possible (for simultaneity and succession are the only relations in time); that is to say, the permanent is the substratum of our empirical representation of time itself, in which alone all determination of time is possible. Permanence is, in fact, just another expression for time, as the abiding correlate of all existence of phenomena, and of all change, and of all coexistence. For change does not affect time itself, but only the phenomena in time (just as coexistence cannot be regarded as a modus of time itself, seeing that in time no parts are coexistent, but all successive). If we were to attribute succession to time itself, we should be obliged to cogitate another time, in which this succession would be possible. It is only by means of the permanent that existence in different parts of the successive series of time receives a quantity, which we entitle duration. For in mere succession, existence is perpetually vanishing and recommencing, and therefore never has even the least quantity. Without the permanent, then, no relation in time is possible. Now, time in itself is not an object of perception; consequently the permanent in phenomena must be regarded as the substratum of all determination of time, and consequently also as the condition of the possibility of all synthetical unity of perceptions, that is, of experience; and all existence and all change in time can only be regarded as a mode in the existence of that which abides unchangeably. Therefore, in all phenomena, the permanent is the object in itself, that is, the substance (phenomenon); but all that changes or can change belongs only to the mode of the existence of this substance or substances, consequently to its determinations.

I find that in all ages not only the philosopher, but even the common understanding, has preposited this permanence as a substratum of all change in phenomena; indeed, I am compelled to believe that they will always accept this as an indubitable fact. Only the philosopher expresses himself in a more precise and definite manner, when he says: “In all changes in the world, the substance remains, and the accidents alone are changeable.” But of this decidedly synthetical proposition, I nowhere meet with even an attempt at proof; nay, it very rarely has the good fortune to stand, as it deserves to do, at the head of the pure and entirely a priori laws of nature. In truth, the statement that substance is permanent, is tautological. For this very permanence is the ground on which we apply the category of substance to the phenomenon; and we should have been obliged to prove that in all phenomena there is something permanent, of the existence of

which the changeable is nothing but a determination. But because a proof of this nature cannot be dogmatical, that is, cannot be drawn from conceptions, inasmuch as it concerns a synthetical proposition a priori, and as philosophers never reflected that such propositions are valid only in relation to possible experience, and therefore cannot be proved except by means of a deduction of the possibility of experience, it is no wonder that while it has served as the foundation of all experience (for we feel the need of it in empirical cognition), it has never been supported by proof.

A philosopher was asked: “What is the weight of smoke?” He answered: “Subtract from the weight of the burnt wood the weight of the remaining ashes, and you will have the weight of the smoke.” Thus he presumed it to be incontrovertible that even in fire the matter (substance) does not perish, but that only the form of it undergoes a change. In like manner was the saying: “From nothing comes nothing,” only another inference from the principle or permanence, or rather of the ever-abiding existence of the true subject in phenomena. For if that in the phenomenon which we call substance is to be the proper substratum of all determination of time, it follows that all existence in past as well as in future time, must be determinable by means of it alone. Hence we are entitled to apply the term substance to a phenomenon, only because we suppose its existence in all time, a notion which the word permanence does not fully express, as it seems rather to be referable to future time. However, the internal necessity perpetually to be, is inseparably connected with the necessity always to have been, and so the expression may stand as it is. “Gigni de nihilo nihil; in nihilum nil posse reverti,”* are two propositions which the ancients never parted, and which people nowadays sometimes mistakenly disjoin, because they imagine that the propositions apply to objects as things in themselves, and that the former might be inimical to the dependence (even in respect of its substance also) of the world upon a supreme cause. But this apprehension is entirely needless, for the question in this case is only of phenomena in the sphere of experience, the unity of which never could be possible, if we admitted the possibility that new things (in respect of their substance) should arise. For in that case, we should lose altogether that which alone can represent the unity of time, to wit, the identity of the substratum, as that through which alone all change possesses complete and thorough unity. This permanence is, however, nothing but the manner in which we represent to ourselves the existence of things in the phenomenal world.

[Footnote: Persius, Satirae, iii.83-84.]

The determinations of a substance, which are only particular modes of its existence, are called accidents. They are always real, because they concern the existence of substance (negations are only determinations, which express the non-existence of something in the substance). Now, if to this real in the substance we ascribe a particular existence (for example, to motion as an accident of matter), this existence is called inherence, in contradistinction to the existence of substance, which we call subsistence. But hence arise many misconceptions, and it would be a more accurate and just mode of expression to designate the accident only as the mode in which the existence of a substance is positively determined. Meanwhile, by reason of the conditions of the logical exercise of our understanding, it is impossible to avoid separating, as it were, that which in the existence of a substance is subject to change, whilst the substance remains, and regarding it in relation to that which is properly permanent and radical. On this account, this category of substance stands under the title of relation, rather because it is the condition thereof than because it contains in itself any relation.

Now, upon this notion of permanence rests the proper notion of the conception change. Origin and extinction are not changes of that which originates or becomes extinct. Change is but a mode of existence, which follows on another mode of existence of the same object; hence all that changes is permanent, and

only the condition thereof changes. Now since this mutation affects only determinations, which can have a beginning or an end, we may say, employing an expression which seems somewhat paradoxical: “Only the permanent (substance) is subject to change; the mutable suffers no change, but rather alternation, that is, when certain determinations cease, others begin.”

Change, when, cannot be perceived by us except in substances, and origin or extinction in an absolute sense, that does not concern merely a determination of the permanent, cannot be a possible perception, for it is this very notion of the permanent which renders possible the representation of a transition from one state into another, and from non-being to being, which, consequently, can be empirically cognized only as alternating determinations of that which is permanent. Grant that a thing absolutely begins to be; we must then have a point of time in which it was not. But how and by what can we fix and determine this point of time, unless by that which already exists? For a void time — preceding — is not an object of perception; but if we connect this beginning with objects which existed previously, and which continue to exist till the object in question in question begins to be, then the latter can only be a determination of the former as the permanent. The same holds good of the notion of extinction, for this presupposes the empirical representation of a time, in which a phenomenon no longer exists.

Substances (in the world of phenomena) are the substratum of all determinations of time. The beginning of some, and the ceasing to be of other substances, would utterly do away with the only condition of the empirical unity of time; and in that case phenomena would relate to two different times, in which, side by side, existence would pass; which is absurd. For there is only one time in which all different times must be placed, not as coexistent, but as successive.

Accordingly, permanence is a necessary condition under which alone phenomena, as things or objects, are determinable in a possible experience. But as regards the empirical criterion of this necessary permanence, and with it of the substantiality of phenomena, we shall find sufficient opportunity to speak in the sequel.

B. SECOND ANALOGY.

Principle of the Succession of Time According to the Law of Causality. All changes take place according to the law of the connection of Cause and Effect.

PROOF.

(That all phenomena in the succession of time are only changes, that is, a successive being and non-being of the determinations of substance, which is permanent; consequently that a being of substance itself which follows on the non-being thereof, or a non-being of substance which follows on the being thereof, in other words, that the origin or extinction of substance itself, is impossible — all this has been fully established in treating of the foregoing principle. This principle might have been expressed as follows: “All alteration (succession) of phenomena is merely change”; for the changes of substance are not origin or extinction, because the conception of change presupposes the same subject as existing with two opposite determinations, and consequently as permanent. After this premonition, we shall proceed to the proof.)

I perceive that phenomena succeed one another, that is to say, a state of things exists at one time, the opposite of which existed in a former state. In this case, then, I really connect together two perceptions in time. Now connection is not an operation of mere sense and intuition, but is the product of a synthetical faculty of imagination, which determines the internal sense in respect of a relation of time. But imagination can connect these two states in two ways, so that either the one or the other may antecede in time; for time in itself cannot be an object of perception, and what in an object precedes and what follows cannot be empirically determined in relation to it. I am only conscious, then, that my imagination places one state before and the other after; not that the one state antecedes the other in the object. In other words, the objective relation of the successive phenomena remains quite undetermined by means of mere perception. Now in order that this relation may be cognized as determined, the relation between the two

states must be so cogitated that it is thereby determined as necessary, which of them must be placed before and which after, and not conversely. But the conception which carries with it a necessity of synthetical unity, can be none other than a pure conception of the understanding which does not lie in mere perception; and in this case it is the conception of "the relation of cause and effect," the former of which determines the latter in time, as its necessary consequence, and not as something which might possibly antecede (or which might in some cases not be perceived to follow). It follows that it is only because we subject the sequence of phenomena, and consequently all change, to the law of causality, that experience itself, that is, empirical cognition of phenomena, becomes possible; and consequently, that phenomena themselves, as objects of experience, are possible only by virtue of this law.

Our apprehension of the manifold of phenomena is always successive. The representations of parts succeed one another. Whether they succeed one another in the object also, is a second point for reflection, which was not contained in the former. Now we may certainly give the name of object to everything, even to every representation, so far as we are conscious thereof; but what this word may mean in the case of phenomena, not merely in so far as they (as representations) are objects, but only in so far as they indicate an object, is a question requiring deeper consideration. In so far as they, regarded merely as representations, are at the same time objects of consciousness, they are not to be distinguished from apprehension, that is, reception into the synthesis of imagination, and we must therefore say: "The manifold of phenomena is always produced successively in the mind." If phenomena were things in themselves, no man would be able to conjecture from the succession of our representations how this manifold is connected in the object; for we have to do only with our representations. How things may be in themselves, without regard to the representations through which they affect us, is utterly beyond the sphere of our cognition. Now although phenomena are not things in themselves, and are nevertheless the only thing given to us to be cognized, it is my duty to show what sort of connection in time belongs to the manifold in phenomena themselves, while the representation of this manifold in apprehension is always successive. For example, the apprehension of the manifold in the phenomenon of a house which stands before me, is successive. Now comes the question whether the manifold of this house is in itself successive — which no one will be at all willing to grant. But, so soon as I raise my conception of an object to the transcendental signification thereof, I find that the house is not a thing in itself, but only a phenomenon, that is, a representation, the transcendental object of which remains utterly unknown. What then am I to understand by the question: "How can the manifold be connected in the phenomenon itself — not considered as a thing in itself, but merely as a phenomenon?" Here that which lies in my successive apprehension is regarded as representation, whilst the phenomenon which is given me, notwithstanding that it is nothing more than a complex of these representations, is regarded as the object thereof, with which my conception, drawn from the representations of apprehension, must harmonize. It is very soon seen that, as accordance of the cognition with its object constitutes truth, the question now before us can only relate to the formal conditions of empirical truth; and that the phenomenon, in opposition to the representations of apprehension, can only be distinguished therefrom as the object of them, if it is subject to a rule which distinguishes it from every other apprehension, and which renders necessary a mode of connection of the manifold. That in the phenomenon which contains the condition of this necessary rule of apprehension, is the object.

Let us now proceed to our task. That something happens, that is to say, that something or some state exists which before was not, cannot be empirically perceived, unless a phenomenon precedes, which does not contain in itself this state. For a reality which should follow upon a void time, in other words, a beginning, which no state of things precedes, can just as little be apprehended as the void time itself. Every apprehension of an event is therefore a perception which follows upon another perception. But as this is the case with all synthesis of apprehension, as I have shown above in the example of a house, my apprehension of an event is not yet sufficiently distinguished from other apprehensions. But I remark also

that if in a phenomenon which contains an occurrence, I call the antecedent state of my perception, A, and the following state, B, the perception B can only follow A in apprehension, and the perception A cannot follow B, but only precede it. For example, I see a ship float down the stream of a river. My perception of its place lower down follows upon my perception of its place higher up the course of the river, and it is impossible that, in the apprehension of this phenomenon, the vessel should be perceived first below and afterwards higher up the stream. Here, therefore, the order in the sequence of perceptions in apprehension is determined; and by this order apprehension is regulated. In the former example, my perceptions in the apprehension of a house might begin at the roof and end at the foundation, or vice versa; or I might apprehend the manifold in this empirical intuition, by going from left to right, and from right to left. Accordingly, in the series of these perceptions, there was no determined order, which necessitated my beginning at a certain point, in order empirically to connect the manifold. But this rule is always to be met with in the perception of that which happens, and it makes the order of the successive perceptions in the apprehension of such a phenomenon necessary.

I must, therefore, in the present case, deduce the subjective sequence of apprehension from the objective sequence of phenomena, for otherwise the former is quite undetermined, and one phenomenon is not distinguishable from another. The former alone proves nothing as to the connection of the manifold in an object, for it is quite arbitrary. The latter must consist in the order of the manifold in a phenomenon, according to which order the apprehension of one thing (that which happens) follows that of another thing (which precedes), in conformity with a rule. In this way alone can I be authorized to say of the phenomenon itself, and not merely of my own apprehension, that a certain order or sequence is to be found therein. That is, in other words, I cannot arrange my apprehension otherwise than in this order.

In conformity with this rule, then, it is necessary that in that which antecedes an event there be found the condition of a rule, according to which in this event follows always and necessarily; but I cannot reverse this and go back from the event, and determine (by apprehension) that which antecedes it. For no phenomenon goes back from the succeeding point of time to the preceding point, although it does certainly relate to a preceding point of time; from a given time, on the other hand, there is always a necessary progression to the determined succeeding time. Therefore, because there certainly is something that follows, I must of necessity connect it with something else, which antecedes, and upon which it follows, in conformity with a rule, that is necessarily, so that the event, as conditioned, affords certain indication of a condition, and this condition determines the event.

Let us suppose that nothing precedes an event, upon which this event must follow in conformity with a rule. All sequence of perception would then exist only in apprehension, that is to say, would be merely subjective, and it could not thereby be objectively determined what thing ought to precede, and what ought to follow in perception. In such a case, we should have nothing but a play of representations, which would possess no application to any object. That is to say, it would not be possible through perception to distinguish one phenomenon from another, as regards relations of time; because the succession in the act of apprehension would always be of the same sort, and therefore there would be nothing in the phenomenon to determine the succession, and to render a certain sequence objectively necessary. And, in this case, I cannot say that two states in a phenomenon follow one upon the other, but only that one apprehension follows upon another. But this is merely subjective, and does not determine an object, and consequently cannot be held to be cognition of an object — not even in the phenomenal world.

Accordingly, when we know in experience that something happens, we always presuppose that something precedes, whereupon it follows in conformity with a rule. For otherwise I could not say of the object that it follows; because the mere succession in my apprehension, if it be not determined by a rule in relation to something preceding, does not authorize succession in the object. Only, therefore, in reference to a rule, according to which phenomena are determined in their sequence, that is, as they happen, by the preceding state, can I make my subjective synthesis (of apprehension) objective, and it is only under this

presupposition that even the experience of an event is possible.

No doubt it appears as if this were in thorough contradiction to all the notions which people have hitherto entertained in regard to the procedure of the human understanding. According to these opinions, it is by means of the perception and comparison of similar consequences following upon certain antecedent phenomena that the understanding is led to the discovery of a rule, according to which certain events always follow certain phenomena, and it is only by this process that we attain to the conception of cause. Upon such a basis, it is clear that this conception must be merely empirical, and the rule which it furnishes us with— "Everything that happens must have a cause" — would be just as contingent as experience itself. The universality and necessity of the rule or law would be perfectly spurious attributes of it. Indeed, it could not possess universal validity, inasmuch as it would not in this case be a priori, but founded on deduction. But the same is the case with this law as with other pure a priori representations (e.g., space and time), which we can draw in perfect clearness and completeness from experience, only because we had already placed them therein, and by that means, and by that alone, had rendered experience possible. Indeed, the logical clearness of this representation of a rule, determining the series of events, is possible only when we have made use thereof in experience. Nevertheless, the recognition of this rule, as a condition of the synthetical unity of phenomena in time, was the ground of experience itself and consequently preceded it a priori.

It is now our duty to show by an example that we never, even in experience, attribute to an object the notion of succession or effect (of an event — that is, the happening of something that did not exist before), and distinguish it from the subjective succession of apprehension, unless when a rule lies at the foundation, which compels us to observe this order of perception in preference to any other, and that, indeed, it is this necessity which first renders possible the representation of a succession in the object.

We have representations within us, of which also we can be conscious. But, however widely extended, however accurate and thoroughgoing this consciousness may be, these representations are still nothing more than representations, that is, internal determinations of the mind in this or that relation of time. Now how happens it that to these representations we should set an object, or that, in addition to their subjective reality, as modifications, we should still further attribute to them a certain unknown objective reality? It is clear that objective significancy cannot consist in a relation to another representation (of that which we desire to term object), for in that case the question again arises: "How does this other representation go out of itself, and obtain objective significancy over and above the subjective, which is proper to it, as a determination of a state of mind?" If we try to discover what sort of new property the relation to an object gives to our subjective representations, and what new importance they thereby receive, we shall find that this relation has no other effect than that of rendering necessary the connection of our representations in a certain manner, and of subjecting them to a rule; and that conversely, it is only because a certain order is necessary in the relations of time of our representations, that objective significancy is ascribed to them.

In the synthesis of phenomena, the manifold of our representations is always successive. Now hereby is not represented an object, for by means of this succession, which is common to all apprehension, no one thing is distinguished from another. But so soon as I perceive or assume that in this succession there is a relation to a state antecedent, from which the representation follows in accordance with a rule, so soon do I represent something as an event, or as a thing that happens; in other words, I cognize an object to which I must assign a certain determinate position in time, which cannot be altered, because of the preceding state in the object. When, therefore, I perceive that something happens, there is contained in this representation, in the first place, the fact, that something antecedes; because, it is only in relation to this that the phenomenon obtains its proper relation of time, in other words, exists after an antecedent time, in which it did not exist. But it can receive its determined place in time only by the presupposition that something existed in the foregoing state, upon which it follows inevitably and always, that is, in conformity with a rule. From all this it is evident that, in the first place, I cannot reverse the order of succession, and make

that which happens precede that upon which it follows; and that, in the second place, if the antecedent state be posited, a certain determinate event inevitably and necessarily follows. Hence it follows that there exists a certain order in our representations, whereby the present gives a sure indication of some previously existing state, as a correlate, though still undetermined, of the existing event which is given — a correlate which itself relates to the event as its consequence, conditions it, and connects it necessarily with itself in the series of time.

If then it be admitted as a necessary law of sensibility, and consequently a formal condition of all perception, that the preceding necessarily determines the succeeding time (inasmuch as I cannot arrive at the succeeding except through the preceding), it must likewise be an indispensable law of empirical representation of the series of time that the phenomena of the past determine all phenomena in the succeeding time, and that the latter, as events, cannot take place, except in so far as the former determine their existence in time, that is to say, establish it according to a rule. For it is of course only in phenomena that we can empirically cognize this continuity in the connection of times.

For all experience and for the possibility of experience, understanding is indispensable, and the first step which it takes in this sphere is not to render the representation of objects clear, but to render the representation of an object in general, possible. It does this by applying the order of time to phenomena, and their existence. In other words, it assigns to each phenomenon, as a consequence, a place in relation to preceding phenomena, determined a priori in time, without which it could not harmonize with time itself, which determines a place a priori to all its parts. This determination of place cannot be derived from the relation of phenomena to absolute time (for it is not an object of perception); but, on the contrary, phenomena must reciprocally determine the places in time of one another, and render these necessary in the order of time. In other words, whatever follows or happens, must follow in conformity with a universal rule upon that which was contained in the foregoing state. Hence arises a series of phenomena, which, by means of the understanding, produces and renders necessary exactly the same order and continuous connection in the series of our possible perceptions, as is found a priori in the form of internal intuition (time), in which all our perceptions must have place.

That something happens, then, is a perception which belongs to a possible experience, which becomes real only because I look upon the phenomenon as determined in regard to its place in time, consequently as an object, which can always be found by means of a rule in the connected series of my perceptions. But this rule of the determination of a thing according to succession in time is as follows: "In what precedes may be found the condition, under which an event always (that is, necessarily) follows." From all this it is obvious that the principle of cause and effect is the principle of possible experience, that is, of objective cognition of phenomena, in regard to their relations in the succession of time.

The proof of this fundamental proposition rests entirely on the following momenta of argument. To all empirical cognition belongs the synthesis of the manifold by the imagination, a synthesis which is always successive, that is, in which the representations therein always follow one another. But the order of succession in imagination is not determined, and the series of successive representations may be taken retrogressively as well as progressively. But if this synthesis is a synthesis of apprehension (of the manifold of a given phenomenon), then the order is determined in the object, or to speak more accurately, there is therein an order of successive synthesis which determines an object, and according to which something necessarily precedes, and when this is posited, something else necessarily follows. If, then, my perception is to contain the cognition of an event, that is, of something which really happens, it must be an empirical judgement, wherein we think that the succession is determined; that is, it presupposes another phenomenon, upon which this event follows necessarily, or in conformity with a rule. If, on the contrary, when I posited the antecedent, the event did not necessarily follow, I should be obliged to consider it merely as a subjective play of my imagination, and if in this I represented to myself anything as objective, I must look upon it as a mere dream. Thus, the relation of phenomena (as possible perceptions), according

to which that which happens is, as to its existence, necessarily determined in time by something which antecedes, in conformity with a rule — in other words, the relation of cause and effect — is the condition of the objective validity of our empirical judgements in regard to the sequence of perceptions, consequently of their empirical truth, and therefore of experience. The principle of the relation of causality in the succession of phenomena is therefore valid for all objects of experience, because it is itself the ground of the possibility of experience.

Here, however, a difficulty arises, which must be resolved. The principle of the connection of causality among phenomena is limited in our formula to the succession thereof, although in practice we find that the principle applies also when the phenomena exist together in the same time, and that cause and effect may be simultaneous. For example, there is heat in a room, which does not exist in the open air. I look about for the cause, and find it to be the fire, Now the fire as the cause is simultaneous with its effect, the heat of the room. In this case, then, there is no succession as regards time, between cause and effect, but they are simultaneous; and still the law holds good. The greater part of operating causes in nature are simultaneous with their effects, and the succession in time of the latter is produced only because the cause cannot achieve the total of its effect in one moment. But at the moment when the effect first arises, it is always simultaneous with the causality of its cause, because, if the cause had but a moment before ceased to be, the effect could not have arisen. Here it must be specially remembered that we must consider the order of time and not the lapse thereof. The relation remains, even though no time has elapsed. The time between the causality of the cause and its immediate effect may entirely vanish, and the cause and effect be thus simultaneous, but the relation of the one to the other remains always determinable according to time. If, for example, I consider a leaden ball, which lies upon a cushion and makes a hollow in it, as a cause, then it is simultaneous with the effect. But I distinguish the two through the relation of time of the dynamical connection of both. For if I lay the ball upon the cushion, then the hollow follows upon the before smooth surface; but supposing the cushion has, from some cause or another, a hollow, there does not thereupon follow a leaden ball.

Thus, the law of succession of time is in all instances the only empirical criterion of effect in relation to the causality of the antecedent cause. The glass is the cause of the rising of the water above its horizontal surface, although the two phenomena are contemporaneous. For, as soon as I draw some water with the glass from a larger vessel, an effect follows thereupon, namely, the change of the horizontal state which the water had in the large vessel into a concave, which it assumes in the glass.

This conception of causality leads us to the conception of action; that of action, to the conception of force; and through it, to the conception of substance. As I do not wish this critical essay, the sole purpose of which is to treat of the sources of our synthetical cognition a priori, to be crowded with analyses which merely explain, but do not enlarge the sphere of our conceptions, I reserve the detailed explanation of the above conceptions for a future system of pure reason. Such an analysis, indeed, executed with great particularity, may already be found in well-known works on this subject. But I cannot at present refrain from making a few remarks on the empirical criterion of a substance, in so far as it seems to be more evident and more easily recognized through the conception of action than through that of the permanence of a phenomenon.

Where action (consequently activity and force) exists, substance also must exist, and in it alone must be sought the seat of that fruitful source of phenomena. Very well. But if we are called upon to explain what we mean by substance, and wish to avoid the vice of reasoning in a circle, the answer is by no means so easy. How shall we conclude immediately from the action to the permanence of that which acts, this being nevertheless an essential and peculiar criterion of substance (phenomenon)? But after what has been said above, the solution of this question becomes easy enough, although by the common mode of procedure — merely analysing our conceptions — it would be quite impossible. The conception of action indicates the relation of the subject of causality to the effect. Now because all effect consists in that which happens,

therefore in the changeable, the last subject thereof is the permanent, as the substratum of all that changes, that is, substance. For according to the principle of causality, actions are always the first ground of all change in phenomena and, consequently, cannot be a property of a subject which itself changes, because if this were the case, other actions and another subject would be necessary to determine this change. From all this it results that action alone, as an empirical criterion, is a sufficient proof of the presence of substantiality, without any necessity on my part of endeavouring to discover the permanence of substance by a comparison. Besides, by this mode of induction we could not attain to the completeness which the magnitude and strict universality of the conception requires. For that the primary subject of the causality of all arising and passing away, all origin and extinction, cannot itself (in the sphere of phenomena) arise and pass away, is a sound and safe conclusion, a conclusion which leads us to the conception of empirical necessity and permanence in existence, and consequently to the conception of a substance as phenomenon.

When something happens, the mere fact of the occurrence, without regard to that which occurs, is an object requiring investigation. The transition from the non-being of a state into the existence of it, supposing that this state contains no quality which previously existed in the phenomenon, is a fact of itself demanding inquiry. Such an event, as has been shown in No. A, does not concern substance (for substance does not thus originate), but its condition or state. It is therefore only change, and not origin from nothing. If this origin be regarded as the effect of a foreign cause, it is termed creation, which cannot be admitted as an event among phenomena, because the very possibility of it would annihilate the unity of experience. If, however, I regard all things not as phenomena, but as things in themselves and objects of understanding alone, they, although substances, may be considered as dependent, in respect of their existence, on a foreign cause. But this would require a very different meaning in the words, a meaning which could not apply to phenomena as objects of possible experience.

How a thing can be changed, how it is possible that upon one state existing in one point of time, an opposite state should follow in another point of time — of this we have not the smallest conception a priori. There is requisite for this the knowledge of real powers, which can only be given empirically; for example, knowledge of moving forces, or, in other words, of certain successive phenomena (as movements) which indicate the presence of such forces. But the form of every change, the condition under which alone it can take place as the coming into existence of another state (be the content of the change, that is, the state which is changed, what it may), and consequently the succession of the states themselves can very well be considered a priori, in relation to the law of causality and the conditions of time.*

[Footnote: It must be remarked that I do not speak of the change of certain relations, but of the change of the state. Thus, when a body moves in a uniform manner, it does not change its state (of motion); but only when all motion increases or decreases.]

When a substance passes from one state, a, into another state, b, the point of time in which the latter exists is different from, and subsequent to that in which the former existed. In like manner, the second state, as reality (in the phenomenon), differs from the first, in which the reality of the second did not exist, as b from zero. That is to say, if the state, b, differs from the state, a, only in respect to quantity, the change is a coming into existence of b -a, which in the former state did not exist, and in relation to which that state is = O.

Now the question arises how a thing passes from one state = a, into another state = b. Between two moments there is always a certain time, and between two states existing in these moments there is always a difference having a certain quantity (for all parts of phenomena are in their turn quantities). Consequently, every transition from one state into another is always effected in a time contained between two moments, of which the first determines the state which leaves, and the second determines the state into the thing passes. The thing leaves, and the second determines the state into which the thing Both moments, then, are limitations of the time of a change, consequently of the intermediate state between

both, and as such they belong to the total of the change. Now every change has a cause, which evidences its causality in the whole time during which the charge takes place. The cause, therefore, does not produce the change all at once or in one moment, but in a time, so that, as the time gradually increases from the commencing instant, a, to its completion at b, in like manner also, the quantity of the reality (b - a) is generated through the lesser degrees which are contained between the first and last. All change is therefore possible only through a continuous action of the causality, which, in so far as it is uniform, we call a momentum. The change does not consist of these momenta, but is generated or produced by them as their effect.

Such is the law of the continuity of all change, the ground of which is that neither time itself nor any phenomenon in time consists of parts which are the smallest possible, but that, notwithstanding, the state of a thing passes in the process of a change through all these parts, as elements, to its second state. There is no smallest degree of reality in a phenomenon, just as there is no smallest degree in the quantity of time; and so the new state of reality grows up out of the former state, through all the infinite degrees thereof, the differences of which one from another, taken all together, are less than the difference between o and a.

It is not our business to inquire here into the utility of this principle in the investigation of nature. But how such a proposition, which appears so greatly to extend our knowledge of nature, is possible completely a priori, is indeed a question which deserves investigation, although the first view seems to demonstrate the truth and reality of the principle, and the question, how it is possible, may be considered superfluous. For there are so many groundless pretensions to the enlargement of our knowledge by pure reason that we must take it as a general rule to be mistrustful of all such, and without a thoroughgoing and radical deduction, to believe nothing of the sort even on the clearest dogmatical evidence.

Every addition to our empirical knowledge, and every advance made in the exercise of our perception, is nothing more than an extension of the determination of the internal sense, that is to say, a progression in time, be objects themselves what they may, phenomena, or pure intuitions. This progression in time determines everything, and is itself determined by nothing else. That is to say, the parts of the progression exist only in time, and by means of the synthesis thereof, and are not given antecedently to it. For this reason, every transition in perception to anything which follows upon another in time, is a determination of time by means of the production of this perception. And as this determination of time is, always and in all its parts, a quantity, the perception produced is to be considered as a quantity which proceeds through all its degrees — no one of which is the smallest possible — from zero up to its determined degree. From this we perceive the possibility of cognizing a priori a law of changes — a law, however, which concerns their form merely. We merely anticipate our own apprehension, the formal condition of which, inasmuch as it is itself to be found in the mind antecedently to all given phenomena, must certainly be capable of being cognized a priori.

Thus, as time contains the sensuous condition a priori of the possibility of a continuous progression of that which exists to that which follows it, the understanding, by virtue of the unity of apperception, contains the condition a priori of the possibility of a continuous determination of the position in time of all phenomena, and this by means of the series of causes and effects, the former of which necessitate the sequence of the latter, and thereby render universally and for all time, and by consequence, objectively, valid the empirical cognition of the relations of time.

C. THIRD ANALOGY.

Principle of Coexistence, According to the Law of Reciprocity or Community.

All substances, in so far as they can be perceived in space at the same time, exist in a state of complete reciprocity of action.

PROOF.

Things are coexistent, when in empirical intuition the perception of the one can follow upon the perception of the other, and vice versa — which cannot occur in the succession of phenomena, as we have

shown in the explanation of the second principle. Thus I can perceive the moon and then the earth, or conversely, first the earth and then the moon; and for the reason that my perceptions of these objects can reciprocally follow each other, I say, they exist contemporaneously. Now coexistence is the existence of the manifold in the same time. But time itself is not an object of perception; and therefore we cannot conclude from the fact that things are placed in the same time, the other fact, that the perception of these things can follow each other reciprocally. The synthesis of the imagination in apprehension would only present to us each of these perceptions as present in the subject when the other is not present, and contrariwise; but would not show that the objects are coexistent, that is to say, that, if the one exists, the other also exists in the same time, and that this is necessarily so, in order that the perceptions may be capable of following each other reciprocally. It follows that a conception of the understanding or category of the reciprocal sequence of the determinations of phenomena (existing, as they do, apart from each other, and yet contemporaneously), is requisite to justify us in saying that the reciprocal succession of perceptions has its foundation in the object, and to enable us to represent coexistence as objective. But that relation of substances in which the one contains determinations the ground of which is in the other substance, is the relation of influence. And, when this influence is reciprocal, it is the relation of community or reciprocity. Consequently the coexistence of substances in space cannot be cognized in experience otherwise than under the precondition of their reciprocal action. This is therefore the condition of the possibility of things themselves as objects of experience.

Things are coexistent, in so far as they exist in one and the same time. But how can we know that they exist in one and the same time? Only by observing that the order in the synthesis of apprehension of the manifold is arbitrary and a matter of indifference, that is to say, that it can proceed from A, through B, C, D, to E, or contrariwise from E to A. For if they were successive in time (and in the order, let us suppose, which begins with A), it is quite impossible for the apprehension in perception to begin with E and go backwards to A, inasmuch as A belongs to past time and, therefore, cannot be an object of apprehension.

Let us assume that in a number of substances considered as phenomena each is completely isolated, that is, that no one acts upon another. Then I say that the coexistence of these cannot be an object of possible perception and that the existence of one cannot, by any mode of empirical synthesis, lead us to the existence of another. For we imagine them in this case to be separated by a completely void space, and thus perception, which proceeds from the one to the other in time, would indeed determine their existence by means of a following perception, but would be quite unable to distinguish whether the one phenomenon follows objectively upon the first, or is coexistent with it.

Besides the mere fact of existence, then, there must be something by means of which A determines the position of B in time and, conversely, B the position of A; because only under this condition can substances be empirically represented as existing contemporaneously. Now that alone determines the position of another thing in time which is the cause of it or of its determinations. Consequently every substance (inasmuch as it can have succession predicated of it only in respect of its determinations) must contain the causality of certain determinations in another substance, and at the same time the effects of the causality of the other in itself. That is to say, substances must stand (mediately or immediately) in dynamical community with each other, if coexistence is to be cognized in any possible experience. But, in regard to objects of experience, that is absolutely necessary without which the experience of these objects would itself be impossible. Consequently it is absolutely necessary that all substances in the world of phenomena, in so far as they are coexistent, stand in a relation of complete community of reciprocal action to each other.

The word community has in our language [Footnote: German] two meanings, and contains the two notions conveyed in the Latin communio and commercium. We employ it in this place in the latter sense — that of a dynamical community, without which even the community of place (communio spatii) could not be

empirically cognized. In our experiences it is easy to observe that it is only the continuous influences in all parts of space that can conduct our senses from one object to another; that the light which plays between our eyes and the heavenly bodies produces a mediating community between them and us, and thereby evidences their coexistence with us; that we cannot empirically change our position (perceive this change), unless the existence of matter throughout the whole of space rendered possible the perception of the positions we occupy; and that this perception can prove the contemporaneous existence of these places only through their reciprocal influence, and thereby also the coexistence of even the most remote objects — although in this case the proof is only mediate. Without community, every perception (of a phenomenon in space) is separated from every other and isolated, and the chain of empirical representations, that is, of experience, must, with the appearance of a new object, begin entirely de novo, without the least connection with preceding representations, and without standing towards these even in the relation of time. My intention here is by no means to combat the notion of empty space; for it may exist where our perceptions cannot exist, inasmuch as they cannot reach thereto, and where, therefore, no empirical perception of coexistence takes place. But in this case it is not an object of possible experience.

The following remarks may be useful in the way of explanation. In the mind, all phenomena, as contents of a possible experience, must exist in community (communio) of apperception or consciousness, and in so far as it is requisite that objects be represented as coexistent and connected, in so far must they reciprocally determine the position in time of each other and thereby constitute a whole. If this subjective community is to rest upon an objective basis, or to be applied to substances as phenomena, the perception of one substance must render possible the perception of another, and conversely. For otherwise succession, which is always found in perceptions as apprehensions, would be predicated of external objects, and their representation of their coexistence be thus impossible. But this is a reciprocal influence, that is to say, a real community (commercium) of substances, without which therefore the empirical relation of coexistence would be a notion beyond the reach of our minds. By virtue of this commercium, phenomena, in so far as they are apart from, and nevertheless in connection with each other, constitute a compositum reale. Such composita are possible in many different ways. The three dynamical relations then, from which all others spring, are those of inherence, consequence, and composition.

These, then, are the three analogies of experience. They are nothing more than principles of the determination of the existence of phenomena in time, according to the three modi of this determination; to wit, the relation to time itself as a quantity (the quantity of existence, that is, duration), the relation in time as a series or succession, finally, the relation in time as the complex of all existence (simultaneity). This unity of determination in regard to time is thoroughly dynamical; that is to say, time is not considered as that in which experience determines immediately to every existence its position; for this is impossible, inasmuch as absolute time is not an object of perception, by means of which phenomena can be connected with each other. On the contrary, the rule of the understanding, through which alone the existence of phenomena can receive synthetical unity as regards relations of time, determines for every phenomenon its position in time, and consequently a priori, and with validity for all and every time.

By nature, in the empirical sense of the word, we understand the totality of phenomena connected, in respect of their existence, according to necessary rules, that is, laws. There are therefore certain laws (which are moreover a priori) which make nature possible; and all empirical laws can exist only by means of experience, and by virtue of those primitive laws through which experience itself becomes possible. The purpose of the analogies is therefore to represent to us the unity of nature in the connection of all phenomena under certain exponents, the only business of which is to express the relation of time (in so far as it contains all existence in itself) to the unity of apperception, which can exist in synthesis only according to rules. The combined expression of all is this: "All phenomena exist in one nature, and must so exist, inasmuch as without this a priori unity, no unity of experience, and consequently no determination

of objects in experience, is possible."

As regards the mode of proof which we have employed in treating of these transcendental laws of nature, and the peculiar character of we must make one remark, which will at the same time be important as a guide in every other attempt to demonstrate the truth of intellectual and likewise synthetical propositions a priori. Had we endeavoured to prove these analogies dogmatically, that is, from conceptions; that is to say, had we employed this method in attempting to show that everything which exists, exists only in that which is permanent — that every thing or event presupposes the existence of something in a preceding state, upon which it follows in conformity with a rule — lastly, that in the manifold, which is coexistent, the states coexist in connection with each other according to a rule, all our labour would have been utterly in vain. For more conceptions of things, analyse them as we may, cannot enable us to conclude from the existence of one object to the existence of another. What other course was left for us to pursue? This only, to demonstrate the possibility of experience as a cognition in which at last all objects must be capable of being presented to us, if the representation of them is to possess any objective reality. Now in this third, this mediating term, the essential form of which consists in the synthetical unity of the apperception of all phenomena, we found a priori conditions of the universal and necessary determination as to time of all existences in the world of phenomena, without which the empirical determination thereof as to time would itself be impossible, and we also discovered rules of synthetical unity a priori, by means of which we could anticipate experience. For want of this method, and from the fancy that it was possible to discover a dogmatical proof of the synthetical propositions which are requisite in the empirical employment of the understanding, has it happened that a proof of the principle of sufficient reason has been so often attempted, and always in vain. The other two analogies nobody has ever thought of, although they have always been silently employed by the mind,* because the guiding thread furnished by the categories was wanting, the guide which alone can enable us to discover every hiatus, both in the system of conceptions and of principles.

[Footnote: The unity of the universe, in which all phenomena to be connected, is evidently a mere consequence of the admitted principle of the community of all substances which are coexistent. For were substances isolated, they could not as parts constitute a whole, and were their connection (reciprocal action of the manifold) not necessary from the very fact of coexistence, we could not conclude from the fact of the latter as a merely ideal relation to the former as a real one. We have, however, shown in its place that community is the proper ground of the possibility of an empirical cognition of coexistence, and that we may therefore properly reason from the latter to the former as its condition.]

4. THE POSTULATES OF EMPIRICAL THOUGHT.

1. That which agrees with the formal conditions (intuition and conception) of experience, is possible.

2. That which coheres with the material conditions of experience (sensation), is real.

3. That whose coherence with the real is determined according to universal conditions of experience is (exists) necessary.

Explanation.

The categories of modality possess this peculiarity, that they do not in the least determine the object, or enlarge the conception to which they are annexed as predicates, but only express its relation to the faculty of cognition. Though my conception of a thing is in itself complete, I am still entitled to ask whether the object of it is merely possible, or whether it is also real, or, if the latter, whether it is also necessary. But hereby the object itself is not more definitely determined in thought, but the question is only in what relation it, including all its determinations, stands to the understanding and its employment in experience, to the empirical faculty of judgement, and to the reason of its application to experience.

For this very reason, too, the categories of modality are nothing more than explanations of the conceptions of possibility, reality, and necessity, as employed in experience, and at the same time,

restrictions of all the categories to empirical use alone, not authorizing the transcendental employment of them. For if they are to have something more than a merely logical significance, and to be something more than a mere analytical expression of the form of thought, and to have a relation to things and their possibility, reality, or necessity, they must concern possible experience and its synthetical unity, in which alone objects of cognition can be given.

The postulate of the possibility of things requires also, that the conception of the things agree with the formal conditions of our experience in general. But this, that is to say, the objective form of experience, contains all the kinds of synthesis which are requisite for the cognition of objects. A conception which contains a synthesis must be regarded as empty and, without reference to an object, if its synthesis does not belong to experience — either as borrowed from it, and in this case it is called an empirical conception, or such as is the ground and a priori condition of experience (its form), and in this case it is a pure conception, a conception which nevertheless belongs to experience, inasmuch as its object can be found in this alone. For where shall we find the criterion or character of the possibility of an object which is cogitated by means of an a priori synthetical conception, if not in the synthesis which constitutes the form of empirical cognition of objects? That in such a conception no contradiction exists is indeed a necessary logical condition, but very far from being sufficient to establish the objective reality of the conception, that is, the possibility of such an object as is thought in the conception. Thus, in the conception of a figure which is contained within two straight lines, there is no contradiction, for the conceptions of two straight lines and of their junction contain no negation of a figure. The impossibility in such a case does not rest upon the conception in itself, but upon the construction of it in space, that is to say, upon the conditions of space and its determinations. But these have themselves objective reality, that is, they apply to possible things, because they contain a priori the form of experience in general.

And now we shall proceed to point out the extensive utility and influence of this postulate of possibility. When I represent to myself a thing that is permanent, so that everything in it which changes belongs merely to its state or condition, from such a conception alone I never can cognize that such a thing is possible. Or, if I represent to myself something which is so constituted that, when it is posited, something else follows always and infallibly, my thought contains no self-contradiction; but whether such a property as causality is to be found in any possible thing, my thought alone affords no means of judging. Finally, I can represent to myself different things (substances) which are so constituted that the state or condition of one causes a change in the state of the other, and reciprocally; but whether such a relation is a property of things cannot be perceived from these conceptions, which contain a merely arbitrary synthesis. Only from the fact, therefore, that these conceptions express a priori the relations of perceptions in every experience, do we know that they possess objective reality, that is, transcendental truth; and that independent of experience, though not independent of all relation to form of an experience in general and its synthetical unity, in which alone objects can be empirically cognized.

But when we fashion to ourselves new conceptions of substances, forces, action, and reaction, from the material presented to us by perception, without following the example of experience in their connection, we create mere chimeras, of the possibility of which we cannot discover any criterion, because we have not taken experience for our instructress, though we have borrowed the conceptions from her. Such fictitious conceptions derive their character of possibility not, like the categories, a priori, as conceptions on which all experience depends, but only, a posteriori, as conceptions given by means of experience itself, and their possibility must either be cognized a posteriori and empirically, or it cannot be cognized at all. A substance which is permanently present in space, yet without filling it (like that tertium quid between matter and the thinking subject which some have tried to introduce into metaphysics), or a peculiar fundamental power of the mind of intuiting the future by anticipation (instead of merely inferring from past and present events), or, finally, a power of the mind to place itself in community of thought with other men, however distant they may be — these are conceptions the possibility of which has no ground to

rest upon. For they are not based upon experience and its known laws; and, without experience, they are a merely arbitrary conjunction of thoughts, which, though containing no internal contradiction, has no claim to objective reality, neither, consequently, to the possibility of such an object as is thought in these conceptions. As far as concerns reality, it is self-evident that we cannot cogitate such a possibility in concreto without the aid of experience; because reality is concerned only with sensation, as the matter of experience, and not with the form of thought, with which we can no doubt indulge in shaping fancies.

But I pass by everything which derives its possibility from reality in experience, and I purpose treating here merely of the possibility of things by means of a priori conceptions. I maintain, then, that the possibility of things is not derived from such conceptions per se, but only when considered as formal and objective conditions of an experience in general.

It seems, indeed, as if the possibility of a triangle could be cognized from the conception of it alone (which is certainly independent of experience); for we can certainly give to the conception a corresponding object completely a priori, that is to say, we can construct it. But as a triangle is only the form of an object, it must remain a mere product of the imagination, and the possibility of the existence of an object corresponding to it must remain doubtful, unless we can discover some other ground, unless we know that the figure can be cogitated under the conditions upon which all objects of experience rest. Now, the facts that space is a formal condition a priori of external experience, that the formative synthesis, by which we construct a triangle in imagination, is the very same as that we employ in the apprehension of a phenomenon for the purpose of making an empirical conception of it, are what alone connect the notion of the possibility of such a thing, with the conception of it. In the same manner, the possibility of continuous quantities, indeed of quantities in general, for the conceptions of them are without exception synthetical, is never evident from the conceptions in themselves, but only when they are considered as the formal conditions of the determination of objects in experience. And where, indeed, should we look for objects to correspond to our conceptions, if not in experience, by which alone objects are presented to us? It is, however, true that without antecedent experience we can cognize and characterize the possibility of things, relatively to the formal conditions, under which something is determined in experience as an object, consequently, completely a priori. But still this is possible only in relation to experience and within its limits.

The postulate concerning the cognition of the reality of things requires perception, consequently conscious sensation, not indeed immediately, that is, of the object itself, whose existence is to be cognized, but still that the object have some connection with a real perception, in accordance with the analogies of experience, which exhibit all kinds of real connection in experience.

From the mere conception of a thing it is impossible to conclude its existence. For, let the conception be ever so complete, and containing a statement of all the determinations of the thing, the existence of it has nothing to do with all this, but only with thew question whether such a thing is given, so that the perception of it can in every case precede the conception. For the fact that the conception of it precedes the perception, merely indicates the possibility of its existence; it is perception which presents matter to the conception, that is the sole criterion of reality. Prior to the perception of the thing, however, and therefore comparatively a priori, we are able to cognize its existence, provided it stands in connection with some perceptions according to the principles of the empirical conjunction of these, that is, in conformity with the analogies of perception. For, in this case, the existence of the supposed thing is connected with our perception in a possible experience, and we are able, with the guidance of these analogies, to reason in the series of possible perceptions from a thing which we do really perceive to the thing we do not perceive. Thus, we cognize the existence of a magnetic matter penetrating all bodies from the perception of the attraction of the steel-filings by the magnet, although the constitution of our organs renders an immediate perception of this matter impossible for us. For, according to the laws of sensibility and the connected context of our perceptions, we should in an experience come also on an immediate

empirical intuition of this matter, if our senses were more acute — but this obtuseness has no influence upon and cannot alter the form of possible experience in general. Our knowledge of the existence of things reaches as far as our perceptions, and what may be inferred from them according to empirical laws, extend. If we do not set out from experience, or do not proceed according to the laws of the empirical connection of phenomena, our pretensions to discover the existence of a thing which we do not immediately perceive are vain. Idealism, however, brings forward powerful objections to these rules for proving existence mediately. This is, therefore, the proper place for its refutation.

REFUTATION OF IDEALISM.

Idealism — I mean material idealism — is the theory which declares the existence of objects in space without us to be either () doubtful and indemonstrable, or (2) false and impossible. The first is the problematical idealism of Descartes, who admits the undoubted certainty of only one empirical assertion (assertio), to wit, "I am." The second is the dogmatical idealism of Berkeley, who maintains that space, together with all the objects of which it is the inseparable condition, is a thing which is in itself impossible, and that consequently the objects in space are mere products of the imagination. The dogmatical theory of idealism is unavoidable, if we regard space as a property of things in themselves; for in that case it is, with all to which it serves as condition, a nonentity. But the foundation for this kind of idealism we have already destroyed in the transcendental aesthetic. Problematical idealism, which makes no such assertion, but only alleges our incapacity to prove the existence of anything besides ourselves by means of immediate experience, is a theory rational and evidencing a thorough and philosophical mode of thinking, for it observes the rule not to form a decisive judgement before sufficient proof be shown. The desired proof must therefore demonstrate that we have experience of external things, and not mere fancies. For this purpose, we must prove, that our internal and, to Descartes, indubitable experience is itself possible only under the previous assumption of external experience.

THEOREM.

The simple but empirically determined consciousness of my own existence proves the existence of external objects in space.

PROOF

I am conscious of my own existence as determined in time. All determination in regard to time presupposes the existence of something permanent in perception. But this permanent something cannot be something in me, for the very reason that my existence in time is itself determined by this permanent something. It follows that the perception of this permanent existence is possible only through a thing without me and not through the mere representation of a thing without me. Consequently, the determination of my existence in time is possible only through the existence of real things external to me. Now, consciousness in time is necessarily connected with the consciousness of the possibility of this determination in time. Hence it follows that consciousness in time is necessarily connected also with the existence of things without me, inasmuch as the existence of these things is the condition of determination in time. That is to say, the consciousness of my own existence is at the same time an immediate consciousness of the existence of other things without me.

Remark I. The reader will observe, that in the foregoing proof the game which idealism plays is retorted upon itself, and with more justice. It assumed that the only immediate experience is internal and that from this we can only infer the existence of external things. But, as always happens, when we reason from given effects to determined causes, idealism has reasoned with too much haste and uncertainty, for it is quite possible that the cause of our representations may lie in ourselves, and that we ascribe it falsely to external things. But our proof shows that external experience is properly immediate,* that only by virtue of it — not, indeed, the consciousness of our own existence, but certainly the determination of our existence in time, that is, internal experience — is possible. It is true, that the representation "I am," which is the expression of the consciousness which can accompany all my thoughts, is that which

immediately includes the existence of a subject. But in this representation we cannot find any knowledge of the subject, and therefore also no empirical knowledge, that is, experience. For experience contains, in addition to the thought of something existing, intuition, and in this case it must be internal intuition, that is, time, in relation to which the subject must be determined. But the existence of external things is absolutely requisite for this purpose, so that it follows that internal experience is itself possible only mediately and through external experience.

[Footnote: The immediate consciousness of the existence of external things is, in the preceding theorem, not presupposed, but proved, by the possibility of this consciousness understood by us or not. The question as to the possibility of it would stand thus: "Have we an internal sense, but no external sense, and is our belief in external perception a mere delusion?" But it is evident that, in order merely to fancy to ourselves anything as external, that is, to present it to the sense in intuition we must already possess an external sense, and must thereby distinguish immediately the mere receptivity of an external intuition from the spontaneity which characterizes every act of imagination. For merely to imagine also an external sense, would annihilate the faculty of intuition itself which is to be determined by the imagination.]

Remark II. Now with this view all empirical use of our faculty of cognition in the determination of time is in perfect accordance. Its truth is supported by the fact that it is possible to perceive a determination of time only by means of a change in external relations (motion) to the permanent in space (for example, we become aware of the sun's motion by observing the changes of his relation to the objects of this earth). But this is not all. We find that we possess nothing permanent that can correspond and be submitted to the conception of a substance as intuition, except matter. This idea of permanence is not itself derived from external experience, but is an a priori necessary condition of all determination of time, consequently also of the internal sense in reference to our own existence, and that through the existence of external things. In the representation "I," the consciousness of myself is not an intuition, but a merely intellectual representation produced by the spontaneous activity of a thinking subject. It follows, that this "I" has not any predicate of intuition, which, in its character of permanence, could serve as correlate to the determination of time in the internal sense — in the same way as impenetrability is the correlate of matter as an empirical intuition.

Remark III. From the fact that the existence of external things is a necessary condition of the possibility of a determined consciousness of ourselves, it does not follow that every intuitive representation of external things involves the existence of these things, for their representations may very well be the mere products of the imagination (in dreams as well as in madness); though, indeed, these are themselves created by the reproduction of previous external perceptions, which, as has been shown, are possible only through the reality of external objects. The sole aim of our remarks has, however, been to prove that internal experience in general is possible only through external experience in general. Whether this or that supposed experience be purely imaginary must be discovered from its particular determinations and by comparing these with the criteria of all real experience.

Finally, as regards the third postulate, it applies to material necessity in existence, and not to merely formal and logical necessity in the connection of conceptions. Now as we cannot cognize completely a priori the existence of any object of sense, though we can do so comparatively a priori, that is, relatively to some other previously given existence — a cognition, however, which can only be of such an existence as must be contained in the complex of experience, of which the previously given perception is a part — the necessity of existence can never be cognized from conceptions, but always, on the contrary, from its connection with that which is an object of perception. But the only existence cognized, under the condition of other given phenomena, as necessary, is the existence of effects from given causes in conformity with the laws of causality. It is consequently not the necessity of the existence of things (as substances), but the necessity of the state of things that we cognize, and that not immediately, but by means of the existence of other states given in perception, according to empirical laws of causality. Hence it follows that the

criterion of necessity is to be found only in the law of possible experience — that everything which happens is determined a priori in the phenomenon by its cause. Thus we cognize only the necessity of effects in nature, the causes of which are given us. Moreover, the criterion of necessity in existence possesses no application beyond the field of possible experience, and even in this it is not valid of the existence of things as substances, because these can never be considered as empirical effects, or as something that happens and has a beginning. Necessity, therefore, regards only the relations of phenomena according to the dynamical law of causality, and the possibility grounded thereon, of reasoning from some given existence (of a cause) a priori to another existence (of an effect). "Everything that happens is hypothetically necessary," is a principle which subjects the changes that take place in the world to a law, that is, to a rule of necessary existence, without which nature herself could not possibly exist. Hence the proposition, "Nothing happens by blind chance (in mundo non datur casus)," is an a priori law of nature. The case is the same with the proposition, "Necessity in nature is not blind," that is, it is conditioned, consequently intelligible necessity (non datur fatum). Both laws subject the play of change to "a nature of things (as phenomena)," or, which is the same thing, to the unity of the understanding, and through the understanding alone can changes belong to an experience, as the synthetical unity of phenomena. Both belong to the class of dynamical principles. The former is properly a consequence of the principle of causality — one of the analogies of experience. The latter belongs to the principles of modality, which to the determination of causality adds the conception of necessity, which is itself, however, subject to a rule of the understanding. The principle of continuity forbids any leap in the series of phenomena regarded as changes (in mundo non datur saltus); and likewise, in the complex of all empirical intuitions in space, any break or hiatus between two phenomena (non datur hiatus) — for we can so express the principle, that experience can admit nothing which proves the existence of a vacuum, or which even admits it as a part of an empirical synthesis. For, as regards a vacuum or void, which we may cogitate as out and beyond the field of possible experience (the world), such a question cannot come before the tribunal of mere understanding, which decides only upon questions that concern the employment of given phenomena for the construction of empirical cognition. It is rather a problem for ideal reason, which passes beyond the sphere of a possible experience and aims at forming a judgement of that which surrounds and circumscribes it, and the proper place for the consideration of it is the transcendental dialectic. These four propositions, "In mundo non datur hiatus, non datur saltus, non datur casus, non datur fatum," as well as all principles of transcendental origin, we could very easily exhibit in their proper order, that is, in conformity with the order of the categories, and assign to each its proper place. But the already practised reader will do this for himself, or discover the clue to such an arrangement. But the combined result of all is simply this, to admit into the empirical synthesis nothing which might cause a break in or be foreign to the understanding and the continuous connection of all phenomena, that is, the unity of the conceptions of the understanding. For in the understanding alone is the unity of experience, in which all perceptions must have their assigned place, possible.

Whether the field of possibility be greater than that of reality, and whether the field of the latter be itself greater than that of necessity, are interesting enough questions, and quite capable of synthetic solution, questions, however, which come under the jurisdiction of reason alone. For they are tantamount to asking whether all things as phenomena do without exception belong to the complex and connected whole of a single experience, of which every given perception is a part which therefore cannot be conjoined with any other phenomena — or, whether my perceptions can belong to more than one possible experience? The understanding gives to experience, according to the subjective and formal conditions, of sensibility as well as of apperception, the rules which alone make this experience possible. Other forms of intuition besides those of space and time, other forms of understanding besides the discursive forms of thought, or of cognition by means of conceptions, we can neither imagine nor make intelligible to ourselves; and even if we could, they would still not belong to experience, which is the only mode of cognition by which

objects are presented to us. Whether other perceptions besides those which belong to the total of our possible experience, and consequently whether some other sphere of matter exists, the understanding has no power to decide, its proper occupation being with the synthesis of that which is given. Moreover, the poverty of the usual arguments which go to prove the existence of a vast sphere of possibility, of which all that is real (every object of experience) is but a small part, is very remarkable. “All real is possible”; from this follows naturally, according to the logical laws of conversion, the particular proposition: “Some possible is real.” Now this seems to be equivalent to: “Much is possible that is not real.” No doubt it does seem as if we ought to consider the sum of the possible to be greater than that of the real, from the fact that something must be added to the former to constitute the latter. But this notion of adding to the possible is absurd. For that which is not in the sum of the possible, and consequently requires to be added to it, is manifestly impossible. In addition to accordance with the formal conditions of experience, the understanding requires a connection with some perception; but that which is connected with this perception is real, even although it is not immediately perceived. But that another series of phenomena, in complete coherence with that which is given in perception, consequently more than one all-embracing experience is possible, is an inference which cannot be concluded from the data given us by experience, and still less without any data at all. That which is possible only under conditions which are themselves merely possible, is not possible in any respect. And yet we can find no more certain ground on which to base the discussion of the question whether the sphere of possibility is wider than that of experience.

I have merely mentioned these questions, that in treating of the conception of the understanding, there might be no omission of anything that, in the common opinion, belongs to them. In reality, however, the notion of absolute possibility (possibility which is valid in every respect) is not a mere conception of the understanding, which can be employed empirically, but belongs to reason alone, which passes the bounds of all empirical use of the understanding. We have, therefore, contented ourselves with a merely critical remark, leaving the subject to be explained in the sequel.

Before concluding this fourth section, and at the same time the system of all principles of the pure understanding, it seems proper to mention the reasons which induced me to term the principles of modality postulates. This expression I do not here use in the sense which some more recent philosophers, contrary to its meaning with mathematicians, to whom the word properly belongs, attach to it — that of a proposition, namely, immediately certain, requiring neither deduction nor proof. For if, in the case of synthetical propositions, however evident they may be, we accord to them without deduction, and merely on the strength of their own pretensions, unqualified belief, all critique of the understanding is entirely lost; and, as there is no want of bold pretensions, which the common belief (though for the philosopher this is no credential) does not reject, the understanding lies exposed to every delusion and conceit, without the power of refusing its assent to those assertions, which, though illegitimate, demand acceptance as veritable axioms. When, therefore, to the conception of a thing an a priori determination is synthetically added, such a proposition must obtain, if not a proof, at least a deduction of the legitimacy of its assertion.

The principles of modality are, however, not objectively synthetical, for the predicates of possibility, reality, and necessity do not in the least augment the conception of that of which they are affirmed, inasmuch as they contribute nothing to the representation of the object. But as they are, nevertheless, always synthetical, they are so merely subjectively. That is to say, they have a reflective power, and apply to the conception of a thing, of which, in other respects, they affirm nothing, the faculty of cognition in which the conception originates and has its seat. So that if the conception merely agree with the formal conditions of experience, its object is called possible; if it is in connection with perception, and determined thereby, the object is real; if it is determined according to conceptions by means of the connection of perceptions, the object is called necessary. The principles of modality therefore predicate of a conception nothing more than the procedure of the faculty of cognition which generated it. Now a postulate in mathematics is a practical proposition which contains nothing but the synthesis by which we

present an object to ourselves, and produce the conception of it, for example— "With a given line, to describe a circle upon a plane, from a given point"; and such a proposition does not admit of proof, because the procedure, which it requires, is exactly that by which alone it is possible to generate the conception of such a figure. With the same right, accordingly, can we postulate the principles of modality, because they do not augment* the conception of a thing but merely indicate the manner in which it is connected with the faculty of cognition.

[Footnote: When I think the reality of a thing, I do really think more than the possibility, but not in the thing; for that can never contain more in reality than was contained in its complete possibility. But while the notion of possibility is merely the notion of a position of thing in relation to the understanding (its empirical use), reality is the conjunction of the thing with perception.]

GENERAL REMARK ON THE SYSTEM OF PRINCIPLES.

It is very remarkable that we cannot perceive the possibility of a thing from the category alone, but must always have an intuition, by which to make evident the objective reality of the pure conception of the understanding. Take, for example, the categories of relation. How (1) a thing can exist only as a subject, and not as a mere determination of other things, that is, can be substance; or how (2), because something exists, some other thing must exist, consequently how a thing can be a cause; or how (3), when several things exist, from the fact that one of these things exists, some consequence to the others follows, and reciprocally, and in this way a community of substances can be possible — are questions whose solution cannot be obtained from mere conceptions. The very same is the case with the other categories; for example, how a thing can be of the same sort with many others, that is, can be a quantity, and so on. So long as we have not intuition we cannot know whether we do really think an object by the categories, and where an object can anywhere be found to cohere with them, and thus the truth is established, that the categories are not in themselves cognitions, but mere forms of thought for the construction of cognitions from given intuitions. For the same reason is it true that from categories alone no synthetical proposition can be made. For example: "In every existence there is substance," that is, something that can exist only as a subject and not as mere predicate; or, "Everything is a quantity" — to construct propositions such as these, we require something to enable us to go out beyond the given conception and connect another with it. For the same reason the attempt to prove a synthetical proposition by means of mere conceptions, for example: "Everything that exists contingently has a cause," has never succeeded. We could never get further than proving that, without this relation to conceptions, we could not conceive the existence of the contingent, that is, could not a priori through the understanding cognize the existence of such a thing; but it does not hence follow that this is also the condition of the possibility of the thing itself that is said to be contingent. If, accordingly; we look back to our proof of the principle of causality, we shall find that we were able to prove it as valid only of objects of possible experience, and, indeed, only as itself the principle of the possibility of experience, Consequently of the cognition of an object given in empirical intuition, and not from mere conceptions. That, however, the proposition: "Everything that is contingent must have a cause," is evident to every one merely from conceptions, is not to be denied. But in this case the conception of the contingent is cogitated as involving not the category of modality (as that the non-existence of which can be conceived) but that of relation (as that which can exist only as the consequence of something else), and so it is really an identical proposition: "That which can exist only as a consequence, has a cause." In fact, when we have to give examples of contingent existence, we always refer to changes, and not merely to the possibility of conceiving the opposite.* But change is an event, which, as such, is possible only through a cause, and considered per se its non-existence is therefore possible, and we become cognizant of its contingency from the fact that it can exist only as the effect of a cause. Hence, if a thing is assumed to be contingent, it is an analytical proposition to say, it has a cause.

[Footnote: We can easily conceive the non-existence of matter; but the ancients did not thence infer its contingency. But even the alternation of the existence and non-existence of a given state in a thing, in which all change consists, by no means proves the contingency of that state — the ground of proof being the reality of its opposite. For example, a body is in a state of rest after motion, but we cannot infer the contingency of the motion from the fact that the former is the opposite of the latter. For this opposite is merely a logical and not a real opposite to the other. If we wish to demonstrate the contingency of the motion, what we ought to prove is that, instead of the motion which took place in the preceding point of time, it was possible for the body to have been then in rest, not, that it is afterwards in rest; for in this case, both opposites are perfectly consistent with each other.]

But it is still more remarkable that, to understand the possibility of things according to the categories and thus to demonstrate the objective reality of the latter, we require not merely intuitions, but external intuitions. If, for example, we take the pure conceptions of relation, we find that (1) for the purpose of presenting to the conception of substance something permanent in intuition corresponding thereto and thus of demonstrating the objective reality of this conception, we require an intuition (of matter) in space, because space alone is permanent and determines things as such, while time, and with it all that is in the internal sense, is in a state of continual flow; (2) in order to represent change as the intuition corresponding to the conception of causality, we require the representation of motion as change in space; in fact, it is through it alone that changes, the possibility of which no pure understanding can perceive, are capable of being intuited. Change is the connection of determinations contradictorily opposed to each other in the existence of one and the same thing. Now, how it is possible that out of a given state one quite opposite to it in the same thing should follow, reason without an example can not only not conceive, but cannot even make intelligible without intuition; and this intuition is the motion of a point in space; the existence of which in different spaces (as a consequence of opposite determinations) alone makes the intuition of change possible. For, in order to make even internal change cognitable, we require to represent time, as the form of the internal sense, figuratively by a line, and the internal change by the drawing of that line (motion), and consequently are obliged to employ external intuition to be able to represent the successive existence of ourselves in different states. The proper ground of this fact is that all change to be perceived as change presupposes something permanent in intuition, while in the internal sense no permanent intuition is to be found. Lastly, the objective possibility of the category of community cannot be conceived by mere reason, and consequently its objective reality cannot be demonstrated without an intuition, and that external in space. For how can we conceive the possibility of community, that is, when several substances exist, that some effect on the existence of the one follows from the existence of the other, and reciprocally, and therefore that, because something exists in the latter, something else must exist in the former, which could not be understood from its own existence alone? For this is the very essence of community — which is inconceivable as a property of things which are perfectly isolated. Hence, Leibnitz, in attributing to the substances of the world — as cogitated by the understanding alone — a community, required the mediating aid of a divinity; for, from their existence, such a property seemed to him with justice inconceivable. But we can very easily conceive the possibility of community (of substances as phenomena) if we represent them to ourselves as in space, consequently in external intuition. For external intuition contains in itself a priori formal external relations, as the conditions of the possibility of the real relations of action and reaction, and therefore of the possibility of community. With the same ease can it be demonstrated, that the possibility of things as quantities, and consequently the objective reality of the category of quantity, can be grounded only in external intuition, and that by its means alone is the notion of quantity appropriated by the internal sense. But I must avoid prolixity, and leave the task of illustrating this by examples to the reader's own reflection.

The above remarks are of the greatest importance, not only for the confirmation of our previous confutation of idealism, but still more when the subject of self-cognition by mere internal consciousness and the determination of our own nature without the aid of external empirical intuitions is under discussion, for the indication of the grounds of the possibility of such a cognition.

The result of the whole of this part of the analytic of principles is, therefore: “All principles of the pure understanding are nothing more than a priori principles of the possibility of experience, and to experience alone do all a priori synthetical propositions apply and relate”; indeed, their possibility itself rests entirely on this relation.

CHAPTER III Of the Ground of the Division of all Objects into Phenomena

and Noumena.

We have now not only traversed the region of the pure understanding and carefully surveyed every part of it, but we have also measured it, and assigned to everything therein its proper place. But this land is an island, and enclosed by nature herself within unchangeable limits. It is the land of truth (an attractive word), surrounded by a wide and stormy ocean, the region of illusion, where many a fog-bank, many an iceberg, seems to the mariner, on his voyage of discovery, a new country, and, while constantly deluding him with vain hopes, engages him in dangerous adventures, from which he never can desist, and which yet he never can bring to a termination. But before venturing upon this sea, in order to explore it in its whole extent, and to arrive at a certainty whether anything is to be discovered there, it will not be without advantage if we cast our eyes upon the chart of the land that we are about to leave, and to ask ourselves, firstly, whether we cannot rest perfectly contented with what it contains, or whether we must not of necessity be contented with it, if we can find nowhere else a solid foundation to build upon; and, secondly, by what title we possess this land itself, and how we hold it secure against all hostile claims? Although, in the course of our analytic, we have already given sufficient answers to these questions, yet a summary recapitulation of these solutions may be useful in strengthening our conviction, by uniting in one point the momenta of the arguments.

We have seen that everything which the understanding draws from itself, without borrowing from experience, it nevertheless possesses only for the behoof and use of experience. The principles of the pure understanding, whether constitutive a priori (as the mathematical principles), or merely regulative (as the dynamical), contain nothing but the pure schema, as it were, of possible experience. For experience possesses its unity from the synthetical unity which the understanding, originally and from itself, imparts to the synthesis of the imagination in relation to apperception, and in a priori relation to and agreement with which phenomena, as data for a possible cognition, must stand. But although these rules of the understanding are not only a priori true, but the very source of all truth, that is, of the accordance of our cognition with objects, and on this ground, that they contain the basis of the possibility of experience, as the ensemble of all cognition, it seems to us not enough to propound what is true — we desire also to be told what we want to know. If, then, we learn nothing more by this critical examination than what we should have practised in the merely empirical use of the understanding, without any such subtle inquiry, the presumption is that the advantage we reap from it is not worth the labour bestowed upon it. It may certainly be answered that no rash curiosity is more prejudicial to the enlargement of our knowledge than that which must know beforehand the utility of this or that piece of information which we seek, before we have entered on the needful investigations, and before one could form the least conception of its utility, even though it were placed before our eyes. But there is one advantage in such transcendental inquiries which can be made comprehensible to the dullest and most reluctant learner — this, namely, that the understanding which is occupied merely with empirical exercise, and does not reflect on the sources of its own cognition, may exercise its functions very well and very successfully, but is quite unable to do one thing, and that of very great importance, to determine, namely, the bounds that limit its employment, and to know what lies within or without its own sphere. This purpose can be obtained only by such profound investigations as we have instituted. But if it cannot distinguish whether certain questions lie within its horizon or not, it can never be sure either as to its claims or possessions, but must lay its account with many humiliating corrections, when it transgresses, as it unavoidably will, the limits of its own territory, and loses itself in fanciful opinions and blinding illusions.

That the understanding, therefore, cannot make of its a priori principles, or even of its conceptions, other than an empirical use, is a proposition which leads to the most important results. A transcendental use is made of a conception in a fundamental proposition or principle, when it is referred to things in general and considered as things in themselves; an empirical use, when it is referred merely to phenomena, that is, to objects of a possible experience. That the latter use of a conception is the only admissible one is evident from the reasons following. For every conception are requisite, firstly, the logical form of a conception (of thought) general; and, secondly, the possibility of presenting to this an object to which it may apply. Failing this latter, it has no sense, and utterly void of content, although it may contain the logical function for constructing a conception from certain data. Now, object cannot be given to a conception otherwise than by intuition, and, even if a pure intuition antecedent to the object is a priori possible, this pure intuition can itself obtain objective validity only from empirical intuition, of which it is itself but the form. All conceptions, therefore, and with them all principles, however high the degree of their a priori possibility, relate to empirical intuitions, that is, to data towards a possible experience. Without this they possess no objective validity, but are mere play of imagination or of understanding with images or notions. Let us take, for example, the conceptions of mathematics, and first in its pure intuitions. "Space has three dimensions"— "Between two points there can be only one straight line," etc. Although all these principles, and the representation of the object with which this science occupies itself, are generated in the mind entirely a priori, they would nevertheless have no significance if we were not always able to exhibit their significance in and by means of phenomena (empirical objects). Hence it is requisite that an abstract conception be made sensuous, that is, that an object corresponding to it in intuition be forthcoming, otherwise the conception remains, as we say, without sense, that is, without meaning. Mathematics fulfils this requirement by the construction of the figure, which is a phenomenon evident to the senses. The same science finds support and significance in number; this in its turn finds it in the fingers, or in counters, or in lines and points. The conception itself is always produced a priori, together with the synthetical principles or formulas from such conceptions; but the proper employment of them, and their application to objects, can exist nowhere but in experience, the possibility of which, as regards its form, they contain a priori.

That this is also the case with all of the categories and the principles based upon them is evident from the fact that we cannot render intelligible the possibility of an object corresponding to them without having recourse to the conditions of sensibility, consequently, to the form of phenomena, to which, as their only proper objects, their use must therefore be confined, inasmuch as, if this condition is removed, all significance, that is, all relation to an object, disappears, and no example can be found to make it comprehensible what sort of things we ought to think under such conceptions.

The conception of quantity cannot be explained except by saying that it is the determination of a thing whereby it can be cogitated how many times one is placed in it. But this "how many times" is based upon successive repetition, consequently upon time and the synthesis of the homogeneous therein. Reality, in contradistinction to negation, can be explained only by cogitating a time which is either filled therewith or is void. If I leave out the notion of permanence (which is existence in all time), there remains in the conception of substance nothing but the logical notion of subject, a notion of which I endeavour to realize by representing to myself something that can exist only as a subject. But not only am I perfectly ignorant of any conditions under which this logical prerogative can belong to a thing, I can make nothing out of the notion, and draw no inference from it, because no object to which to apply the conception is determined, and we consequently do not know whether it has any meaning at all. In like manner, if I leave out the notion of time, in which something follows upon some other thing in conformity with a rule, I can find nothing in the pure category, except that there is a something of such a sort that from it a conclusion may be drawn as to the existence of some other thing. But in this case it would not only be impossible to distinguish between a cause and an effect, but, as this power to draw conclusions requires conditions of

which I am quite ignorant, the conception is not determined as to the mode in which it ought to apply to an object. The so-called principle: "Everything that is contingent has a cause," comes with a gravity and self-assumed authority that seems to require no support from without. But, I ask, what is meant by contingent? The answer is that the non-existence of which is possible. But I should like very well to know by what means this possibility of non-existence is to be cognized, if we do not represent to ourselves a succession in the series of phenomena, and in this succession an existence which follows a non-existence, or conversely, consequently, change. For to say, that the non-existence of a thing is not self-contradictory is a lame appeal to a logical condition, which is no doubt a necessary condition of the existence of the conception, but is far from being sufficient for the real objective possibility of non-existence. I can annihilate in thought every existing substance without self-contradiction, but I cannot infer from this their objective contingency in existence, that is to say, the possibility of their non-existence in itself. As regards the category of community, it may easily be inferred that, as the pure categories of substance and causality are incapable of a definition and explanation sufficient to determine their object without the aid of intuition, the category of reciprocal causality in the relation of substances to each other (commercium) is just as little susceptible thereof. Possibility, existence, and necessity nobody has ever yet been able to explain without being guilty of manifest tautology, when the definition has been drawn entirely from the pure understanding. For the substitution of the logical possibility of the conception — the condition of which is that it be not self-contradictory, for the transcendental possibility of things — the condition of which is that there be an object corresponding to the conception, is a trick which can only deceive the inexperienced.*

[Footnote: In one word, to none of these conceptions belongs a corresponding object, and consequently their real possibility cannot be demonstrated, if we take away sensuous intuition — the only intuition which we possess — and there then remains nothing but the logical possibility, that is, the fact that the conception or thought is possible — which, however, is not the question; what we want to know being, whether it relates to an object and thus possesses any meaning.]

It follows incontestably, that the pure conceptions of the understanding are incapable of transcendental, and must always be of empirical use alone, and that the principles of the pure understanding relate only to the general conditions of a possible experience, to objects of the senses, and never to things in general, apart from the mode in which we intuite them.

Transcendental analytic has accordingly this important result, to wit, that the understanding is competent' effect nothing a priori, except the anticipation of the form of a possible experience in general, and that, as that which is not phenomenon cannot be an object of experience, it can never overstep the limits of sensibility, within which alone objects are presented to us. Its principles are merely principles of the exposition of phenomena, and the proud name of an ontology, which professes to present synthetical cognitions a priori of things in general in a systematic doctrine, must give place to the modest title of analytic of the pure understanding.

Thought is the act of referring a given intuition to an object. If the mode of this intuition is unknown to us, the object is merely transcendental, and the conception of the understanding is employed only transcendentally, that is, to produce unity in the thought of a manifold in general. Now a pure category, in which all conditions of sensuous intuition — as the only intuition we possess — are abstracted, does not determine an object, but merely expresses the thought of an object in general, according to different modes. Now, to employ a conception, the function of judgement is required, by which an object is subsumed under the conception, consequently the at least formal condition, under which something can be given in intuition. Failing this condition of judgement (schema), subsumption is impossible; for there is in such a case nothing given, which may be subsumed under the conception. The merely transcendental use of the categories is therefore, in fact, no use at all and has no determined, or even, as regards its form,

determinable object. Hence it follows that the pure category is incompetent to establish a synthetical a priori principle, and that the principles of the pure understanding are only of empirical and never of transcendental use, and that beyond the sphere of possible experience no synthetical a priori principles are possible.

It may be advisable, therefore, to express ourselves thus. The pure categories, apart from the formal conditions of sensibility, have a merely transcendental meaning, but are nevertheless not of transcendental use, because this is in itself impossible, inasmuch as all the conditions of any employment or use of them (in judgements) are absent, to wit, the formal conditions of the subsumption of an object under these conceptions. As, therefore, in the character of pure categories, they must be employed empirically, and cannot be employed transcendentally, they are of no use at all, when separated from sensibility, that is, they cannot be applied to an object. They are merely the pure form of the employment of the understanding in respect of objects in general and of thought, without its being at the same time possible to think or to determine any object by their means. But there lurks at the foundation of this subject an illusion which it is very difficult to avoid. The categories are not based, as regards their origin, upon sensibility, like the forms of intuition, space, and time; they seem, therefore, to be capable of an application beyond the sphere of sensuous objects. But this is not the case. They are nothing but mere forms of thought, which contain only the logical faculty of uniting a priori in consciousness the manifold given in intuition. Apart, then, from the only intuition possible for us, they have still less meaning than the pure sensuous forms, space and time, for through them an object is at least given, while a mode of connection of the manifold, when the intuition which alone gives the manifold is wanting, has no meaning at all. At the same time, when we designate certain objects as phenomena or sensuous existences, thus distinguishing our mode of intuiting them from their own nature as things in themselves, it is evident that by this very distinction we as it were place the latter, considered in this their own nature, although we do not so intuite them, in opposition to the former, or, on the other hand, we do so place other possible things, which are not objects of our senses, but are cogitated by the understanding alone, and call them intelligible existences (noumena). Now the question arises whether the pure conceptions of our understanding do possess significance in respect of these latter, and may possibly be a mode of cognizing them.

But we are met at the very commencement with an ambiguity, which may easily occasion great misapprehension. The understanding, when it terms an object in a certain relation phenomenon, at the same time forms out of this relation a representation or notion of an object in itself, and hence believes that it can form also conceptions of such objects. Now as the understanding possesses no other fundamental conceptions besides the categories, it takes for granted that an object considered as a thing in itself must be capable of being thought by means of these pure conceptions, and is thereby led to hold the perfectly undetermined conception of an intelligible existence, a something out of the sphere of our sensibility, for a determinate conception of an existence which we can cognize in some way or other by means of the understanding.

If, by the term noumenon, we understand a thing so far as it is not an object of our sensuous intuition, thus making abstraction of our mode of intuiting it, this is a noumenon in the negative sense of the word. But if we understand by it an object of a non-sensuous intuition, we in this case assume a peculiar mode of intuition, an intellectual intuition, to wit, which does not, however, belong to us, of the very possibility of which we have no notion — and this is a noumenon in the positive sense.

The doctrine of sensibility is also the doctrine of noumena in the negative sense, that is, of things which the understanding is obliged to cogitate apart from any relation to our mode of intuition, consequently not as mere phenomena, but as things in themselves. But the understanding at the same time comprehends that it cannot employ its categories for the consideration of things in themselves, because these possess significance only in relation to the unity of intuitions in space and time, and that they are competent to determine this unity by means of general a priori connecting conceptions only on account of the pure

ideality of space and time. Where this unity of time is not to be met with, as is the case with noumena, the whole use, indeed the whole meaning of the categories is entirely lost, for even the possibility of things to correspond to the categories is in this case incomprehensible. On this point, I need only refer the reader to what I have said at the commencement of the General Remark appended to the foregoing chapter. Now, the possibility of a thing can never be proved from the fact that the conception of it is not self-contradictory, but only by means of an intuition corresponding to the conception. If, therefore, we wish to apply the categories to objects which cannot be regarded as phenomena, we must have an intuition different from the sensuous, and in this case the objects would be a noumena in the positive sense of the word. Now, as such an intuition, that is, an intellectual intuition, is no part of our faculty of cognition, it is absolutely impossible for the categories to possess any application beyond the limits of experience. It may be true that there are intelligible existences to which our faculty of sensuous intuition has no relation, and cannot be applied, but our conceptions of the understanding, as mere forms of thought for our sensuous intuition, do not extend to these. What, therefore, we call noumenon must be understood by us as such in a negative sense.

If I take away from an empirical intuition all thought (by means of the categories), there remains no cognition of any object; for by means of mere intuition nothing is cogitated, and, from the existence of such or such an affection of sensibility in me, it does not follow that this affection or representation has any relation to an object without me. But if I take away all intuition, there still remains the form of thought, that is, the mode of determining an object for the manifold of a possible intuition. Thus the categories do in some measure really extend further than sensuous intuition, inasmuch as they think objects in general, without regard to the mode (of sensibility) in which these objects are given. But they do not for this reason apply to and determine a wider sphere of objects, because we cannot assume that such can be given, without presupposing the possibility of another than the sensuous mode of intuition, a supposition we are not justified in making.

I call a conception problematical which contains in itself no contradiction, and which is connected with other cognitions as a limitation of given conceptions, but whose objective reality cannot be cognized in any manner. The conception of a noumenon, that is, of a thing which must be cogitated not as an object of sense, but as a thing in itself (solely through the pure understanding), is not self-contradictory, for we are not entitled to maintain that sensibility is the only possible mode of intuition. Nay, further, this conception is necessary to restrain sensuous intuition within the bounds of phenomena, and thus to limit the objective validity of sensuous cognition; for things in themselves, which lie beyond its province, are called noumena for the very purpose of indicating that this cognition does not extend its application to all that the understanding thinks. But, after all, the possibility of such noumena is quite incomprehensible, and beyond the sphere of phenomena, all is for us a mere void; that is to say, we possess an understanding whose province does problematically extend beyond this sphere, but we do not possess an intuition, indeed, not even the conception of a possible intuition, by means of which objects beyond the region of sensibility could be given us, and in reference to which the understanding might be employed assertorically. The conception of a noumenon is therefore merely a limitative conception and therefore only of negative use. But it is not an arbitrary or fictitious notion, but is connected with the limitation of sensibility, without, however, being capable of presenting us with any positive datum beyond this sphere.

The division of objects into phenomena and noumena, and of the world into a mundus sensibilis and intelligibilis is therefore quite inadmissible in a positive sense, although conceptions do certainly admit of such a division; for the class of noumena have no determinate object corresponding to them, and cannot therefore possess objective validity. If we abandon the senses, how can it be made conceivable that the categories (which are the only conceptions that could serve as conceptions for noumena) have any sense or meaning at all, inasmuch as something more than the mere unity of thought, namely, a possible intuition, is requisite for their application to an object? The conception of a noumenon, considered as merely

problematical, is, however, not only admissible, but, as a limitative conception of sensibility, absolutely necessary. But, in this case, a noumenon is not a particular intelligible object for our understanding; on the contrary, the kind of understanding to which it could belong is itself a problem, for we cannot form the most distant conception of the possibility of an understanding which should cognize an object, not discursively by means of categories, but intuitively in a non-sensuous intuition. Our understanding attains in this way a sort of negative extension. That is to say, it is not limited by, but rather limits, sensibility, by giving the name of noumena to things, not considered as phenomena, but as things in themselves. But it at the same time prescribes limits to itself, for it confesses itself unable to cognize these by means of the categories, and hence is compelled to cogitate them merely as an unknown something.

I find, however, in the writings of modern authors, an entirely different use of the expressions, mundus sensibilis and intelligibilis, which quite departs from the meaning of the ancients — an acceptation in which, indeed, there is to be found no difficulty, but which at the same time depends on mere verbal quibbling. According to this meaning, some have chosen to call the complex of phenomena, in so far as it is intuited, mundus sensibilis, but in so far as the connection thereof is cogitated according to general laws of thought, mundus intelligibilis. Astronomy, in so far as we mean by the word the mere observation of the starry heaven, may represent the former; a system of astronomy, such as the Copernican or Newtonian, the latter. But such twisting of words is a mere sophistical subterfuge, to avoid a difficult question, by modifying its meaning to suit our own convenience. To be sure, understanding and reason are employed in the cognition of phenomena; but the question is, whether these can be applied when the object is not a phenomenon and in this sense we regard it if it is cogitated as given to the understanding alone, and not to the senses. The question therefore is whether, over and above the empirical use of the understanding, a transcendental use is possible, which applies to the noumenon as an object. This question we have answered in the negative.

When therefore we say, the senses represent objects as they appear, the understanding as they are, the latter statement must not be understood in a transcendental, but only in an empirical signification, that is, as they must be represented in the complete connection of phenomena, and not according to what they may be, apart from their relation to possible experience, consequently not as objects of the pure understanding. For this must ever remain unknown to us. Nay, it is also quite unknown to us whether any such transcendental or extraordinary cognition is possible under any circumstances, at least, whether it is possible by means of our categories. Understanding and sensibility, with us, can determine objects only in conjunction. If we separate them, we have intuitions without conceptions, or conceptions without intuitions; in both cases, representations, which we cannot apply to any determinate object.

If, after all our inquiries and explanations, any one still hesitates to abandon the mere transcendental use of the categories, let him attempt to construct with them a synthetical proposition. It would, of course, be unnecessary for this purpose to construct an analytical proposition, for that does not extend the sphere of the understanding, but, being concerned only about what is cogitated in the conception itself, it leaves it quite undecided whether the conception has any relation to objects, or merely indicates the unity of thought — complete abstraction being made of the modi in which an object may be given: in such a proposition, it is sufficient for the understanding to know what lies in the conception — to what it applies is to it indifferent. The attempt must therefore be made with a synthetical and so-called transcendental principle, for example: “Everything that exists, exists as substance,” or, “Everything that is contingent exists as an effect of some other thing, viz., of its cause.” Now I ask, whence can the understanding draw these synthetical propositions, when the conceptions contained therein do not relate to possible experience but to things in themselves (noumena)? Where is to be found the third term, which is always requisite PURE site in a synthetical proposition, which may connect in the same proposition conceptions which have no logical (analytical) connection with each other? The proposition never will be demonstrated, nay, more, the possibility of any such pure assertion never can be shown, without making

reference to the empirical use of the understanding, and thus, ipso facto, completely renouncing pure and non-sensuous judgement. Thus the conception of pure and merely intelligible objects is completely void of all principles of its application, because we cannot imagine any mode in which they might be given, and the problematical thought which leaves a place open for them serves only, like a void space, to limit the use of empirical principles, without containing at the same time any other object of cognition beyond their sphere.

APPENDIX.

Of the Equivocal Nature or Amphiboly of the Conceptions of Reflection from the Confusion of the Transcendental with the Empirical use of the Understanding.

Reflection (reflexio) is not occupied about objects themselves, for the purpose of directly obtaining conceptions of them, but is that state of the mind in which we set ourselves to discover the subjective conditions under which we obtain conceptions. It is the consciousness of the relation of given representations to the different sources or faculties of cognition, by which alone their relation to each other can be rightly determined. The first question which occurs in considering our representations is to what faculty of cognition do they belong? To the understanding or to the senses? Many judgements are admitted to be true from mere habit or inclination; but, because reflection neither precedes nor follows, it is held to be a judgement that has its origin in the understanding. All judgements do not require examination, that is, investigation into the grounds of their truth. For, when they are immediately certain (for example: “Between two points there can be only one straight line”), no better or less mediate test of their truth can be found than that which they themselves contain and express. But all judgement, nay, all comparisons require reflection, that is, a distinction of the faculty of cognition to which the given conceptions belong. The act whereby I compare my representations with the faculty of cognition which originates them, and whereby I distinguish whether they are compared with each other as belonging to the pure understanding or to sensuous intuition, I term transcendental reflection. Now, the relations in which conceptions can stand to each other are those of identity and difference, agreement and opposition, of the internal and external, finally, of the determinable and the determining (matter and form). The proper determination of these relations rests on the question, to what faculty of cognition they subjectively belong, whether to sensibility or understanding? For, on the manner in which we solve this question depends the manner in which we must cogitate these relations.

Before constructing any objective judgement, we compare the conceptions that are to be placed in the judgement, and observe whether there exists identity (of many representations in one conception), if a general judgement is to be constructed, or difference, if a particular; whether there is agreement when affirmative; and opposition when negative judgements are to be constructed, and so on. For this reason we ought to call these conceptions, conceptions of comparison (conceptus comparationis). But as, when the question is not as to the logical form, but as to the content of conceptions, that is to say, whether the things themselves are identical or different, in agreement or opposition, and so on, the things can have a twofold relation to our faculty of cognition, to wit, a relation either to sensibility or to the understanding, and as on this relation depends their relation to each other, transcendental reflection, that is, the relation of given representations to one or the other faculty of cognition, can alone determine this latter relation. Thus we shall not be able to discover whether the things are identical or different, in agreement or opposition, etc., from the mere conception of the things by means of comparison (comparatio), but only by distinguishing the mode of cognition to which they belong, in other words, by means of transcendental reflection. We may, therefore, with justice say, that logical reflection is mere comparison, for in it no account is taken of the faculty of cognition to which the given conceptions belong, and they are consequently, as far as regards their origin, to be treated as homogeneous; while transcendental reflection (which applies to the objects themselves) contains the ground of the possibility of objective comparison of representations with each other, and is therefore very different from the former, because the faculties of cognition to which they belong are not even the same. Transcendental reflection is a duty which no one can neglect who wishes to establish an a priori judgement upon things. We shall now proceed to fulfil this duty, and thereby throw not a little light on the question as to the determination of the proper business of the understanding.

1. Identity and Difference. When an object is presented to us several times, but always with the same internal determinations (qualitas et quantitas), it, if an object of pure understanding, is always the same, not several things, but only one thing (numerica identitas); but if a phenomenon, we do not concern ourselves with comparing the conception of the thing with the conception of some other, but, although they may be in this respect perfectly the same, the difference of place at the same time is a sufficient ground for asserting the numerical difference of these objects (of sense). Thus, in the case of two drops of water, we may make complete abstraction of all internal difference (quality and quantity), and, the fact that they are intuited at the same time in different places, is sufficient to justify us in holding them to be numerically different. Leibnitz regarded phenomena as things in themselves, consequently as intelligibilia, that is, objects of pure understanding (although, on account of the confused nature of their representations, he gave them the name of phenomena), and in this case his principle of the indiscernible (principium identatis indiscernibilium) is not to be impugned. But, as phenomena are objects of sensibility, and, as the understanding, in respect of them, must be employed empirically and not purely or transcendentally, plurality and numerical difference are given by space itself as the condition of external phenomena. For one part of space, although it may be perfectly similar and equal to another part, is still without it, and for this reason alone is different from the latter, which is added to it in order to make up a greater space. It follows that this must hold good of all things that are in the different parts of space at the same time, however similar and equal one may be to another.

2. Agreement and Opposition. When reality is represented by the pure understanding (realitas noumenon), opposition between realities is incogitable — such a relation, that is, that when these realities are connected in one subject, they annihilate the effects of each other and may be represented in the formula 3 -3 = 0. On the other hand, the real in a phenomenon (realitas phaenomenon) may very well be in mutual opposition, and, when united in the same subject, the one may completely or in part annihilate the effect or consequence of the other; as in the case of two moving forces in the same straight line drawing or impelling a point in opposite directions, or in the case of a pleasure counterbalancing a certain amount of pain.

3. The Internal and External. In an object of the pure understanding, only that is internal which has no relation (as regards its existence) to anything different from itself. On the other hand, the internal determinations of a substantia phaenomenon in space are nothing but relations, and it is itself nothing more than a complex of mere relations. Substance in space we are cognizant of only through forces operative in it, either drawing others towards itself (attraction), or preventing others from forcing into itself (repulsion and impenetrability). We know no other properties that make up the conception of substance phenomenal in space, and which we term matter. On the other hand, as an object of the pure understanding, every substance must have internal determination and forces. But what other internal attributes of such an object can I think than those which my internal sense presents to me? That, to wit, which in either itself thought, or something analogous to it. Hence Leibnitz, who looked upon things as noumena, after denying them everything like external relation, and therefore also composition or combination, declared that all substances, even the component parts of matter, were simple substances with powers of representation, in one word, monads.

4. Matter and Form. These two conceptions lie at the foundation of all other reflection, so inseparably are they connected with every mode of exercising the understanding. The former denotes the determinable in general, the second its determination, both in a transcendental sense, abstraction being made of every difference in that which is given, and of the mode in which it is determined. Logicians formerly termed the universal, matter, the specific difference of this or that part of the universal, form. In a judgement one may call the given conceptions logical matter (for the judgement), the relation of these to each other (by means of the copula), the form of the judgement. In an object, the composite parts thereof (essentialia) are the matter; the mode in which they are connected in the object, the form. In respect to things in general,

unlimited reality was regarded as the matter of all possibility, the limitation thereof (negation) as the form, by which one thing is distinguished from another according to transcendental conceptions. The understanding demands that something be given (at least in the conception), in order to be able to determine it in a certain manner. Hence, in a conception of the pure understanding, the matter precedes the form, and for this reason Leibnitz first assumed the existence of things (monads) and of an internal power of representation in them, in order to found upon this their external relation and the community their state (that is, of their representations). Hence, with him, space and time were possible — the former through the relation of substances, the latter through the connection of their determinations with each other, as causes and effects. And so would it really be, if the pure understanding were capable of an immediate application to objects, and if space and time were determinations of things in themselves. But being merely sensuous intuitions, in which we determine all objects solely as phenomena, the form of intuition (as a subjective property of sensibility) must antecede all matter (sensations), consequently space and time must antecede all phenomena and all data of experience, and rather make experience itself possible. But the intellectual philosopher could not endure that the form should precede the things themselves and determine their possibility; an objection perfectly correct, if we assume that we intuite things as they are, although with confused representation. But as sensuous intuition is a peculiar subjective condition, which is a priori at the foundation of all perception, and the form of which is primitive, the form must be given per se, and so far from matter (or the things themselves which appear) lying at the foundation of experience (as we must conclude, if we judge by mere conceptions), the very possibility of itself presupposes, on the contrary, a given formal intuition (space and time).

REMARK ON THE AMPHIBOLY OF THE CONCEPTIONS OF REFLECTION.

Let me be allowed to term the position which we assign to a conception either in the sensibility or in the pure understanding, the transcendental place. In this manner, the appointment of the position which must be taken by each conception according to the difference in its use, and the directions for determining this place to all conceptions according to rules, would be a transcendental topic, a doctrine which would thoroughly shield us from the surreptitious devices of the pure understanding and the delusions which thence arise, as it would always distinguish to what faculty of cognition each conception properly belonged. Every conception, every title, under which many cognitions rank together, may be called a logical place. Upon this is based the logical topic of Aristotle, of which teachers and rhetoricians could avail themselves, in order, under certain titles of thought, to observe what would best suit the matter they had to treat, and thus enable themselves to quibble and talk with fluency and an appearance of profundity.

Transcendental topic, on the contrary, contains nothing more than the above-mentioned four titles of all comparison and distinction, which differ from categories in this respect, that they do not represent the object according to that which constitutes its conception (quantity, reality), but set forth merely the comparison of representations, which precedes our conceptions of things. But this comparison requires a previous reflection, that is, a determination of the place to which the representations of the things which are compared belong, whether, to wit, they are cogitated by the pure understanding, or given by sensibility.

Conceptions may be logically compared without the trouble of inquiring to what faculty their objects belong, whether as noumena, to the understanding, or as phenomena, to sensibility. If, however, we wish to employ these conceptions in respect of objects, previous transcendental reflection is necessary. Without this reflection I should make a very unsafe use of these conceptions, and construct pretended synthetical propositions which critical reason cannot acknowledge and which are based solely upon a transcendental amphiboly, that is, upon a substitution of an object of pure understanding for a phenomenon.

For want of this doctrine of transcendental topic, and consequently deceived by the amphiboly of the conceptions of reflection, the celebrated Leibnitz constructed an intellectual system of the world, or rather, believed himself competent to cognize the internal nature of things, by comparing all objects

merely with the understanding and the abstract formal conceptions of thought. Our table of the conceptions of reflection gives us the unexpected advantage of being able to exhibit the distinctive peculiarities of his system in all its parts, and at the same time of exposing the fundamental principle of this peculiar mode of thought, which rested upon naught but a misconception. He compared all things with each other merely by means of conceptions, and naturally found no other differences than those by which the understanding distinguishes its pure conceptions one from another. The conditions of sensuous intuition, which contain in themselves their own means of distinction, he did not look upon as primitive, because sensibility was to him but a confused mode of representation and not any particular source of representations. A phenomenon was for him the representation of the thing in itself, although distinguished from cognition by the understanding only in respect of the logical form — the former with its usual want of analysis containing, according to him, a certain mixture of collateral representations in its conception of a thing, which it is the duty of the understanding to separate and distinguish. In one word, Leibnitz intellectualized phenomena, just as Locke, in his system of noogony (if I may be allowed to make use of such expressions), sensualized the conceptions of the understanding, that is to say, declared them to be nothing more than empirical or abstract conceptions of reflection. Instead of seeking in the understanding and sensibility two different sources of representations, which, however, can present us with objective judgements of things only in conjunction, each of these great men recognized but one of these faculties, which, in their opinion, applied immediately to things in themselves, the other having no duty but that of confusing or arranging the representations of the former.

Accordingly, the objects of sense were compared by Leibnitz as things in general merely in the understanding.

1st. He compares them in regard to their identity or difference — as judged by the understanding. As, therefore, he considered merely the conceptions of objects, and not their position in intuition, in which alone objects can be given, and left quite out of sight the transcendental locale of these conceptions — whether, that is, their object ought to be classed among phenomena, or among things in themselves, it was to be expected that he should extend the application of the principle of indiscernibles, which is valid solely of conceptions of things in general, to objects of sense (mundus phaenomenon), and that he should believe that he had thereby contributed in no small degree to extend our knowledge of nature. In truth, if I cognize in all its inner determinations a drop of water as a thing in itself, I cannot look upon one drop as different from another, if the conception of the one is completely identical with that of the other. But if it is a phenomenon in space, it has a place not merely in the understanding (among conceptions), but also in sensuous external intuition (in space), and in this case, the physical locale is a matter of indifference in regard to the internal determinations of things, and one place, B, may contain a thing which is perfectly similar and equal to another in a place, A, just as well as if the two things were in every respect different from each other. Difference of place without any other conditions, makes the plurality and distinction of objects as phenomena, not only possible in itself, but even necessary. Consequently, the above so-called law is not a law of nature. It is merely an analytical rule for the comparison of things by means of mere conceptions.

2nd. The principle: “Realities (as simple affirmations) never logically contradict each other,” is a proposition perfectly true respecting the relation of conceptions, but, whether as regards nature, or things in themselves (of which we have not the slightest conception), is without any the least meaning. For real opposition, in which A -B is = 0, exists everywhere, an opposition, that is, in which one reality united with another in the same subject annihilates the effects of the other — a fact which is constantly brought before our eyes by the different antagonistic actions and operations in nature, which, nevertheless, as depending on real forces, must be called realitates phaenomena. General mechanics can even present us with the empirical condition of this opposition in an a priori rule, as it directs its attention to the opposition in the direction of forces — a condition of which the transcendental conception of reality can

tell us nothing. Although M. Leibnitz did not announce this proposition with precisely the pomp of a new principle, he yet employed it for the establishment of new propositions, and his followers introduced it into their Leibnitzio-Wolfian system of philosophy. According to this principle, for example, all evils are but consequences of the limited nature of created beings, that is, negations, because these are the only opposite of reality. (In the mere conception of a thing in general this is really the case, but not in things as phenomena.) In like manner, the upholders of this system deem it not only possible, but natural also, to connect and unite all reality in one being, because they acknowledge no other sort of opposition than that of contradiction (by which the conception itself of a thing is annihilated), and find themselves unable to conceive an opposition of reciprocal destruction, so to speak, in which one real cause destroys the effect of another, and the conditions of whose representation we meet with only in sensibility.

3rd. The Leibnitzian monadology has really no better foundation than on this philosopher's mode of falsely representing the difference of the internal and external solely in relation to the understanding. Substances, in general, must have something inward, which is therefore free from external relations, consequently from that of composition also. The simple — that which can be represented by a unit — is therefore the foundation of that which is internal in things in themselves. The internal state of substances cannot therefore consist in place, shape, contact, or motion, determinations which are all external relations, and we can ascribe to them no other than that whereby we internally determine our faculty of sense itself, that is to say, the state of representation. Thus, then, were constructed the monads, which were to form the elements of the universe, the active force of which consists in representation, the effects of this force being thus entirely confined to themselves.

For the same reason, his view of the possible community of substances could not represent it but as a predetermined harmony, and by no means as a physical influence. For inasmuch as everything is occupied only internally, that is, with its own representations, the state of the representations of one substance could not stand in active and living connection with that of another, but some third cause operating on all without exception was necessary to make the different states correspond with one another. And this did not happen by means of assistance applied in each particular case (systema assistentiae), but through the unity of the idea of a cause occupied and connected with all substances, in which they necessarily receive, according to the Leibnitzian school, their existence and permanence, consequently also reciprocal correspondence, according to universal laws.

4th. This philosopher's celebrated doctrine of space and time, in which he intellectualized these forms of sensibility, originated in the same delusion of transcendental reflection. If I attempt to represent by the mere understanding, the external relations of things, I can do so only by employing the conception of their reciprocal action, and if I wish to connect one state of the same thing with another state, I must avail myself of the notion of the order of cause and effect. And thus Leibnitz regarded space as a certain order in the community of substances, and time as the dynamical sequence of their states. That which space and time possess proper to themselves and independent of things, he ascribed to a necessary confusion in our conceptions of them, whereby that which is a mere form of dynamical relations is held to be a self-existent intuition, antecedent even to things themselves. Thus space and time were the intelligible form of the connection of things (substances and their states) in themselves. But things were intelligible substances (substantiae noumena). At the same time, he made these conceptions valid of phenomena, because he did not allow to sensibility a peculiar mode of intuition, but sought all, even the empirical representation of objects, in the understanding, and left to sense naught but the despicable task of confusing and disarranging the representations of the former.

But even if we could frame any synthetical proposition concerning things in themselves by means of the pure understanding (which is impossible), it could not apply to phenomena, which do not represent things in themselves. In such a case I should be obliged in transcendental reflection to compare my conceptions only under the conditions of sensibility, and so space and time would not be determinations of things in

themselves, but of phenomena. What things may be in themselves, I know not and need not know, because a thing is never presented to me otherwise than as a phenomenon.

I must adopt the same mode of procedure with the other conceptions of reflection. Matter is substantia phaenomenon. That in it which is internal I seek to discover in all parts of space which it occupies, and in all the functions and operations it performs, and which are indeed never anything but phenomena of the external sense. I cannot therefore find anything that is absolutely, but only what is comparatively internal, and which itself consists of external relations. The absolutely internal in matter, and as it should be according to the pure understanding, is a mere chimera, for matter is not an object for the pure understanding. But the transcendental object, which is the foundation of the phenomenon which we call matter, is a mere nescio quid, the nature of which we could not understand, even though someone were found able to tell us. For we can understand nothing that does not bring with it something in intuition corresponding to the expressions employed. If, by the complaint of being unable to perceive the internal nature of things, it is meant that we do not comprehend by the pure understanding what the things which appear to us may be in themselves, it is a silly and unreasonable complaint; for those who talk thus really desire that we should be able to cognize, consequently to intuite, things without senses, and therefore wish that we possessed a faculty of cognition perfectly different from the human faculty, not merely in degree, but even as regards intuition and the mode thereof, so that thus we should not be men, but belong to a class of beings, the possibility of whose existence, much less their nature and constitution, we have no means of cognizing. By observation and analysis of phenomena we penetrate into the interior of nature, and no one can say what progress this knowledge may make in time. But those transcendental questions which pass beyond the limits of nature, we could never answer, even although all nature were laid open to us, because we have not the power of observing our own mind with any other intuition than that of our internal sense. For herein lies the mystery of the origin and source of our faculty of sensibility. Its application to an object, and the transcendental ground of this unity of subjective and objective, lie too deeply concealed for us, who cognize ourselves only through the internal sense, consequently as phenomena, to be able to discover in our existence anything but phenomena, the non-sensuous cause of which we at the same time earnestly desire to penetrate to.

The great utility of this critique of conclusions arrived at by the processes of mere reflection consists in its clear demonstration of the nullity of all conclusions respecting objects which are compared with each other in the understanding alone, while it at the same time confirms what we particularly insisted on, namely, that, although phenomena are not included as things in themselves among the objects of the pure understanding, they are nevertheless the only things by which our cognition can possess objective reality, that is to say, which give us intuitions to correspond with our conceptions.

When we reflect in a purely logical manner, we do nothing more than compare conceptions in our understanding, to discover whether both have the same content, whether they are self-contradictory or not, whether anything is contained in either conception, which of the two is given, and which is merely a mode of thinking that given. But if I apply these conceptions to an object in general (in the transcendental sense), without first determining whether it is an object of sensuous or intellectual intuition, certain limitations present themselves, which forbid us to pass beyond the conceptions and render all empirical use of them impossible. And thus these limitations prove that the representation of an object as a thing in general is not only insufficient, but, without sensuous determination and independently of empirical conditions, self-contradictory; that we must therefore make abstraction of all objects, as in logic, or, admitting them, must think them under conditions of sensuous intuition; that, consequently, the intelligible requires an altogether peculiar intuition, which we do not possess, and in the absence of which it is for us nothing; while, on the other hand phenomena cannot be objects in themselves. For, when I merely think things in general, the difference in their external relations cannot constitute a difference in the things themselves; on the contrary, the former presupposes the latter, and if the conception of one of two things is not internally

different from that of the other, I am merely thinking the same thing in different relations. Further, by the addition of one affirmation (reality) to the other, the positive therein is really augmented, and nothing is abstracted or withdrawn from it; hence the real in things cannot be in contradiction with or opposition to itself — and so on.

The true use of the conceptions of reflection in the employment of the understanding has, as we have shown, been so misconceived by Leibnitz, one of the most acute philosophers of either ancient or modern times, that he has been misled into the construction of a baseless system of intellectual cognition, which professes to determine its objects without the intervention of the senses. For this reason, the exposition of the cause of the amphiboly of these conceptions, as the origin of these false principles, is of great utility in determining with certainty the proper limits of the understanding.

It is right to say whatever is affirmed or denied of the whole of a conception can be affirmed or denied of any part of it (dictum de omni et nullo); but it would be absurd so to alter this logical proposition as to say whatever is not contained in a general conception is likewise not contained in the particular conceptions which rank under it; for the latter are particular conceptions, for the very reason that their content is greater than that which is cogitated in the general conception. And yet the whole intellectual system of Leibnitz is based upon this false principle, and with it must necessarily fall to the ground, together with all the ambiguous principles in reference to the employment of the understanding which have thence originated.

Leibnitz's principle of the identity of indiscernibles or indistinguishables is really based on the presupposition that, if in the conception of a thing a certain distinction is not to be found, it is also not to be met with in things themselves; that, consequently, all things are completely identical (numero eadem) which are not distinguishable from each other (as to quality or quantity) in our conceptions of them. But, as in the mere conception of anything abstraction has been made of many necessary conditions of intuition, that of which abstraction has been made is rashly held to be non-existent, and nothing is attributed to the thing but what is contained in its conception.

The conception of a cubic foot of space, however I may think it, is in itself completely identical. But two cubic feet in space are nevertheless distinct from each other from the sole fact of their being in different places (they are numero diversa); and these places are conditions of intuition, wherein the object of this conception is given, and which do not belong to the conception, but to the faculty of sensibility. In like manner, there is in the conception of a thing no contradiction when a negative is not connected with an affirmative; and merely affirmative conceptions cannot, in conjunction, produce any negation. But in sensuous intuition, wherein reality (take for example, motion) is given, we find conditions (opposite directions) — of which abstraction has been made in the conception of motion in general — which render possible a contradiction or opposition (not indeed of a logical kind) — and which from pure positives produce zero = 0. We are therefore not justified in saying that all reality is in perfect agreement and harmony, because no contradiction is discoverable among its conceptions.* According to mere conceptions, that which is internal is the substratum of all relations or external determinations. When, therefore, I abstract all conditions of intuition, and confine myself solely to the conception of a thing in general, I can make abstraction of all external relations, and there must nevertheless remain a conception of that which indicates no relation, but merely internal determinations. Now it seems to follow that in everything (substance) there is something which is absolutely internal and which antecedes all external determinations, inasmuch as it renders them possible; and that therefore this substratum is something which does not contain any external relations and is consequently simple (for corporeal things are never anything but relations, at least of their parts external to each other); and, inasmuch as we know of no other absolutely internal determinations than those of the internal sense, this substratum is not only simple, but also, analogously with our internal sense, determined through representations, that is to say, all things are properly monads, or simple beings endowed with the power of representation. Now all this would be

perfectly correct, if the conception of a thing were the only necessary condition of the presentation of objects of external intuition. It is, on the contrary, manifest that a permanent phenomenon in space (impenetrable extension) can contain mere relations, and nothing that is absolutely internal, and yet be the primary substratum of all external perception. By mere conceptions I cannot think anything external, without, at the same time, thinking something internal, for the reason that conceptions of relations presuppose given things, and without these are impossible. But, as an intuition there is something (that is, space, which, with all it contains, consists of purely formal, or, indeed, real relations) which is not found in the mere conception of a thing in general, and this presents to us the substratum which could not be cognized through conceptions alone, I cannot say: because a thing cannot be represented by mere conceptions without something absolutely internal, there is also, in the things themselves which are contained under these conceptions, and in their intuition nothing external to which something absolutely internal does not serve as the foundation. For, when we have made abstraction of all the conditions of intuition, there certainly remains in the mere conception nothing but the internal in general, through which alone the external is possible. But this necessity, which is grounded upon abstraction alone, does not obtain in the case of things themselves, in so far as they are given in intuition with such determinations as express mere relations, without having anything internal as their foundation; for they are not things of a thing of which we can neither for they are not things in themselves, but only phenomena. What we cognize in matter is nothing but relations (what we call its internal determinations are but comparatively internal). But there are some self-subsistent and permanent, through which a determined object is given. That I, when abstraction is made of these relations, have nothing more to think, does not destroy the conception of a thing as phenomenon, nor the conception of an object in abstracto, but it does away with the possibility of an object that is determinable according to mere conceptions, that is, of a noumenon. It is certainly startling to hear that a thing consists solely of relations; but this thing is simply a phenomenon, and cannot be cogitated by means of the mere categories: it does itself consist in the mere relation of something in general to the senses. In the same way, we cannot cogitate relations of things in abstracto, if we commence with conceptions alone, in any other manner than that one is the cause of determinations in the other; for that is itself the conception of the understanding or category of relation. But, as in this case we make abstraction of all intuition, we lose altogether the mode in which the manifold determines to each of its parts its place, that is, the form of sensibility (space); and yet this mode antecedes all empirical causality.

[Footnote: If any one wishes here to have recourse to the usual subterfuge, and to say, that at least realitates noumena cannot be in opposition to each other, it will be requisite for him to adduce an example of this pure and non-sensuous reality, that it may be understood whether the notion represents something or nothing. But an example cannot be found except in experience, which never presents to us anything more than phenomena; and thus the proposition means nothing more than that the conception which contains only affirmatives does not contain anything negative — a proposition nobody ever doubted.]

If by intelligible objects we understand things which can be thought by means of the pure categories, without the need of the schemata of sensibility, such objects are impossible. For the condition of the objective use of all our conceptions of understanding is the mode of our sensuous intuition, whereby objects are given; and, if we make abstraction of the latter, the former can have no relation to an object. And even if we should suppose a different kind of intuition from our own, still our functions of thought would have no use or signification in respect thereof. But if we understand by the term, objects of a non-sensuous intuition, in respect of which our categories are not valid, and of which we can accordingly have no knowledge (neither intuition nor conception), in this merely negative sense noumena must be admitted. For this is no more than saying that our mode of intuition is not applicable to all things, but only to objects of our senses, that consequently its objective validity is limited, and that room is therefore left for another kind of intuition, and thus also for things that may be objects of it. But in this sense the conception of a

noumenon is problematical, that is to say, it is the notion of that it that it is possible, nor that it is impossible, inasmuch as we do not know of any mode of intuition besides the sensuous, or of any other sort of conceptions than the categories — a mode of intuition and a kind of conception neither of which is applicable to a non-sensuous object. We are on this account incompetent to extend the sphere of our objects of thought beyond the conditions of our sensibility, and to assume the existence of objects of pure thought, that is, of noumena, inasmuch as these have no true positive signification. For it must be confessed of the categories that they are not of themselves sufficient for the cognition of things in themselves and, without the data of sensibility, are mere subjective forms of the unity of the understanding. Thought is certainly not a product of the senses, and in so far is not limited by them, but it does not therefore follow that it may be employed purely and without the intervention of sensibility, for it would then be without reference to an object. And we cannot call a noumenon an object of pure thought; for the representation thereof is but the problematical conception of an object for a perfectly different intuition and a perfectly different understanding from ours, both of which are consequently themselves problematical. The conception of a noumenon is therefore not the conception of an object, but merely a problematical conception inseparably connected with the limitation of our sensibility. That is to say, this conception contains the answer to the question: “Are there objects quite unconnected with, and independent of, our intuition?” — a question to which only an indeterminate answer can be given. That answer is: “Inasmuch as sensuous intuition does not apply to all things without distinction, there remains room for other and different objects.” The existence of these problematical objects is therefore not absolutely denied, in the absence of a determinate conception of them, but, as no category is valid in respect of them, neither must they be admitted as objects for our understanding.

Understanding accordingly limits sensibility, without at the same time enlarging its own field. While, moreover, it forbids sensibility to apply its forms and modes to things in themselves and restricts it to the sphere of phenomena, it cogitates an object in itself, only, however, as a transcendental object, which is the cause of a phenomenon (consequently not itself a phenomenon), and which cannot be thought either as a quantity or as reality, or as substance (because these conceptions always require sensuous forms in which to determine an object) — an object, therefore, of which we are quite unable to say whether it can be met with in ourselves or out of us, whether it would be annihilated together with sensibility, or, if this were taken away, would continue to exist. If we wish to call this object a noumenon, because the representation of it is non-sensuous, we are at liberty to do so. But as we can apply to it none of the conceptions of our understanding, the representation is for us quite void, and is available only for the indication of the limits of our sensuous intuition, thereby leaving at the same time an empty space, which we are competent to fill by the aid neither of possible experience, nor of the pure understanding.

The critique of the pure understanding, accordingly, does not permit us to create for ourselves a new field of objects beyond those which are presented to us as phenomena, and to stray into intelligible worlds; nay, it does not even allow us to endeavour to form so much as a conception of them. The specious error which leads to this — and which is a perfectly excusable one — lies in the fact that the employment of the understanding, contrary to its proper purpose and destination, is made transcendental, and objects, that is, possible intuitions, are made to regulate themselves according to conceptions, instead of the conceptions arranging themselves according to the intuitions, on which alone their own objective validity rests. Now the reason of this again is that apperception, and with it thought, antecedes all possible determinate arrangement of representations. Accordingly we think something in general and determine it on the one hand sensuously, but, on the other, distinguish the general and in abstracto represented object from this particular mode of intuiting it. In this case there remains a mode of determining the object by mere thought, which is really but a logical form without content, which, however, seems to us to be a mode of the existence of the object in itself (noumenon), without regard to intuition which is limited to our senses.

Before ending this transcendental analytic, we must make an addition, which, although in itself of no particular importance, seems to be necessary to the completeness of the system. The highest conception, with which a transcendental philosophy commonly begins, is the division into possible and impossible. But as all division presupposes a divided conception, a still higher one must exist, and this is the conception of an object in general — problematically understood and without its being decided whether it is something or nothing. As the categories are the only conceptions which apply to objects in general, the distinguishing of an object, whether it is something or nothing, must proceed according to the order and direction of the categories.

1. To the categories of quantity, that is, the conceptions of all, many, and one, the conception which annihilates all, that is, the conception of none, is opposed. And thus the object of a conception, to which no intuition can be found to correspond, is = nothing. That is, it is a conception without an object (ens rationis), like noumena, which cannot be considered possible in the sphere of reality, though they must not therefore be held to be impossible — or like certain new fundamental forces in matter, the existence of which is cogitable without contradiction, though, as examples from experience are not forthcoming, they must not be regarded as possible.

2. Reality is something; negation is nothing, that is, a conception of the absence of an object, as cold, a shadow (nihil privativum).

3. The mere form of intuition, without substance, is in itself no object, but the merely formal condition of an object (as phenomenon), as pure space and pure time. These are certainly something, as forms of intuition, but are not themselves objects which are intuited (ens imaginarium).

4. The object of a conception which is self-contradictory, is nothing, because the conception is nothing — is impossible, as a figure composed of two straight lines (nihil negativum).

The table of this division of the conception of nothing (the corresponding division of the conception of something does not require special description) must therefore be arranged as follows:

Nothing.
As
1.
Empty conception without object,
ens rationis.

2.	**3.**
Empty object of a conception,	**Empty intuition without object,**
nihil privativum.	***ens imaginarium.***

4.
Empty object without conception,
nihil negativum.

We see that the ens rationis is distinguished from the nihil negativum or pure nothing by the consideration that the former must not be reckoned among possibilities, because it is a mere fiction — though not self-contradictory, while the latter is completely opposed to all possibility, inasmuch as the conception annihilates itself. Both, however, are empty conceptions. On the other hand, the nihil privativum and ens imaginarium are empty data for conceptions. If light be not given to the senses, we cannot represent to ourselves darkness, and if extended objects are not perceived, we cannot represent space. Neither the negation, nor the mere form of intuition can, without something real, be an object.

TRANSCENDENTAL LOGIC. SECOND DIVISION. TRANSCENDENTAL DIALECTIC. INTRODUCTION.

I. Of Transcendental Illusory Appearance.

We termed dialectic in general a logic of appearance. This does not signify a doctrine of probability;

for probability is truth, only cognized upon insufficient grounds, and though the information it gives us is imperfect, it is not therefore deceitful. Hence it must not be separated from the analytical part of logic. Still less must phenomenon and appearance be held to be identical. For truth or illusory appearance does not reside in the object, in so far as it is intuited, but in the judgement upon the object, in so far as it is thought. It is, therefore, quite correct to say that the senses do not err, not because they always judge correctly, but because they do not judge at all. Hence truth and error, consequently also, illusory appearance as the cause of error, are only to be found in a judgement, that is, in the relation of an object to our understanding. In a cognition which completely harmonizes with the laws of the understanding, no error can exist. In a representation of the senses — as not containing any judgement — there is also no error. But no power of nature can of itself deviate from its own laws. Hence neither the understanding per se (without the influence of another cause), nor the senses per se, would fall into error; the former could not, because, if it acts only according to its own laws, the effect (the judgement) must necessarily accord with these laws. But in accordance with the laws of the understanding consists the formal element in all truth. In the senses there is no judgement — neither a true nor a false one. But, as we have no source of cognition besides these two, it follows that error is caused solely by the unobserved influence of the sensibility upon the understanding. And thus it happens that the subjective grounds of a judgement and are confounded with the objective, and cause them to deviate from their proper determination,* just as a body in motion would always of itself proceed in a straight line, but if another impetus gives to it a different direction, it will then start off into a curvilinear line of motion. To distinguish the peculiar action of the understanding from the power which mingles with it, it is necessary to consider an erroneous judgement as the diagonal between two forces, that determine the judgement in two different directions, which, as it were, form an angle, and to resolve this composite operation into the simple ones of the understanding and the sensibility. In pure a priori judgements this must be done by means of transcendental reflection, whereby, as has been already shown, each representation has its place appointed in the corresponding faculty of cognition, and consequently the influence of the one faculty upon the other is made apparent.

[Footnote: Sensibility, subjected to the understanding, as the object upon which the understanding employs its functions, is the source of real cognitions. But, in so far as it exercises an influence upon the action of the understanding and determines it to judgement, sensibility is itself the cause of error.]

It is not at present our business to treat of empirical illusory appearance (for example, optical illusion), which occurs in the empirical application of otherwise correct rules of the understanding, and in which the judgement is misled by the influence of imagination. Our purpose is to speak of transcendental illusory appearance, which influences principles — that are not even applied to experience, for in this case we should possess a sure test of their correctness — but which leads us, in disregard of all the warnings of criticism, completely beyond the empirical employment of the categories and deludes us with the chimera of an extension of the sphere of the pure understanding. We shall term those principles the application of which is confined entirely within the limits of possible experience, immanent; those, on the other hand, which transgress these limits, we shall call transcendent principles. But by these latter I do not understand principles of the transcendental use or misuse of the categories, which is in reality a mere fault of the judgement when not under due restraint from criticism, and therefore not paying sufficient attention to the limits of the sphere in which the pure understanding is allowed to exercise its functions; but real principles which exhort us to break down all those barriers, and to lay claim to a perfectly new field of cognition, which recognizes no line of demarcation. Thus transcendental and transcendent are not identical terms. The principles of the pure understanding, which we have already propounded, ought to be of empirical and not of transcendental use, that is, they are not applicable to any object beyond the sphere of experience. A principle which removes these limits, nay, which authorizes us to overstep them, is

called transcendent. If our criticism can succeed in exposing the illusion in these pretended principles, those which are limited in their employment to the sphere of experience may be called, in opposition to the others, immanent principles of the pure understanding.

Logical illusion, which consists merely in the imitation of the form of reason (the illusion in sophistical syllogisms), arises entirely from a want of due attention to logical rules. So soon as the attention is awakened to the case before us, this illusion totally disappears. Transcendental illusion, on the contrary, does not cease to exist, even after it has been exposed, and its nothingness clearly perceived by means of transcendental criticism. Take, for example, the illusion in the proposition: "The world must have a beginning in time." The cause of this is as follows. In our reason, subjectively considered as a faculty of human cognition, there exist fundamental rules and maxims of its exercise, which have completely the appearance of objective principles. Now from this cause it happens that the subjective necessity of a certain connection of our conceptions, is regarded as an objective necessity of the determination of things in themselves. This illusion it is impossible to avoid, just as we cannot avoid perceiving that the sea appears to be higher at a distance than it is near the shore, because we see the former by means of higher rays than the latter, or, which is a still stronger case, as even the astronomer cannot prevent himself from seeing the moon larger at its rising than some time afterwards, although he is not deceived by this illusion.

Transcendental dialectic will therefore content itself with exposing the illusory appearance in transcendental judgements, and guarding us against it; but to make it, as in the case of logical illusion, entirely disappear and cease to be illusion is utterly beyond its power. For we have here to do with a natural and unavoidable illusion, which rests upon subjective principles and imposes these upon us as objective, while logical dialectic, in the detection of sophisms, has to do merely with an error in the logical consequence of the propositions, or with an artificially constructed illusion, in imitation of the natural error. There is, therefore, a natural and unavoidable dialectic of pure reason — not that in which the bungler, from want of the requisite knowledge, involves himself, nor that which the sophist devises for the purpose of misleading, but that which is an inseparable adjunct of human reason, and which, even after its illusions have been exposed, does not cease to deceive, and continually to lead reason into momentary errors, which it becomes necessary continually to remove.

II. Of Pure Reason as the Seat of Transcendental Illusory Appearance.

A. OF REASON IN GENERAL.

All our knowledge begins with sense, proceeds thence to understanding, and ends with reason, beyond which nothing higher can be discovered in the human mind for elaborating the matter of intuition and subjecting it to the highest unity of thought. At this stage of our inquiry it is my duty to give an explanation of this, the highest faculty of cognition, and I confess I find myself here in some difficulty. Of reason, as of the understanding, there is a merely formal, that is, logical use, in which it makes abstraction of all content of cognition; but there is also a real use, inasmuch as it contains in itself the source of certain conceptions and principles, which it does not borrow either from the senses or the understanding. The former faculty has been long defined by logicians as the faculty of mediate conclusion in contradistinction to immediate conclusions (consequentiae immediatae); but the nature of the latter, which itself generates conceptions, is not to be understood from this definition. Now as a division of reason into a logical and a transcendental faculty presents itself here, it becomes necessary to seek for a higher conception of this source of cognition which shall comprehend both conceptions. In this we may expect, according to the analogy of the conceptions of the understanding, that the logical conception will give us the key to the transcendental, and that the table of the functions of the former will present us with the clue to the conceptions of reason.

In the former part of our transcendental logic, we defined the understanding to be the faculty of rules; reason may be distinguished from understanding as the faculty of principles.

The term principle is ambiguous, and commonly signifies merely a cognition that may be employed as a principle, although it is not in itself, and as regards its proper origin, entitled to the distinction. Every

general proposition, even if derived from experience by the process of induction, may serve as the major in a syllogism; but it is not for that reason a principle. Mathematical axioms (for example, there can be only one straight line between two points) are general a priori cognitions, and are therefore rightly denominated principles, relatively to the cases which can be subsumed under them. But I cannot for this reason say that I cognize this property of a straight line from principles — I cognize it only in pure intuition.

Cognition from principles, then, is that cognition in which I cognize the particular in the general by means of conceptions. Thus every syllogism is a form of the deduction of a cognition from a principle. For the major always gives a conception, through which everything that is subsumed under the condition thereof is cognized according to a principle. Now as every general cognition may serve as the major in a syllogism, and the understanding presents us with such general a priori propositions, they may be termed principles, in respect of their possible use.

But if we consider these principles of the pure understanding in relation to their origin, we shall find them to be anything rather than cognitions from conceptions. For they would not even be possible a priori, if we could not rely on the assistance of pure intuition (in mathematics), or on that of the conditions of a possible experience. That everything that happens has a cause, cannot be concluded from the general conception of that which happens; on the contrary the principle of causality instructs us as to the mode of obtaining from that which happens a determinate empirical conception.

Synthetical cognitions from conceptions the understanding cannot supply, and they alone are entitled to be called principles. At the same time, all general propositions may be termed comparative principles.

It has been a long-cherished wish — that (who knows how late), may one day, be happily accomplished — that the principles of the endless variety of civil laws should be investigated and exposed; for in this way alone can we find the secret of simplifying legislation. But in this case, laws are nothing more than limitations of our freedom upon conditions under which it subsists in perfect harmony with itself; they consequently have for their object that which is completely our own work, and of which we ourselves may be the cause by means of these conceptions. But how objects as things in themselves — how the nature of things is subordinated to principles and is to be determined, according to conceptions, is a question which it seems well nigh impossible to answer. Be this, however, as it may — for on this point our investigation is yet to be made — it is at least manifest from what we have said that cognition from principles is something very different from cognition by means of the understanding, which may indeed precede other cognitions in the form of a principle, but in itself — in so far as it is synthetical — is neither based upon mere thought, nor contains a general proposition drawn from conceptions alone.

The understanding may be a faculty for the production of unity of phenomena by virtue of rules; the reason is a faculty for the production of unity of rules (of the understanding) under principles. Reason, therefore, never applies directly to experience, or to any sensuous object; its object is, on the contrary, the understanding, to the manifold cognition of which it gives a unity a priori by means of conceptions — a unity which may be called rational unity, and which is of a nature very different from that of the unity produced by the understanding.

The above is the general conception of the faculty of reason, in so far as it has been possible to make it comprehensible in the absence of examples. These will be given in the sequel.

B. OF THE LOGICAL USE OF REASON.

A distinction is commonly made between that which is immediately cognized and that which is inferred or concluded. That in a figure which is bounded by three straight lines there are three angles, is an immediate cognition; but that these angles are together equal to two right angles, is an inference or conclusion. Now, as we are constantly employing this mode of thought and have thus become quite accustomed to it, we no longer remark the above distinction, and, as in the case of the so-called deceptions of sense, consider as immediately perceived, what has really been inferred. In every reasoning

or syllogism, there is a fundamental proposition, afterwards a second drawn from it, and finally the conclusion, which connects the truth in the first with the truth in the second — and that infallibly. If the judgement concluded is so contained in the first proposition that it can be deduced from it without the meditation of a third notion, the conclusion is called immediate (consequentia immediata); I prefer the term conclusion of the understanding. But if, in addition to the fundamental cognition, a second judgement is necessary for the production of the conclusion, it is called a conclusion of the reason. In the proposition: All men are mortal, are contained the propositions: Some men are mortal, Nothing that is not mortal is a man, and these are therefore immediate conclusions from the first. On the other hand, the proposition: all the learned are mortal, is not contained in the main proposition (for the conception of a learned man does not occur in it), and it can be deduced from the main proposition only by means of a mediating judgement.

In every syllogism I first cogitate a rule (the major) by means of the understanding. In the next place I subsume a cognition under the condition of the rule (and this is the minor) by means of the judgement. And finally I determine my cognition by means of the predicate of the rule (this is the conclusio), consequently, I determine it a priori by means of the reason. The relations, therefore, which the major proposition, as the rule, represents between a cognition and its condition, constitute the different kinds of syllogisms. These are just threefold — analogously with all judgements, in so far as they differ in the mode of expressing the relation of a cognition in the understanding — namely, categorical, hypothetical, and disjunctive.

When as often happens, the conclusion is a judgement which may follow from other given judgements, through which a perfectly different object is cogitated, I endeavour to discover in the understanding whether the assertion in this conclusion does not stand under certain conditions according to a general rule. If I find such a condition, and if the object mentioned in the conclusion can be subsumed under the given condition, then this conclusion follows from a rule which is also valid for other objects of cognition. From this we see that reason endeavours to subject the great variety of the cognitions of the understanding to the smallest possible number of principles (general conditions), and thus to produce in it the highest unity.

C. OF THE PURE USE OF REASON.

Can we isolate reason, and, if so, is it in this case a peculiar source of conceptions and judgements which spring from it alone, and through which it can be applied to objects; or is it merely a subordinate faculty, whose duty it is to give a certain form to given cognitions — a form which is called logical, and through which the cognitions of the understanding are subordinated to each other, and lower rules to higher (those, to wit, whose condition comprises in its sphere the condition of the others), in so far as this can be done by comparison? This is the question which we have at present to answer. Manifold variety of rules and unity of principles is a requirement of reason, for the purpose of bringing the understanding into complete accordance with itself, just as understanding subjects the manifold content of intuition to conceptions, and thereby introduces connection into it. But this principle prescribes no law to objects, and does not contain any ground of the possibility of cognizing or of determining them as such, but is merely a subjective law for the proper arrangement of the content of the understanding. The purpose of this law is, by a comparison of the conceptions of the understanding, to reduce them to the smallest possible number, although, at the same time, it does not justify us in demanding from objects themselves such a uniformity as might contribute to the convenience and the enlargement of the sphere of the understanding, or in expecting that it will itself thus receive from them objective validity. In one word, the question is: "does reason in itself, that is, does pure reason contain a priori synthetical principles and rules, and what are those principles?"

The formal and logical procedure of reason in syllogisms gives us sufficient information in regard to the ground on which the transcendental principle of reason in its pure synthetical cognition will rest.

1. Reason, as observed in the syllogistic process, is not applicable to intuitions, for the purpose of subjecting them to rules — for this is the province of the understanding with its categories — but to conceptions and judgements. If pure reason does apply to objects and the intuition of them, it does so not immediately, but mediately — through the understanding and its judgements, which have a direct relation to the senses and their intuition, for the purpose of determining their objects. The unity of reason is therefore not the unity of a possible experience, but is essentially different from this unity, which is that of the understanding. That everything which happens has a cause, is not a principle cognized and prescribed by reason. This principle makes the unity of experience possible and borrows nothing from reason, which, without a reference to possible experience, could never have produced by means of mere conceptions any such synthetical unity.

2. Reason, in its logical use, endeavours to discover the general condition of its judgement (the conclusion), and a syllogism is itself nothing but a judgement by means of the subsumption of its condition under a general rule (the major). Now as this rule may itself be subjected to the same process of reason, and thus the condition of the condition be sought (by means of a prosyllogism) as long as the process can be continued, it is very manifest that the peculiar principle of reason in its logical use is to find for the conditioned cognition of the understanding the unconditioned whereby the unity of the former is completed.

But this logical maxim cannot be a principle of pure reason, unless we admit that, if the conditioned is given, the whole series of conditions subordinated to one another — a series which is consequently itself unconditioned — is also given, that is, contained in the object and its connection.

But this principle of pure reason is evidently synthetical; for, analytically, the conditioned certainly relates to some condition, but not to the unconditioned. From this principle also there must originate different synthetical propositions, of which the pure understanding is perfectly ignorant, for it has to do only with objects of a possible experience, the cognition and synthesis of which is always conditioned. The unconditioned, if it does really exist, must be especially considered in regard to the determinations which distinguish it from whatever is conditioned, and will thus afford us material for many a priori synthetical propositions.

The principles resulting from this highest principle of pure reason will, however, be transcendent in relation to phenomena, that is to say, it will be impossible to make any adequate empirical use of this principle. It is therefore completely different from all principles of the understanding, the use made of which is entirely immanent, their object and purpose being merely the possibility of experience. Now our duty in the transcendental dialectic is as follows. To discover whether the principle that the series of conditions (in the synthesis of phenomena, or of thought in general) extends to the unconditioned is objectively true, or not; what consequences result therefrom affecting the empirical use of the understanding, or rather whether there exists any such objectively valid proposition of reason, and whether it is not, on the contrary, a merely logical precept which directs us to ascend perpetually to still higher conditions, to approach completeness in the series of them, and thus to introduce into our cognition the highest possible unity of reason. We must ascertain, I say, whether this requirement of reason has not been regarded, by a misunderstanding, as a transcendental principle of pure reason, which postulates a thorough completeness in the series of conditions in objects themselves. We must show, moreover, the misconceptions and illusions that intrude into syllogisms, the major proposition of which pure reason has supplied — a proposition which has perhaps more of the character of a petitio than of a postulatum — and that proceed from experience upwards to its conditions. The solution of these problems is our task in transcendental dialectic, which we are about to expose even at its source, that lies deep in human reason. We shall divide it into two parts, the first of which will treat of the transcendent conceptions of pure reason, the second of transcendent and dialectical syllogisms.

BOOK I. — OF THE CONCEPTIONS OF PURE REASON.

The conceptions of pure reason — we do not here speak of the possibility of them — are not obtained by reflection, but by inference or conclusion. The conceptions of understanding are also cogitated a priori antecedently to experience, and render it possible; but they contain nothing but the unity of reflection upon phenomena, in so far as these must necessarily belong to a possible empirical consciousness. Through them alone are cognition and the determination of an object possible. It is from them, accordingly, that we receive material for reasoning, and antecedently to them we possess no a priori conceptions of objects from which they might be deduced, On the other hand, the sole basis of their objective reality consists in the necessity imposed on them, as containing the intellectual form of all experience, of restricting their application and influence to the sphere of experience.

But the term, conception of reason, or rational conception, itself indicates that it does not confine itself within the limits of experience, because its object-matter is a cognition, of which every empirical cognition is but a part — nay, the whole of possible experience may be itself but a part of it — a cognition to which no actual experience ever fully attains, although it does always pertain to it. The aim of rational conceptions is the comprehension, as that of the conceptions of understanding is the understanding of perceptions. If they contain the unconditioned, they relate to that to which all experience is subordinate, but which is never itself an object of experience — that towards which reason tends in all its conclusions from experience, and by the standard of which it estimates the degree of their empirical use, but which is never itself an element in an empirical synthesis. If, notwithstanding, such conceptions possess objective validity, they may be called conceptus ratiocinati (conceptions legitimately concluded); in cases where they do not, they have been admitted on account of having the appearance of being correctly concluded, and may be called conceptus ratiocinantes (sophistical conceptions). But as this can only be sufficiently demonstrated in that part of our treatise which relates to the dialectical conclusions of reason, we shall omit any consideration of it in this place. As we called the pure conceptions of the understanding categories, we shall also distinguish those of pure reason by a new name and call them transcendental ideas. These terms, however, we must in the first place explain and justify.

SECTION I — Of Ideas in General.

Despite the great wealth of words which European languages possess, the thinker finds himself often at a loss for an expression exactly suited to his conception, for want of which he is unable to make himself intelligible either to others or to himself. To coin new words is a pretension to legislation in language which is seldom successful; and, before recourse is taken to so desperate an expedient, it is advisable to examine the dead and learned languages, with the hope and the probability that we may there meet with some adequate expression of the notion we have in our minds. In this case, even if the original meaning of the word has become somewhat uncertain, from carelessness or want of caution on the part of the authors of it, it is always better to adhere to and confirm its proper meaning — even although it may be doubtful whether it was formerly used in exactly this sense — than to make our labour vain by want of sufficient care to render ourselves intelligible.

For this reason, when it happens that there exists only a single word to express a certain conception, and this word, in its usual acceptation, is thoroughly adequate to the conception, the accurate distinction of which from related conceptions is of great importance, we ought not to employ the expression improvidently, or, for the sake of variety and elegance of style, use it as a synonym for other cognate words. It is our duty, on the contrary, carefully to preserve its peculiar signification, as otherwise it easily happens that when the attention of the reader is no longer particularly attracted to the expression, and it is lost amid the multitude of other words of very different import, the thought which it conveyed, and which it alone conveyed, is lost with it.

Plato employed the expression idea in a way that plainly showed he meant by it something which is never derived from the senses, but which far transcends even the conceptions of the understanding (with which Aristotle occupied himself), inasmuch as in experience nothing perfectly corresponding to them

could be found. Ideas are, according to him, archetypes of things themselves, and not merely keys to possible experiences, like the categories. In his view they flow from the highest reason, by which they have been imparted to human reason, which, however, exists no longer in its original state, but is obliged with great labour to recall by reminiscence — which is called philosophy — the old but now sadly obscured ideas. I will not here enter upon any literary investigation of the sense which this sublime philosopher attached to this expression. I shall content myself with remarking that it is nothing unusual, in common conversation as well as in written works, by comparing the thoughts which an author has delivered upon a subject, to understand him better than he understood himself inasmuch as he may not have sufficiently determined his conception, and thus have sometimes spoken, nay even thought, in opposition to his own opinions.

Plato perceived very clearly that our faculty of cognition has the feeling of a much higher vocation than that of merely spelling out phenomena according to synthetical unity, for the purpose of being able to read them as experience, and that our reason naturally raises itself to cognitions far too elevated to admit of the possibility of an object given by experience corresponding to them — cognitions which are nevertheless real, and are not mere phantoms of the brain.

This philosopher found his ideas especially in all that is practical,* that is, which rests upon freedom, which in its turn ranks under cognitions that are the peculiar product of reason. He who would derive from experience the conceptions of virtue, who would make (as many have really done) that, which at best can but serve as an imperfectly illustrative example, a model for or the formation of a perfectly adequate idea on the subject, would in fact transform virtue into a nonentity changeable according to time and circumstance and utterly incapable of being employed as a rule. On the contrary, every one is conscious that, when any one is held up to him as a model of virtue, he compares this so-called model with the true original which he possesses in his own mind and values him according to this standard. But this standard is the idea of virtue, in relation to which all possible objects of experience are indeed serviceable as examples — proofs of the practicability in a certain degree of that which the conception of virtue demands — but certainly not as archetypes. That the actions of man will never be in perfect accordance with all the requirements of the pure ideas of reason, does not prove the thought to be chimerical. For only through this idea are all judgements as to moral merit or demerit possible; it consequently lies at the foundation of every approach to moral perfection, however far removed from it the obstacles in human nature — indeterminable as to degree — may keep us.

[Footnote: He certainly extended the application of his conception to speculative cognitions also, provided they were given pure and completely a priori, nay, even to mathematics, although this science cannot possess an object otherwhere than in Possible experience.

I cannot follow him in this, and as little can I follow him in his mystical deduction of these ideas, or in his hypostatization of them; although, in truth, the elevated and exaggerated language which he employed in describing them is quite capable of an interpretation more subdued and more in accordance with fact and the nature of things.]

The Platonic Republic has become proverbial as an example — and a striking one — of imaginary perfection, such as can exist only in the brain of the idle thinker; and Brucker ridicules the philosopher for maintaining that a prince can never govern well, unless he is participant in the ideas. But we should do better to follow up this thought and, where this admirable thinker leaves us without assistance, employ new efforts to place it in clearer light, rather than carelessly fling it aside as useless, under the very miserable and pernicious pretext of impracticability. A constitution of the greatest possible human freedom according to laws, by which the liberty of every individual can consist with the liberty of every other (not of the greatest possible happiness, for this follows necessarily from the former), is, to say the least, a necessary idea, which must be placed at the foundation not only of the first plan of the constitution

of a state, but of all its laws. And, in this, it not necessary at the outset to take account of the obstacles which lie in our way — obstacles which perhaps do not necessarily arise from the character of human nature, but rather from the previous neglect of true ideas in legislation. For there is nothing more pernicious and more unworthy of a philosopher, than the vulgar appeal to a so-called adverse experience, which indeed would not have existed, if those institutions had been established at the proper time and in accordance with ideas; while, instead of this, conceptions, crude for the very reason that they have been drawn from experience, have marred and frustrated all our better views and intentions. The more legislation and government are in harmony with this idea, the more rare do punishments become and thus it is quite reasonable to maintain, as Plato did, that in a perfect state no punishments at all would be necessary. Now although a perfect state may never exist, the idea is not on that account the less just, which holds up this maximum as the archetype or standard of a constitution, in order to bring legislative government always nearer and nearer to the greatest possible perfection. For at what precise degree human nature must stop in its progress, and how wide must be the chasm which must necessarily exist between the idea and its realization, are problems which no one can or ought to determine — and for this reason, that it is the destination of freedom to overstep all assigned limits between itself and the idea.

But not only in that wherein human reason is a real causal agent and where ideas are operative causes (of actions and their objects), that is to say, in the region of ethics, but also in regard to nature herself, Plato saw clear proofs of an origin from ideas. A plant, and animal, the regular order of nature — probably also the disposition of the whole universe — give manifest evidence that they are possible only by means of and according to ideas; that, indeed, no one creature, under the individual conditions of its existence, perfectly harmonizes with the idea of the most perfect of its kind — just as little as man with the idea of humanity, which nevertheless he bears in his soul as the archetypal standard of his actions; that, notwithstanding, these ideas are in the highest sense individually, unchangeably, and completely determined, and are the original causes of things; and that the totality of connected objects in the universe is alone fully adequate to that idea. Setting aside the exaggerations of expression in the writings of this philosopher, the mental power exhibited in this ascent from the ectypal mode of regarding the physical world to the architectonic connection thereof according to ends, that is, ideas, is an effort which deserves imitation and claims respect. But as regards the principles of ethics, of legislation, and of religion, spheres in which ideas alone render experience possible, although they never attain to full expression therein, he has vindicated for himself a position of peculiar merit, which is not appreciated only because it is judged by the very empirical rules, the validity of which as principles is destroyed by ideas. For as regards nature, experience presents us with rules and is the source of truth, but in relation to ethical laws experience is the parent of illusion, and it is in the highest degree reprehensible to limit or to deduce the laws which dictate what I ought to do, from what is done.

We must, however, omit the consideration of these important subjects, the development of which is in reality the peculiar duty and dignity of philosophy, and confine ourselves for the present to the more humble but not less useful task of preparing a firm foundation for those majestic edifices of moral science. For this foundation has been hitherto insecure from the many subterranean passages which reason in its confident but vain search for treasures has made in all directions. Our present duty is to make ourselves perfectly acquainted with the transcendental use made of pure reason, its principles and ideas, that we may be able properly to determine and value its influence and real worth. But before bringing these introductory remarks to a close, I beg those who really have philosophy at heart — and their number is but small — if they shall find themselves convinced by the considerations following as well as by those above, to exert themselves to preserve to the expression idea its original signification, and to take care that it be not lost among those other expressions by which all sorts of representations are loosely designated — that the interests of science may not thereby suffer. We are in no want of words to denominate adequately every mode of representation, without the necessity of encroaching upon terms

which are proper to others. The following is a graduated list of them. The genus is representation in general (representatio). Under it stands representation with consciousness (perceptio). A perception which relates solely to the subject as a modification of its state, is a sensation (sensatio), an objective perception is a cognition (cognitio). A cognition is either an intuition or a conception (intuitus vel conceptus). The former has an immediate relation to the object and is singular and individual; the latter has but a mediate relation, by means of a characteristic mark which may be common to several things. A conception is either empirical or pure. A pure conception, in so far as it has its origin in the understanding alone, and is not the conception of a pure sensuous image, is called notio. A conception formed from notions, which transcends the possibility of experience, is an idea, or a conception of reason. To one who has accustomed himself to these distinctions, it must be quite intolerable to hear the representation of the colour red called an idea. It ought not even to be called a notion or conception of understanding.

SECTION II. Of Transcendental Ideas.

Transcendental analytic showed us how the mere logical form of our cognition can contain the origin of pure conceptions a priori, conceptions which represent objects antecedently to all experience, or rather, indicate the synthetical unity which alone renders possible an empirical cognition of objects. The form of judgements — converted into a conception of the synthesis of intuitions — produced the categories which direct the employment of the understanding in experience. This consideration warrants us to expect that the form of syllogisms, when applied to synthetical unity of intuitions, following the rule of the categories, will contain the origin of particular a priori conceptions, which we may call pure conceptions of reason or transcendental ideas, and which will determine the use of the understanding in the totality of experience according to principles.

The function of reason in arguments consists in the universality of a cognition according to conceptions, and the syllogism itself is a judgement which is determined a priori in the whole extent of its condition. The proposition: “Caius is mortal,” is one which may be obtained from experience by the aid of the understanding alone; but my wish is to find a conception which contains the condition under which the predicate of this judgement is given — in this case, the conception of man — and after subsuming under this condition, taken in its whole extent (all men are mortal), I determine according to it the cognition of the object thought, and say: “Caius is mortal.”

Hence, in the conclusion of a syllogism we restrict a predicate to a certain object, after having thought it in the major in its whole extent under a certain condition. This complete quantity of the extent in relation to such a condition is called universality (universalitas). To this corresponds totality (universitas) of conditions in the synthesis of intuitions. The transcendental conception of reason is therefore nothing else than the conception of the totality of the conditions of a given conditioned. Now as the unconditioned alone renders possible totality of conditions, and, conversely, the totality of conditions is itself always unconditioned; a pure rational conception in general can be defined and explained by means of the conception of the unconditioned, in so far as it contains a basis for the synthesis of the conditioned.

To the number of modes of relation which the understanding cogitates by means of the categories, the number of pure rational conceptions will correspond. We must therefore seek for, first, an unconditioned of the categorical synthesis in a subject; secondly, of the hypothetical synthesis of the members of a series; thirdly, of the disjunctive synthesis of parts in a system.

There are exactly the same number of modes of syllogisms, each of which proceeds through prosyllogisms to the unconditioned — one to the subject which cannot be employed as predicate, another to the presupposition which supposes nothing higher than itself, and the third to an aggregate of the members of the complete division of a conception. Hence the pure rational conceptions of totality in the synthesis of conditions have a necessary foundation in the nature of human reason — at least as modes of elevating the unity of the understanding to the unconditioned. They may have no valid application, corresponding to their transcendental employment, in concreto, and be thus of no greater utility than to

direct the understanding how, while extending them as widely as possible, to maintain its exercise and application in perfect consistence and harmony.

But, while speaking here of the totality of conditions and of the unconditioned as the common title of all conceptions of reason, we again light upon an expression which we find it impossible to dispense with, and which nevertheless, owing to the ambiguity attaching to it from long abuse, we cannot employ with safety. The word absolute is one of the few words which, in its original signification, was perfectly adequate to the conception it was intended to convey — a conception which no other word in the same language exactly suits, and the loss — or, which is the same thing, the incautious and loose employment — of which must be followed by the loss of the conception itself. And, as it is a conception which occupies much of the attention of reason, its loss would be greatly to the detriment of all transcendental philosophy. The word absolute is at present frequently used to denote that something can be predicated of a thing considered in itself and intrinsically. In this sense absolutely possible would signify that which is possible in itself (interne) — which is, in fact, the least that one can predicate of an object. On the other hand, it is sometimes employed to indicate that a thing is valid in all respects — for example, absolute sovereignty. Absolutely possible would in this sense signify that which is possible in all relations and in every respect; and this is the most that can be predicated of the possibility of a thing. Now these significations do in truth frequently coincide. Thus, for example, that which is intrinsically impossible, is also impossible in all relations, that is, absolutely impossible. But in most cases they differ from each other toto caelo, and I can by no means conclude that, because a thing is in itself possible, it is also possible in all relations, and therefore absolutely. Nay, more, I shall in the sequel show that absolute necessity does not by any means depend on internal necessity, and that, therefore, it must not be considered as synonymous with it. Of an opposite which is intrinsically impossible, we may affirm that it is in all respects impossible, and that, consequently, the thing itself, of which this is the opposite, is absolutely necessary; but I cannot reason conversely and say, the opposite of that which is absolutely necessary is intrinsically impossible, that is, that the absolute necessity of things is an internal necessity. For this internal necessity is in certain cases a mere empty word with which the least conception cannot be connected, while the conception of the necessity of a thing in all relations possesses very peculiar determinations. Now as the loss of a conception of great utility in speculative science cannot be a matter of indifference to the philosopher, I trust that the proper determination and careful preservation of the expression on which the conception depends will likewise be not indifferent to him.

In this enlarged signification, then, shall I employ the word absolute, in opposition to that which is valid only in some particular respect; for the latter is restricted by conditions, the former is valid without any restriction whatever.

Now the transcendental conception of reason has for its object nothing else than absolute totality in the synthesis of conditions and does not rest satisfied till it has attained to the absolutely, that is, in all respects and relations, unconditioned. For pure reason leaves to the understanding everything that immediately relates to the object of intuition or rather to their synthesis in imagination. The former restricts itself to the absolute totality in the employment of the conceptions of the understanding and aims at carrying out the synthetical unity which is cogitated in the category, even to the unconditioned. This unity may hence be called the rational unity of phenomena, as the other, which the category expresses, may be termed the unity of the understanding. Reason, therefore, has an immediate relation to the use of the understanding, not indeed in so far as the latter contains the ground of possible experience (for the conception of the absolute totality of conditions is not a conception that can be employed in experience, because no experience is unconditioned), but solely for the purpose of directing it to a certain unity, of which the understanding has no conception, and the aim of which is to collect into an absolute whole all acts of the understanding. Hence the objective employment of the pure conceptions of reason is always transcendent, while that of the pure conceptions of the understanding must, according to their nature, be

always immanent, inasmuch as they are limited to possible experience.

I understand by idea a necessary conception of reason, to which no corresponding object can be discovered in the world of sense. Accordingly, the pure conceptions of reason at present under consideration are transcendental ideas. They are conceptions of pure reason, for they regard all empirical cognition as determined by means of an absolute totality of conditions. They are not mere fictions, but natural and necessary products of reason, and have hence a necessary relation to the whole sphere of the exercise of the understanding. And, finally, they are transcendent, and overstep the limits of all experiences, in which, consequently, no object can ever be presented that would be perfectly adequate to a transcendental idea. When we use the word idea, we say, as regards its object (an object of the pure understanding), a great deal, but as regards its subject (that is, in respect of its reality under conditions of experience), exceedingly little, because the idea, as the conception of a maximum, can never be completely and adequately presented in concreto. Now, as in the merely speculative employment of reason the latter is properly the sole aim, and as in this case the approximation to a conception, which is never attained in practice, is the same thing as if the conception were non-existent — it is commonly said of the conception of this kind, “it is only an idea.” So we might very well say, “the absolute totality of all phenomena is only an idea,” for, as we never can present an adequate representation of it, it remains for us a problem incapable of solution. On the other hand, as in the practical use of the understanding we have only to do with action and practice according to rules, an idea of pure reason can always be given really in concreto, although only partially, nay, it is the indispensable condition of all practical employment of reason. The practice or execution of the idea is always limited and defective, but nevertheless within indeterminable boundaries, consequently always under the influence of the conception of an absolute perfection. And thus the practical idea is always in the highest degree fruitful, and in relation to real actions indispensably necessary. In the idea, pure reason possesses even causality and the power of producing that which its conception contains. Hence we cannot say of wisdom, in a disparaging way, “it is only an idea.” For, for the very reason that it is the idea of the necessary unity of all possible aims, it must be for all practical exertions and endeavours the primitive condition and rule — a rule which, if not constitutive, is at least limitative.

Now, although we must say of the transcendental conceptions of reason, “they are only ideas,” we must not, on this account, look upon them as superfluous and nugatory. For, although no object can be determined by them, they can be of great utility, unobserved and at the basis of the edifice of the understanding, as the canon for its extended and self-consistent exercise — a canon which, indeed, does not enable it to cognize more in an object than it would cognize by the help of its own conceptions, but which guides it more securely in its cognition. Not to mention that they perhaps render possible a transition from our conceptions of nature and the non-ego to the practical conceptions, and thus produce for even ethical ideas keeping, so to speak, and connection with the speculative cognitions of reason. The explication of all this must be looked for in the sequel.

But setting aside, in conformity with our original purpose, the consideration of the practical ideas, we proceed to contemplate reason in its speculative use alone, nay, in a still more restricted sphere, to wit, in the transcendental use; and here must strike into the same path which we followed in our deduction of the categories. That is to say, we shall consider the logical form of the cognition of reason, that we may see whether reason may not be thereby a source of conceptions which enables us to regard objects in themselves as determined synthetically a priori, in relation to one or other of the functions of reason.

Reason, considered as the faculty of a certain logical form of cognition, is the faculty of conclusion, that is, of mediate judgement — by means of the subsumption of the condition of a possible judgement under the condition of a given judgement. The given judgement is the general rule (major). The subsumption of the condition of another possible judgement under the condition of the rule is the minor. The actual judgement, which enounces the assertion of the rule in the subsumed case, is the conclusion

(conclusio). The rule predicates something generally under a certain condition. The condition of the rule is satisfied in some particular case. It follows that what was valid in general under that condition must also be considered as valid in the particular case which satisfies this condition. It is very plain that reason attains to a cognition, by means of acts of the understanding which constitute a series of conditions. When I arrive at the proposition, "All bodies are changeable," by beginning with the more remote cognition (in which the conception of body does not appear, but which nevertheless contains the condition of that conception), "All compound is changeable," by proceeding from this to a less remote cognition, which stands under the condition of the former, "Bodies are compound," and hence to a third, which at length connects for me the remote cognition (changeable) with the one before me, "Consequently, bodies are changeable" — I have arrived at a cognition (conclusion) through a series of conditions (premisses). Now every series, whose exponent (of the categorical or hypothetical judgement) is given, can be continued; consequently the same procedure of reason conducts us to the ratiocinatio polysyllogistica, which is a series of syllogisms, that can be continued either on the side of the conditions (per prosyllogismos) or of the conditioned (per episyllogismos) to an indefinite extent.

But we very soon perceive that the chain or series of prosyllogisms, that is, of deduced cognitions on the side of the grounds or conditions of a given cognition, in other words, the ascending series of syllogisms must have a very different relation to the faculty of reason from that of the descending series, that is, the progressive procedure of reason on the side of the conditioned by means of episyllogisms. For, as in the former case the cognition (conclusio) is given only as conditioned, reason can attain to this cognition only under the presupposition that all the members of the series on the side of the conditions are given (totality in the series of premisses), because only under this supposition is the judgement we may be considering possible a priori; while on the side of the conditioned or the inferences, only an incomplete and becoming, and not a presupposed or given series, consequently only a potential progression, is cogitated. Hence, when a cognition is contemplated as conditioned, reason is compelled to consider the series of conditions in an ascending line as completed and given in their totality. But if the very same condition is considered at the same time as the condition of other cognitions, which together constitute a series of inferences or consequences in a descending line, reason may preserve a perfect indifference, as to how far this progression may extend a parte posteriori, and whether the totality of this series is possible, because it stands in no need of such a series for the purpose of arriving at the conclusion before it, inasmuch as this conclusion is sufficiently guaranteed and determined on grounds a parte priori. It may be the case, that upon the side of the conditions the series of premisses has a first or highest condition, or it may not possess this, and so be a parte priori unlimited; but it must, nevertheless, contain totality of conditions, even admitting that we never could succeed in completely apprehending it; and the whole series must be unconditionally true, if the conditioned, which is considered as an inference resulting from it, is to be held as true. This is a requirement of reason, which announces its cognition as determined a priori and as necessary, either in itself — and in this case it needs no grounds to rest upon — or, if it is deduced, as a member of a series of grounds, which is itself unconditionally true.

SECTION III. System of Transcendental Ideas.

We are not at present engaged with a logical dialectic, which makes complete abstraction of the content of cognition and aims only at unveiling the illusory appearance in the form of syllogisms. Our subject is transcendental dialectic, which must contain, completely a priori, the origin of certain cognitions drawn from pure reason, and the origin of certain deduced conceptions, the object of which cannot be given empirically and which therefore lie beyond the sphere of the faculty of understanding. We have observed, from the natural relation which the transcendental use of our cognition, in syllogisms as well as in judgements, must have to the logical, that there are three kinds of dialectical arguments, corresponding to the three modes of conclusion, by which reason attains to cognitions on principles; and that in all it is the business of reason to ascend from the conditioned synthesis, beyond which the understanding never

proceeds, to the unconditioned which the understanding never can reach.

Now the most general relations which can exist in our representations are: 1st, the relation to the subject; 2nd, the relation to objects, either as phenomena, or as objects of thought in general. If we connect this subdivision with the main division, all the relations of our representations, of which we can form either a conception or an idea, are threefold: 1. The relation to the subject; 2. The relation to the manifold of the object as a phenomenon; 3. The relation to all things in general.

Now all pure conceptions have to do in general with the synthetical unity of representations; conceptions of pure reason (transcendental ideas), on the other hand, with the unconditional synthetical unity of all conditions. It follows that all transcendental ideas arrange themselves in three classes, the first of which contains the absolute (unconditioned) unity of the thinking subject, the second the absolute unity of the series of the conditions of a phenomenon, the third the absolute unity of the condition of all objects of thought in general.

The thinking subject is the object-matter of Psychology; the sum total of all phenomena (the world) is the object-matter of Cosmology; and the thing which contains the highest condition of the possibility of all that is cogitable (the being of all beings) is the object-matter of all Theology. Thus pure reason presents us with the idea of a transcendental doctrine of the soul (psychologia rationalis), of a transcendental science of the world (cosmologia rationalis), and finally of a transcendental doctrine of God (theologia transcendentalis). Understanding cannot originate even the outline of any of these sciences, even when connected with the highest logical use of reason, that is, all cogitable syllogisms — for the purpose of proceeding from one object (phenomenon) to all others, even to the utmost limits of the empirical synthesis. They are, on the contrary, pure and genuine products, or problems, of pure reason.

What modi of the pure conceptions of reason these transcendental ideas are will be fully exposed in the following chapter. They follow the guiding thread of the categories. For pure reason never relates immediately to objects, but to the conceptions of these contained in the understanding. In like manner, it will be made manifest in the detailed explanation of these ideas — how reason, merely through the synthetical use of the same function which it employs in a categorical syllogism, necessarily attains to the conception of the absolute unity of the thinking subject — how the logical procedure in hypothetical ideas necessarily produces the idea of the absolutely unconditioned in a series of given conditions, and finally — how the mere form of the disjunctive syllogism involves the highest conception of a being of all beings: a thought which at first sight seems in the highest degree paradoxical.

An objective deduction, such as we were able to present in the case of the categories, is impossible as regards these transcendental ideas. For they have, in truth, no relation to any object, in experience, for the very reason that they are only ideas. But a subjective deduction of them from the nature of our reason is possible, and has been given in the present chapter.

It is easy to perceive that the sole aim of pure reason is the absolute totality of the synthesis on the side of the conditions, and that it does not concern itself with the absolute completeness on the Part of the conditioned. For of the former alone does she stand in need, in order to preposit the whole series of conditions, and thus present them to the understanding a priori. But if we once have a completely (and unconditionally) given condition, there is no further necessity, in proceeding with the series, for a conception of reason; for the understanding takes of itself every step downward, from the condition to the conditioned. Thus the transcendental ideas are available only for ascending in the series of conditions, till we reach the unconditioned, that is, principles. As regards descending to the conditioned, on the other hand, we find that there is a widely extensive logical use which reason makes of the laws of the understanding, but that a transcendental use thereof is impossible; and that when we form an idea of the absolute totality of such a synthesis, for example, of the whole series of all future changes in the world, this idea is a mere ens rationis, an arbitrary fiction of thought, and not a necessary presupposition of reason. For the possibility of the conditioned presupposes the totality of its conditions, but not of its

consequences. Consequently, this conception is not a transcendental idea — and it is with these alone that we are at present occupied.

Finally, it is obvious that there exists among the transcendental ideas a certain connection and unity, and that pure reason, by means of them, collects all its cognitions into one system. From the cognition of self to the cognition of the world, and through these to the supreme being, the progression is so natural, that it seems to resemble the logical march of reason from the premisses to the conclusion.* Now whether there lies unobserved at the foundation of these ideas an analogy of the same kind as exists between the logical and transcendental procedure of reason, is another of those questions, the answer to which we must not expect till we arrive at a more advanced stage in our inquiries. In this cursory and preliminary view, we have, meanwhile, reached our aim. For we have dispelled the ambiguity which attached to the transcendental conceptions of reason, from their being commonly mixed up with other conceptions in the systems of philosophers, and not properly distinguished from the conceptions of the understanding; we have exposed their origin and, thereby, at the same time their determinate number, and presented them in a systematic connection, and have thus marked out and enclosed a definite sphere for pure reason.

[Footnote: The science of Metaphysics has for the proper object of its inquiries only three grand ideas: GOD, FREEDOM, and IMMORTALITY, and it aims at showing, that the second conception, conjoined with the first, must lead to the third, as a necessary conclusion. All the other subjects with which it occupies itself, are merely means for the attainment and realization of these ideas. It does not require these ideas for the construction of a science of nature, but, on the contrary, for the purpose of passing beyond the sphere of nature. A complete insight into and comprehension of them would render Theology, Ethics, and, through the conjunction of both, Religion, solely dependent on the speculative faculty of reason. In a systematic representation of these ideas the above-mentioned arrangement — the synthetical one — would be the most suitable; but in the investigation which must necessarily precede it, the analytical, which reverses this arrangement, would be better adapted to our purpose, as in it we should proceed from that which experience immediately presents to us — psychology, to cosmology, and thence to theology.]

BOOK II. — OF THE DIALECTICAL PROCEDURE OF PURE REASON.

It may be said that the object of a merely transcendental idea is something of which we have no conception, although the idea may be a necessary product of reason according to its original laws. For, in fact, a conception of an object that is adequate to the idea given by reason, is impossible. For such an object must be capable of being presented and intuited in a Possible experience. But we should express our meaning better, and with less risk of being misunderstood, if we said that we can have no knowledge of an object, which perfectly corresponds to an idea, although we may possess a problematical conception thereof.

Now the transcendental (subjective) reality at least of the pure conceptions of reason rests upon the fact that we are led to such ideas by a necessary procedure of reason. There must therefore be syllogisms which contain no empirical premisses, and by means of which we conclude from something that we do know, to something of which we do not even possess a conception, to which we, nevertheless, by an unavoidable illusion, ascribe objective reality. Such arguments are, as regards their result, rather to be termed sophisms than syllogisms, although indeed, as regards their origin, they are very well entitled to the latter name, inasmuch as they are not fictions or accidental products of reason, but are necessitated by its very nature. They are sophisms, not of men, but of pure reason herself, from which the Wisest cannot free himself. After long labour he may be able to guard against the error, but he can never be thoroughly rid of the illusion which continually mocks and misleads him.

Of these dialectical arguments there are three kinds, corresponding to the number of the ideas which their conclusions present. In the argument or syllogism of the first class, I conclude, from the transcendental conception of the subject contains no manifold, the absolute unity of the subject itself, of which I cannot in this manner attain to a conception. This dialectical argument I shall call the transcendental paralogism. The second class of sophistical arguments is occupied with the transcendental

conception of the absolute totality of the series of conditions for a given phenomenon, and I conclude, from the fact that I have always a self-contradictory conception of the unconditioned synthetical unity of the series upon one side, the truth of the opposite unity, of which I have nevertheless no conception. The condition of reason in these dialectical arguments, I shall term the antinomy of pure reason. Finally, according to the third kind of sophistical argument, I conclude, from the totality of the conditions of thinking objects in general, in so far as they can be given, the absolute synthetical unity of all conditions of the possibility of things in general; that is, from things which I do not know in their mere transcendental conception, I conclude a being of all beings which I know still less by means of a transcendental conception, and of whose unconditioned necessity I can form no conception whatever. This dialectical argument I shall call the ideal of pure reason.

CHAPTER I. Of the Paralogisms of Pure Reason.

The logical paralogism consists in the falsity of an argument in respect of its form, be the content what it may. But a transcendental paralogism has a transcendental foundation, and concludes falsely, while the form is correct and unexceptionable. In this manner the paralogism has its foundation in the nature of human reason, and is the parent of an unavoidable, though not insoluble, mental illusion.

We now come to a conception which was not inserted in the general list of transcendental conceptions, and yet must be reckoned with them, but at the same time without in the least altering, or indicating a deficiency in that table. This is the conception, or, if the term is preferred, the judgement, “I think.” But it is readily perceived that this thought is as it were the vehicle of all conceptions in general, and consequently of transcendental conceptions also, and that it is therefore regarded as a transcendental conception, although it can have no peculiar claim to be so ranked, inasmuch as its only use is to indicate that all thought is accompanied by consciousness. At the same time, pure as this conception is from empirical content (impressions of the senses), it enables us to distinguish two different kinds of objects. “I,” as thinking, am an object of the internal sense, and am called soul. That which is an object of the external senses is called body. Thus the expression, “I,” as a thinking being, designates the object-matter of psychology, which may be called “the rational doctrine of the soul,” inasmuch as in this science I desire to know nothing of the soul but what, independently of all experience (which determines me in concreto), may be concluded from this conception “I,” in so far as it appears in all thought.

Now, the rational doctrine of the soul is really an undertaking of this kind. For if the smallest empirical element of thought, if any particular perception of my internal state, were to be introduced among the grounds of cognition of this science, it would not be a rational, but an empirical doctrine of the soul. We have thus before us a pretended science, raised upon the single proposition, “I think,” whose foundation or want of foundation we may very properly, and agreeably with the nature of a transcendental philosophy, here examine. It ought not to be objected that in this proposition, which expresses the perception of one’s self, an internal experience is asserted, and that consequently the rational doctrine of the soul which is founded upon it, is not pure, but partly founded upon an empirical principle. For this internal perception is nothing more than the mere apperception, “I think,” which in fact renders all transcendental conceptions possible, in which we say, “I think substance, cause, etc.” For internal experience in general and its possibility, or perception in general, and its relation to other perceptions, unless some particular distinction or determination thereof is empirically given, cannot be regarded as empirical cognition, but as cognition of the empirical, and belongs to the investigation of the possibility of every experience, which is certainly transcendental. The smallest object of experience (for example, only pleasure or pain), that should be included in the general representation of self-consciousness, would immediately change the rational into an empirical psychology.

“I think” is therefore the only text of rational psychology, from which it must develop its whole system. It is manifest that this thought, when applied to an object (myself), can contain nothing but transcendental predicates thereof; because the least empirical predicate would destroy the purity of the science and its independence of all experience.

But we shall have to follow here the guidance of the categories — only, as in the present case a thing, “I,” as thinking being, is at first given, we shall — not indeed change the order of the categories as it stands in the table — but begin at the category of substance, by which at the a thing in itself is represented and proceeds backwards through the series. The topic of the rational doctrine of the soul, from which everything else it may contain must be deduced, is accordingly as follows:

1
The Soul is SUBSTANCE

2
As regards its quality
it is SIMPLE

3
As regards the different
times in which it exists,
it is numerically identical,
that is UNITY, not Plurality.

4 It is in relation to possible objects in space

[Footnote: The reader, who may not so easily perceive the psychological sense of these expressions, taken here in their transcendental abstraction, and cannot guess why the latter attribute of the soul belongs to the category of existence, will find the expressions sufficiently explained and justified in the sequel. I have, moreover, to apologize for the Latin terms which have been employed, instead of their German synonyms, contrary to the rules of correct writing. But I judged it better to sacrifice elegance to perspicuity.]

From these elements originate all the conceptions of pure psychology, by combination alone, without the aid of any other principle. This substance, merely as an object of the internal sense, gives the conception of Immateriality; as simple substance, that of Incorruptibility; its identity, as intellectual substance, gives the conception of Personality; all these three together, Spirituality. Its relation to objects in space gives us the conception of connection (commercium) with bodies. Thus it represents thinking substance as the principle of life in matter, that is, as a soul (anima), and as the ground of Animality; and this, limited and determined by the conception of spirituality, gives us that of Immortality.

Now to these conceptions relate four paralogisms of a transcendental psychology, which is falsely held to be a science of pure reason, touching the nature of our thinking being. We can, however, lay at the foundation of this science nothing but the simple and in itself perfectly contentless representation "I" which cannot even be called a conception, but merely a consciousness which accompanies all conceptions. By this "I," or "He," or "It," who or which thinks, nothing more is represented than a transcendental subject of thought = x, which is cognized only by means of the thoughts that are its predicates, and of which, apart from these, we cannot form the least conception. Hence in a perpetual circle, inasmuch as we must always employ it, in order to frame any judgement respecting it. And this inconvenience we find it impossible to rid ourselves of, because consciousness in itself is not so much a representation distinguishing a particular object, as a form of representation in general, in so far as it may be termed cognition; for in and by cognition alone do I think anything.

It must, however, appear extraordinary at first sight that the condition under which I think, and which is consequently a property of my subject, should be held to be likewise valid for every existence which thinks, and that we can presume to base upon a seemingly empirical proposition a judgement which is apodeictic and universal, to wit, that everything which thinks is constituted as the voice of my consciousness declares it to be, that is, as a self-conscious being. The cause of this belief is to be found in the fact that we necessarily attribute to things a priori all the properties which constitute conditions under which alone we can cogitate them. Now I cannot obtain the least representation of a thinking being by means of external experience, but solely through self-consciousness. Such objects are consequently nothing more than the transference of this consciousness of mine to other things which can only thus be represented as thinking beings. The proposition, "I think," is, in the present case, understood in a

problematical sense, not in so far as it contains a perception of an existence (like the Cartesian "Cogito, ergo sum"),[Footnote: "I think, therefore I am."] but in regard to its mere possibility — for the purpose of discovering what properties may be inferred from so simple a proposition and predicated of the subject of it.

If at the foundation of our pure rational cognition of thinking beings there lay more than the mere Cogito — if we could likewise call in aid observations on the play of our thoughts, and the thence derived natural laws of the thinking self, there would arise an empirical psychology which would be a kind of physiology of the internal sense and might possibly be capable of explaining the phenomena of that sense. But it could never be available for discovering those properties which do not belong to possible experience (such as the quality of simplicity), nor could it make any apodeictic enunciation on the nature of thinking beings: it would therefore not be a rational psychology.

Now, as the proposition "I think" (in the problematical sense) contains the form of every judgement in general and is the constant accompaniment of all the categories, it is manifest that conclusions are drawn from it only by a transcendental employment of the understanding. This use of the understanding excludes all empirical elements; and we cannot, as has been shown above, have any favourable conception beforehand of its procedure. We shall therefore follow with a critical eye this proposition through all the predicaments of pure psychology; but we shall, for brevity's sake, allow this examination to proceed in an uninterrupted connection.

Before entering on this task, however, the following general remark may help to quicken our attention to this mode of argument. It is not merely through my thinking that I cognize an object, but only through my determining a given intuition in relation to the unity of consciousness in which all thinking consists. It follows that I cognize myself, not through my being conscious of myself as thinking, but only when I am conscious of the intuition of myself as determined in relation to the function of thought. All the modi of self-consciousness in thought are hence not conceptions of objects (conceptions of the understanding — categories); they are mere logical functions, which do not present to thought an object to be cognized, and cannot therefore present my Self as an object. Not the consciousness of the determining, but only that of the determinable self, that is, of my internal intuition (in so far as the manifold contained in it can be connected conformably with the general condition of the unity of apperception in thought), is the object.

1. In all judgements I am the determining subject of that relation which constitutes a judgement. But that the I which thinks, must be considered as in thought always a subject, and as a thing which cannot be a predicate to thought, is an apodeictic and identical proposition. But this proposition does not signify that I, as an object, am, for myself, a self-subsistent being or substance. This latter statement — an ambitious one — requires to be supported by data which are not to be discovered in thought; and are perhaps (in so far as I consider the thinking self merely as such) not to be discovered in the thinking self at all.

2. That the I or Ego of apperception, and consequently in all thought, is singular or simple, and cannot be resolved into a plurality of subjects, and therefore indicates a logically simple subject — this is self-evident from the very conception of an Ego, and is consequently an analytical proposition. But this is not tantamount to declaring that the thinking Ego is a simple substance — for this would be a synthetical proposition. The conception of substance always relates to intuitions, which with me cannot be other than sensuous, and which consequently lie completely out of the sphere of the understanding and its thought: but to this sphere belongs the affirmation that the Ego is simple in thought. It would indeed be surprising, if the conception of "substance," which in other cases requires so much labour to distinguish from the other elements presented by intuition — so much trouble, too, to discover whether it can be simple (as in the case of the parts of matter) — should be presented immediately to me, as if by revelation, in the poorest mental representation of all.

3. The proposition of the identity of my Self amidst all the manifold representations of which I am

conscious, is likewise a proposition lying in the conceptions themselves, and is consequently analytical. But this identity of the subject, of which I am conscious in all its representations, does not relate to or concern the intuition of the subject, by which it is given as an object. This proposition cannot therefore enounce the identity of the person, by which is understood the consciousness of the identity of its own substance as a thinking being in all change and variation of circumstances. To prove this, we should require not a mere analysis of the proposition, but synthetical judgements based upon a given intuition.

4. I distinguish my own existence, as that of a thinking being, from that of other things external to me — among which my body also is reckoned. This is also an analytical proposition, for other things are exactly those which I think as different or distinguished from myself. But whether this consciousness of myself is possible without things external to me; and whether therefore I can exist merely as a thinking being (without being man) — cannot be known or inferred from this proposition.

Thus we have gained nothing as regards the cognition of myself as object, by the analysis of the consciousness of my Self in thought. The logical exposition of thought in general is mistaken for a metaphysical determination of the object.

Our Critique would be an investigation utterly superfluous, if there existed a possibility of proving a priori, that all thinking beings are in themselves simple substances, as such, therefore, possess the inseparable attribute of personality, and are conscious of their existence apart from and unconnected with matter. For we should thus have taken a step beyond the world of sense, and have penetrated into the sphere of noumena; and in this case the right could not be denied us of extending our knowledge in this sphere, of establishing ourselves, and, under a favouring star, appropriating to ourselves possessions in it. For the proposition: “Every thinking being, as such, is simple substance,” is an a priori synthetical proposition; because in the first place it goes beyond the conception which is the subject of it, and adds to the mere notion of a thinking being the mode of its existence, and in the second place annexes a predicate (that of simplicity) to the latter conception — a predicate which it could not have discovered in the sphere of experience. It would follow that a priori synthetical propositions are possible and legitimate, not only, as we have maintained, in relation to objects of possible experience, and as principles of the possibility of this experience itself, but are applicable to things in themselves — an inference which makes an end of the whole of this Critique, and obliges us to fall back on the old mode of metaphysical procedure. But indeed the danger is not so great, if we look a little closer into the question.

There lurks in the procedure of rational Psychology a paralogism, which is represented in the following syllogism:

That which cannot be cogitated otherwise than as subject, does not exist otherwise than as subject, and is therefore substance.

A thinking being, considered merely as such, cannot be cogitated otherwise than as subject.

Therefore it exists also as such, that is, as substance.

In the major we speak of a being that can be cogitated generally and in every relation, consequently as it may be given in intuition. But in the minor we speak of the same being only in so far as it regards itself as subject, relatively to thought and the unity of consciousness, but not in relation to intuition, by which it is presented as an object to thought. Thus the conclusion is here arrived at by a Sophisma figurae dictionis.*

[Footnote: Thought is taken in the two premisses in two totally different senses. In the major it is considered as relating and applying to objects in general, consequently to objects of intuition also. In the minor, we understand it as relating merely to self-consciousness. In this sense, we do not cogitate an object, but merely the relation to the self-consciousness of the subject, as the form of thought. In the former premiss we speak of things which cannot be cogitated otherwise than as subjects. In the second, we do not speak of things, but of thought (all objects being abstracted), in which the Ego is always the subject of consciousness. Hence the conclusion cannot be, “I cannot exist otherwise than as subject”; but only “I can, in cogitating my existence, employ my Ego only as the subject of the judgement.” But this is an identical proposition, and throws no light on the mode of my existence.]

That this famous argument is a mere paralogism, will be plain to any one who will consider the general remark which precedes our exposition of the principles of the pure understanding, and the section on noumena. For it was there proved that the conception of a thing, which can exist per se — only as a subject and never as a predicate, possesses no objective reality; that is to say, we can never know whether there exists any object to correspond to the conception; consequently, the conception is nothing more than a conception, and from it we derive no proper knowledge. If this conception is to indicate by the term substance, an object that can be given, if it is to become a cognition, we must have at the foundation of the cognition a permanent intuition, as the indispensable condition of its objective reality. For through intuition alone can an object be given. But in internal intuition there is nothing permanent, for the Ego is but the consciousness of my thought. If then, we appeal merely to thought, we cannot discover the necessary condition of the application of the conception of substance — that is, of a subject existing per se — to the subject as a thinking being. And thus the conception of the simple nature of substance, which is connected with the objective reality of this conception, is shown to be also invalid, and to be, in fact, nothing more than the logical qualitative unity of self-consciousness in thought; whilst we remain perfectly ignorant whether the subject is composite or not.

Refutation of the Argument of Mendelssohn for the Substantiality or Permanence of the Soul.

This acute philosopher easily perceived the insufficiency of the common argument which attempts to prove that the soul — it being granted that it is a simple being — cannot perish by dissolution or decomposition; he saw it is not impossible for it to cease to be by extinction, or disappearance. He endeavoured to prove in his Phaedo, that the soul cannot be annihilated, by showing that a simple being cannot cease to exist. Inasmuch as, he said, a simple existence cannot diminish, nor gradually lose portions of its being, and thus be by degrees reduced to nothing (for it possesses no parts, and therefore no multiplicity), between the moment in which it is, and the moment in which it is not, no time can be discovered — which is impossible. But this philosopher did not consider that, granting the soul to possess this simple nature, which contains no parts external to each other and consequently no extensive quantity, we cannot refuse to it any less than to any other being, intensive quantity, that is, a degree of reality in regard to all its faculties, nay, to all that constitutes its existence. But this degree of reality can become less and less through an infinite series of smaller degrees. It follows, therefore, that this supposed substance — this thing, the permanence of which is not assured in any other way, may, if not by decomposition, by gradual loss (remissio) of its powers (consequently by elanguescence, if I may employ this expression), be changed into nothing. For consciousness itself has always a degree, which may be lessened.* Consequently the faculty of being conscious may be diminished; and so with all other faculties. The permanence of the soul, therefore, as an object of the internal sense, remains undemonstrated, nay, even indemonstrable. Its permanence in life is evident, per se, inasmuch as the thinking being (as man) is to itself, at the same time, an object of the external senses. But this does not authorize the rational psychologist to affirm, from mere conceptions, its permanence beyond life.*

[Footnote: Clearness is not, as logicians maintain, the consciousness of a representation. For a certain degree of consciousness, which may not, however, be sufficient for recollection, is to be met with in many dim representations. For without any consciousness at all, we should not be able to recognize any difference in the obscure representations we connect; as we really can do with many conceptions, such as those of right and justice, and those of the musician, who strikes at once several notes in improvising a piece of music. But a representation is clear, in which our consciousness is sufficient for the consciousness of the difference of this representation from others. If we are only conscious that there is a difference, but are not conscious of the difference — that is, what the difference is — the representation must be termed obscure. There is, consequently, an infinite series of degrees of consciousness down to its entire disappearance.]

[Footnote: There are some who think they have done enough to establish a new possibility in the mode of the existence of souls, when they have shown that there is no contradiction in their hypotheses on this subject. Such are those who affirm the possibility of thought — of which

they have no other knowledge than what they derive from its use in connecting empirical intuitions presented in this our human life — after this life has ceased. But it is very easy to embarrass them by the introduction of counter-possibilities, which rest upon quite as good a foundation. Such, for example, is the possibility of the division of a simple substance into several substances; and conversely, of the coalition of several into one simple substance. For, although divisibility presupposes composition, it does not necessarily require a composition of substances, but only of the degrees (of the several faculties) of one and the same substance. Now we can cogitate all the powers and faculties of the soul — even that of consciousness — as diminished by one half, the substance still remaining. In the same way we can represent to ourselves without contradiction, this obliterated half as preserved, not in the soul, but without it; and we can believe that, as in this case every thing that is real in the soul, and has a degree — consequently its entire existence — has been halved, a particular substance would arise out of the soul. For the multiplicity, which has been divided, formerly existed, but not as a multiplicity of substances, but of every reality as the quantum of existence in it; and the unity of substance was merely a mode of existence, which by this division alone has been transformed into a plurality of subsistence. In the same manner several simple substances might coalesce into one, without anything being lost except the plurality of subsistence, inasmuch as the one substance would contain the degree of reality of all the former substances. Perhaps, indeed, the simple substances, which appear under the form of matter, might (not indeed by a mechanical or chemical influence upon each other, but by an unknown influence, of which the former would be but the phenomenal appearance), by means of such a dynamical division of the parent-souls, as intensive quantities, produce other souls, while the former repaired the loss thus sustained with new matter of the same sort. I am far from allowing any value to such chimeras; and the principles of our analytic have clearly proved that no other than an empirical use of the categories — that of substance, for example — is possible. But if the rationalist is bold enough to construct, on the mere authority of the faculty of thought — without any intuition, whereby an object is given — a self-subsistent being, merely because the unity of apperception in thought cannot allow him to believe it a composite being, instead of declaring, as he ought to do, that he is unable to explain the possibility of a thinking nature; what ought to hinder the materialist, with as complete an independence of experience, to employ the principle of the rationalist in a directly opposite manner — still preserving the formal unity required by his opponent?]

If, now, we take the above propositions — as they must be accepted as valid for all thinking beings in the system of rational psychology — in synthetical connection, and proceed, from the category of relation, with the proposition: “All thinking beings are, as such, substances,” backwards through the series, till the circle is completed; we come at last to their existence, of which, in this system of rational psychology, substances are held to be conscious, independently of external things; nay, it is asserted that, in relation to the permanence which is a necessary characteristic of substance, they can of themselves determine external things. It follows that idealism — at least problematical idealism, is perfectly unavoidable in this rationalistic system. And, if the existence of outward things is not held to be requisite to the determination of the existence of a substance in time, the existence of these outward things at all, is a gratuitous assumption which remains without the possibility of a proof.

But if we proceed analytically — the “I think” as a proposition containing in itself an existence as given, consequently modality being the principle — and dissect this proposition, in order to ascertain its content, and discover whether and how this Ego determines its existence in time and space without the aid of anything external; the propositions of rationalistic psychology would not begin with the conception of a thinking being, but with a reality, and the properties of a thinking being in general would be deduced from the mode in which this reality is cogitated, after everything empirical had been abstracted; as is shown in the following table:

1
I think,
2
as Subject,
3
as simple Subject,
4
as identical Subject,
in every state of my thought.

Now, inasmuch as it is not determined in this second proposition, whether I can exist and be cogitated only as subject, and not also as a predicate of another being, the conception of a subject is here taken in a merely logical sense; and it remains undetermined, whether substance is to be cogitated under the

conception or not. But in the third proposition, the absolute unity of apperception — the simple Ego in the representation to which all connection and separation, which constitute thought, relate, is of itself important; even although it presents us with no information about the constitution or subsistence of the subject. Apperception is something real, and the simplicity of its nature is given in the very fact of its possibility. Now in space there is nothing real that is at the same time simple; for points, which are the only simple things in space, are merely limits, but not constituent parts of space. From this follows the impossibility of a definition on the basis of materialism of the constitution of my Ego as a merely thinking subject. But, because my existence is considered in the first proposition as given, for it does not mean, "Every thinking being exists" (for this would be predicating of them absolute necessity), but only, "I exist thinking"; the proposition is quite empirical, and contains the determinability of my existence merely in relation to my representations in time. But as I require for this purpose something that is permanent, such as is not given in internal intuition; the mode of my existence, whether as substance or as accident, cannot be determined by means of this simple self-consciousness. Thus, if materialism is inadequate to explain the mode in which I exist, spiritualism is likewise as insufficient; and the conclusion is that we are utterly unable to attain to any knowledge of the constitution of the soul, in so far as relates to the possibility of its existence apart from external objects.

And, indeed, how should it be possible, merely by the aid of the unity of consciousness — which we cognize only for the reason that it is indispensable to the possibility of experience — to pass the bounds of experience (our existence in this life); and to extend our cognition to the nature of all thinking beings by means of the empirical — but in relation to every sort of intuition, perfectly undetermined — proposition, "I think"?

There does not then exist any rational psychology as a doctrine furnishing any addition to our knowledge of ourselves. It is nothing more than a discipline, which sets impassable limits to speculative reason in this region of thought, to prevent it, on the one hand, from throwing itself into the arms of a soulless materialism, and, on the other, from losing itself in the mazes of a baseless spiritualism. It teaches us to consider this refusal of our reason to give any satisfactory answer to questions which reach beyond the limits of this our human life, as a hint to abandon fruitless speculation; and to direct, to a practical use, our knowledge of ourselves — which, although applicable only to objects of experience, receives its principles from a higher source, and regulates its procedure as if our destiny reached far beyond the boundaries of experience and life.

From all this it is evident that rational psychology has its origin in a mere misunderstanding. The unity of consciousness, which lies at the basis of the categories, is considered to be an intuition of the subject as an object; and the category of substance is applied to the intuition. But this unity is nothing more than the unity in thought, by which no object is given; to which therefore the category of substance — which always presupposes a given intuition — cannot be applied. Consequently, the subject cannot be cognized. The subject of the categories cannot, therefore, for the very reason that it cogitates these, frame any conception of itself as an object of the categories; for, to cogitate these, it must lay at the foundation its own pure self-consciousness — the very thing that it wishes to explain and describe. In like manner, the subject, in which the representation of time has its basis, cannot determine, for this very reason, its own existence in time. Now, if the latter is impossible, the former, as an attempt to determine itself by means of the categories as a thinking being in general, is no less so.*

[Footnote: The "I think" is, as has been already stated, an empirical proposition, and contains the proposition, "I exist." But I cannot say,

"Everything, which thinks, exists"; for in this case the property of thought would constitute all beings possessing it, necessary beings.

Hence my existence cannot be considered as an inference from the proposition, “I think,” as Descartes maintained — because in this case the major premiss, “Everything, which thinks, exists,” must precede — but the two propositions are identical. The proposition, “I think,” expresses an undetermined empirical intuition, that perception (proving consequently that sensation, which must belong to sensibility, lies at the foundation of this proposition); but it precedes experience, whose province it is to determine an object of perception by means of the categories in relation to time; and existence in this proposition is not a category, as it does not apply to an undetermined given object, but only to one of which we have a conception, and about which we wish to know whether it does or does not exist, out of, and apart from this conception. An undetermined perception signifies here merely something real that has been given, only, however, to thought in general — but not as a phenomenon, nor as a thing in itself (noumenon), but only as something that really exists, and is designated as such in the proposition, “I think.” For it must be remarked that, when I call the proposition, “I think,” an empirical proposition, I do not thereby mean that the Ego in the proposition is an empirical representation; on the contrary, it is purely intellectual, because it belongs to thought in general. But without some empirical representation, which presents to the mind material for thought, the mental act, “I think,” would not take place; and the empirical is only the condition of the application or employment of the pure intellectual faculty.]

Thus, then, appears the vanity of the hope of establishing a cognition which is to extend its rule beyond the limits of experience — a cognition which is one of the highest interests of humanity; and thus is proved the futility of the attempt of speculative philosophy in this region of thought. But, in this interest of thought, the severity of criticism has rendered to reason a not unimportant service, by the demonstration of the impossibility of making any dogmatical affirmation concerning an object of experience beyond the boundaries of experience. She has thus fortified reason against all affirmations of the contrary. Now, this can be accomplished in only two ways. Either our proposition must be proved apodeictically; or, if this is unsuccessful, the sources of this inability must be sought for, and, if these are discovered to exist in the natural and necessary limitation of our reason, our opponents must submit to the same law of renunciation and refrain from advancing claims to dogmatic assertion.

But the right, say rather the necessity to admit a future life, upon principles of the practical conjoined with the speculative use of reason, has lost nothing by this renunciation; for the merely speculative proof has never had any influence upon the common reason of men. It stands upon the point of a hair, so that even the schools have been able to preserve it from falling only by incessantly discussing it and spinning it like a top; and even in their eyes it has never been able to present any safe foundation for the erection of a theory. The proofs which have been current among men, preserve their value undiminished; nay, rather gain in clearness and unsophisticated power, by the rejection of the dogmatical assumptions of speculative reason. For reason is thus confined within her own peculiar province — the arrangement of ends or aims, which is at the same time the arrangement of nature; and, as a practical faculty, without limiting itself to the latter, it is justified in extending the former, and with it our own existence, beyond the boundaries of experience and life. If we turn our attention to the analogy of the nature of living beings in this world, in the consideration of which reason is obliged to accept as a principle that no organ, no faculty, no appetite is useless, and that nothing is superfluous, nothing disproportionate to its use, nothing unsuited to its end; but that, on the contrary, everything is perfectly conformed to its destination in life — we shall find that man, who alone is the final end and aim of this order, is still the only animal that seems to be excepted from it. For his natural gifts — not merely as regards the talents and motives that may incite him to employ them, but especially the moral law in him — stretch so far beyond all mere earthly utility and advantage, that he feels himself bound to prize the mere consciousness of probity, apart from all advantageous consequences — even the shadowy gift of posthumous fame — above everything; and he is conscious of an inward call to constitute himself, by his conduct in this world — without regard to mere sublunary interests — the citizen of a better. This mighty, irresistible proof — accompanied by an ever-increasing knowledge of the conformability to a purpose in everything we see around us, by the conviction of the boundless immensity of creation, by the consciousness of a certain illimitableness in the possible extension of our knowledge, and by a desire commensurate therewith — remains to humanity, even after the theoretical cognition of ourselves has failed to establish the necessity of an existence after death.

Conclusion of the Solution of the Psychological Paralogism.

The dialectical illusion in rational psychology arises from our confounding an idea of reason (of a pure intelligence) with the conception — in every respect undetermined — of a thinking being in general. I cogitate myself in behalf of a possible experience, at the same time making abstraction of all actual experience; and infer therefrom that I can be conscious of myself apart from experience and its empirical conditions. I consequently confound the possible abstraction of my empirically determined existence with the supposed consciousness of a possible separate existence of my thinking self; and I believe that I cognize what is substantial in myself as a transcendental subject, when I have nothing more in thought than the unity of consciousness, which lies at the basis of all determination of cognition.

The task of explaining the community of the soul with the body does not properly belong to the psychology of which we are here speaking; because it proposes to prove the personality of the soul apart from this communion (after death), and is therefore transcendent in the proper sense of the word, although occupying itself with an object of experience — only in so far, however, as it ceases to be an object of experience. But a sufficient answer may be found to the question in our system. The difficulty which lies in the execution of this task consists, as is well known, in the presupposed heterogeneity of the object of the internal sense (the soul) and the objects of the external senses; inasmuch as the formal condition of the intuition of the one is time, and of that of the other space also. But if we consider that both kinds of objects do not differ internally, but only in so far as the one appears externally to the other — consequently, that what lies at the basis of phenomena, as a thing in itself, may not be heterogeneous; this difficulty disappears. There then remains no other difficulty than is to be found in the question — how a community of substances is possible; a question which lies out of the region of psychology, and which the reader, after what in our analytic has been said of primitive forces and faculties, will easily judge to be also beyond the region of human cognition.

GENERAL REMARK

On the Transition from Rational Psychology to Cosmology.

The proposition, “I think,” or, “I exist thinking,” is an empirical proposition. But such a proposition must be based on empirical intuition, and the object cogitated as a phenomenon; and thus our theory appears to maintain that the soul, even in thought, is merely a phenomenon; and in this way our consciousness itself, in fact, abuts upon nothing.

Thought, per se, is merely the purely spontaneous logical function which operates to connect the manifold of a possible intuition; and it does not represent the subject of consciousness as a phenomenon — for this reason alone, that it pays no attention to the question whether the mode of intuiting it is sensuous or intellectual. I therefore do not represent myself in thought either as I am, or as I appear to myself; I merely cogitate myself as an object in general, of the mode of intuiting which I make abstraction. When I represent myself as the subject of thought, or as the ground of thought, these modes of representation are not related to the categories of substance or of cause; for these are functions of thought applicable only to our sensuous intuition. The application of these categories to the Ego would, however, be necessary, if I wished to make myself an object of knowledge. But I wish to be conscious of myself only as thinking; in what mode my Self is given in intuition, I do not consider, and it may be that I, who think, am a phenomenon — although not in so far as I am a thinking being; but in the consciousness of myself in mere thought I am a being, though this consciousness does not present to me any property of this being as material for thought.

But the proposition, “I think,” in so far as it declares, “I exist thinking,” is not the mere representation of a logical function. It determines the subject (which is in this case an object also) in relation to

existence; and it cannot be given without the aid of the internal sense, whose intuition presents to us an object, not as a thing in itself, but always as a phenomenon. In this proposition there is therefore something more to be found than the mere spontaneity of thought; there is also the receptivity of intuition, that is, my thought of myself applied to the empirical intuition of myself. Now, in this intuition the thinking self must seek the conditions of the employment of its logical functions as categories of substance, cause, and so forth; not merely for the purpose of distinguishing itself as an object in itself by means of the representation "I," but also for the purpose of determining the mode of its existence, that is, of cognizing itself as noumenon. But this is impossible, for the internal empirical intuition is sensuous, and presents us with nothing but phenomenal data, which do not assist the object of pure consciousness in its attempt to cognize itself as a separate existence, but are useful only as contributions to experience.

But, let it be granted that we could discover, not in experience, but in certain firmly-established a priori laws of the use of pure reason — laws relating to our existence, authority to consider ourselves as legislating a priori in relation to our own existence and as determining this existence; we should, on this supposition, find ourselves possessed of a spontaneity, by which our actual existence would be determinable, without the aid of the conditions of empirical intuition. We should also become aware that in the consciousness of our existence there was an a priori content, which would serve to determine our own existence — an existence only sensuously determinable — relatively, however, to a certain internal faculty in relation to an intelligible world.

But this would not give the least help to the attempts of rational psychology. For this wonderful faculty, which the consciousness of the moral law in me reveals, would present me with a principle of the determination of my own existence which is purely intellectual — but by what predicates? By none other than those which are given in sensuous intuition. Thus I should find myself in the same position in rational psychology which I formerly occupied, that is to say, I should find myself still in need of sensuous intuitions, in order to give significance to my conceptions of substance and cause, by means of which alone I can possess a knowledge of myself: but these intuitions can never raise me above the sphere of experience. I should be justified, however, in applying these conceptions, in regard to their practical use, which is always directed to objects of experience — in conformity with their analogical significance when employed theoretically — to freedom and its subject. At the same time, I should understand by them merely the logical functions of subject and predicate, of principle and consequence, in conformity with which all actions are so determined, that they are capable of being explained along with the laws of nature, conformably to the categories of substance and cause, although they originate from a very different principle. We have made these observations for the purpose of guarding against misunderstanding, to which the doctrine of our intuition of self as a phenomenon is exposed. We shall have occasion to perceive their utility in the sequel.

CHAPTER II. The Antinomy of Pure Reason.

We showed in the introduction to this part of our work, that all transcendental illusion of pure reason arose from dialectical arguments, the schema of which logic gives us in its three formal species of syllogisms — just as the categories find their logical schema in the four functions of all judgements. The first kind of these sophistical arguments related to the unconditioned unity of the subjective conditions of all representations in general (of the subject or soul), in correspondence with the categorical syllogisms, the major of which, as the principle, enounces the relation of a predicate to a subject. The second kind of dialectical argument will therefore be concerned, following the analogy with hypothetical syllogisms, with the unconditioned unity of the objective conditions in the phenomenon; and, in this way, the theme of the third kind to be treated of in the following chapter will be the unconditioned unity of the objective conditions of the possibility of objects in general.

But it is worthy of remark that the transcendental paralogism produced in the mind only a one-third illusion, in regard to the idea of the subject of our thought; and the conceptions of reason gave no ground to maintain the contrary proposition. The advantage is completely on the side of Pneumatism; although this theory itself passes into naught, in the crucible of pure reason.

Very different is the case when we apply reason to the objective synthesis of phenomena. Here, certainly, reason establishes, with much plausibility, its principle of unconditioned unity; but it very soon falls into such contradictions that it is compelled, in relation to cosmology, to renounce its pretensions.

For here a new phenomenon of human reason meets us — a perfectly natural antithetic, which does not require to be sought for by subtle sophistry, but into which reason of itself unavoidably falls. It is thereby preserved, to be sure, from the slumber of a fancied conviction — which a merely one-sided illusion produces; but it is at the same time compelled, either, on the one hand, to abandon itself to a despairing scepticism, or, on the other, to assume a dogmatical confidence and obstinate persistence in certain assertions, without granting a fair hearing to the other side of the question. Either is the death of a sound philosophy, although the former might perhaps deserve the title of the euthanasia of pure reason.

Before entering this region of discord and confusion, which the conflict of the laws of pure reason (antinomy) produces, we shall present the reader with some considerations, in explanation and justification of the method we intend to follow in our treatment of this subject. I term all transcendental ideas, in so far as they relate to the absolute totality in the synthesis of phenomena, cosmical conceptions; partly on account of this unconditioned totality, on which the conception of the world-whole is based — a conception, which is itself an idea — partly because they relate solely to the synthesis of phenomena — the empirical synthesis; while, on the other hand, the absolute totality in the synthesis of the conditions of all possible things gives rise to an ideal of pure reason, which is quite distinct from the cosmical conception, although it stands in relation with it. Hence, as the paralogisms of pure reason laid the foundation for a dialectical psychology, the antinomy of pure reason will present us with the transcendental principles of a pretended pure (rational) cosmology — not, however, to declare it valid and to appropriate it, but — as the very term of a conflict of reason sufficiently indicates, to present it as an idea which cannot be reconciled with phenomena and experience.

SECTION I. System of Cosmological Ideas.

That We may be able to enumerate with systematic precision these ideas according to a principle, we must remark, in the first place, that it is from the understanding alone that pure and transcendental conceptions take their origin; that the reason does not properly give birth to any conception, but only frees the conception of the understanding from the unavoidable limitation of a possible experience, and thus endeavours to raise it above the empirical, though it must still be in connection with it. This happens from

the fact that, for a given conditioned, reason demands absolute totality on the side of the conditions (to which the understanding submits all phenomena), and thus makes of the category a transcendental idea. This it does that it may be able to give absolute completeness to the empirical synthesis, by continuing it to the unconditioned (which is not to be found in experience, but only in the idea). Reason requires this according to the principle: If the conditioned is given the whole of the conditions, and consequently the absolutely unconditioned, is also given, whereby alone the former was possible. First, then, the transcendental ideas are properly nothing but categories elevated to the unconditioned; and they may be arranged in a table according to the titles of the latter. But, secondly, all the categories are not available for this purpose, but only those in which the synthesis constitutes a series — of conditions subordinated to, not co-ordinated with, each other. Absolute totality is required of reason only in so far as concerns the ascending series of the conditions of a conditioned; not, consequently, when the question relates to the descending series of consequences, or to the aggregate of the co-ordinated conditions of these consequences. For, in relation to a given conditioned, conditions are presupposed and considered to be given along with it. On the other hand, as the consequences do not render possible their conditions, but rather presuppose them — in the consideration of the procession of consequences (or in the descent from the given condition to the conditioned), we may be quite unconcerned whether the series ceases or not; and their totality is not a necessary demand of reason.

Thus we cogitate — and necessarily — a given time completely elapsed up to a given moment, although that time is not determinable by us. But as regards time future, which is not the condition of arriving at the present, in order to conceive it; it is quite indifferent whether we consider future time as ceasing at some point, or as prolonging itself to infinity. Take, for example, the series m, n, o, in which n is given as conditioned in relation to m, but at the same time as the condition of o, and let the series proceed upwards from the conditioned n to m (l, k, i, etc.), and also downwards from the condition n to the conditioned o (p, q, r, etc.) — I must presuppose the former series, to be able to consider n as given, and n is according to reason (the totality of conditions) possible only by means of that series. But its possibility does not rest on the following series o, p, q, r, which for this reason cannot be regarded as given, but only as capable of being given (dabilis).

I shall term the synthesis of the series on the side of the conditions — from that nearest to the given phenomenon up to the more remote — regressive; that which proceeds on the side of the conditioned, from the immediate consequence to the more remote, I shall call the progressive synthesis. The former proceeds in antecedentia, the latter in consequentia. The cosmological ideas are therefore occupied with the totality of the regressive synthesis, and proceed in antecedentia, not in consequentia. When the latter takes place, it is an arbitrary and not a necessary problem of pure reason; for we require, for the complete understanding of what is given in a phenomenon, not the consequences which succeed, but the grounds or principles which precede.

In order to construct the table of ideas in correspondence with the table of categories, we take first the two primitive quanta of all our intuitions, time and space. Time is in itself a series (and the formal condition of all series), and hence, in relation to a given present, we must distinguish a priori in it the antecedentia as conditions (time past) from the consequentia (time future). Consequently, the transcendental idea of the absolute totality of the series of the conditions of a given conditioned, relates merely to all past time. According to the idea of reason, the whole past time, as the condition of the given moment, is necessarily cogitated as given. But, as regards space, there exists in it no distinction between progressus and regressus; for it is an aggregate and not a series — its parts existing together at the same time. I can consider a given point of time in relation to past time only as conditioned, because this given moment comes into existence only through the past time rather through the passing of the preceding time. But as the parts of space are not subordinated, but co-ordinated to each other, one part cannot be the condition of the possibility of the other; and space is not in itself, like time, a series. But the synthesis of

the manifold parts of space — (the syntheses whereby we apprehend space) — is nevertheless successive; it takes place, therefore, in time, and contains a series. And as in this series of aggregated spaces (for example, the feet in a rood), beginning with a given portion of space, those which continue to be annexed form the condition of the limits of the former — the measurement of a space must also be regarded as a synthesis of the series of the conditions of a given conditioned. It differs, however, in this respect from that of time, that the side of the conditioned is not in itself distinguishable from the side of the condition; and, consequently, regressus and progressus in space seem to be identical. But, inasmuch as one part of space is not given, but only limited, by and through another, we must also consider every limited space as conditioned, in so far as it presupposes some other space as the condition of its limitation, and so on. As regards limitation, therefore, our procedure in space is also a regressus, and the transcendental idea of the absolute totality of the synthesis in a series of conditions applies to space also; and I am entitled to demand the absolute totality of the phenomenal synthesis in space as well as in time. Whether my demand can be satisfied is a question to be answered in the sequel.

Secondly, the real in space — that is, matter — is conditioned. Its internal conditions are its parts, and the parts of parts its remote conditions; so that in this case we find a regressive synthesis, the absolute totality of which is a demand of reason. But this cannot be obtained otherwise than by a complete division of parts, whereby the real in matter becomes either nothing or that which is not matter, that is to say, the simple. Consequently we find here also a series of conditions and a progress to the unconditioned.

Thirdly, as regards the categories of a real relation between phenomena, the category of substance and its accidents is not suitable for the formation of a transcendental idea; that is to say, reason has no ground, in regard to it, to proceed regressively with conditions. For accidents (in so far as they inhere in a substance) are co-ordinated with each other, and do not constitute a series. And, in relation to substance, they are not properly subordinated to it, but are the mode of existence of the substance itself. The conception of the substantial might nevertheless seem to be an idea of the transcendental reason. But, as this signifies nothing more than the conception of an object in general, which subsists in so far as we cogitate in it merely a transcendental subject without any predicates; and as the question here is of an unconditioned in the series of phenomena — it is clear that the substantial can form no member thereof. The same holds good of substances in community, which are mere aggregates and do not form a series. For they are not subordinated to each other as conditions of the possibility of each other; which, however, may be affirmed of spaces, the limits of which are never determined in themselves, but always by some other space. It is, therefore, only in the category of causality that we can find a series of causes to a given effect, and in which we ascend from the latter, as the conditioned, to the former as the conditions, and thus answer the question of reason.

Fourthly, the conceptions of the possible, the actual, and the necessary do not conduct us to any series — excepting only in so far as the contingent in existence must always be regarded as conditioned, and as indicating, according to a law of the understanding, a condition, under which it is necessary to rise to a higher, till in the totality of the series, reason arrives at unconditioned necessity.

There are, accordingly, only four cosmological ideas, corresponding with the four titles of the categories. For we can select only such as necessarily furnish us with a series in the synthesis of the manifold.

1
The absolute Completeness
of the
COMPOSITION
of the given totality of all phenomena.
2

The absolute Completeness
of the
DIVISION
of given totality in a phenomenon.
3
The absolute Completeness
of the
ORIGINATION
of a phenomenon.
4
The absolute Completeness
of the DEPENDENCE of the EXISTENCE
of what is changeable in a phenomenon.

We must here remark, in the first place, that the idea of absolute totality relates to nothing but the exposition of phenomena, and therefore not to the pure conception of a totality of things. Phenomena are here, therefore, regarded as given, and reason requires the absolute completeness of the conditions of their possibility, in so far as these conditions constitute a series — consequently an absolutely (that is, in every respect) complete synthesis, whereby a phenomenon can be explained according to the laws of the understanding.

Secondly, it is properly the unconditioned alone that reason seeks in this serially and regressively conducted synthesis of conditions. It wishes, to speak in another way, to attain to completeness in the series of premisses, so as to render it unnecessary to presuppose others. This unconditioned is always contained in the absolute totality of the series, when we endeavour to form a representation of it in thought. But this absolutely complete synthesis is itself but an idea; for it is impossible, at least before hand, to know whether any such synthesis is possible in the case of phenomena. When we represent all existence in thought by means of pure conceptions of the understanding, without any conditions of sensuous intuition, we may say with justice that for a given conditioned the whole series of conditions subordinated to each other is also given; for the former is only given through the latter. But we find in the case of phenomena a particular limitation of the mode in which conditions are given, that is, through the successive synthesis of the manifold of intuition, which must be complete in the regress. Now whether this completeness is sensuously possible, is a problem. But the idea of it lies in the reason — be it possible or impossible to connect with the idea adequate empirical conceptions. Therefore, as in the absolute totality of the regressive synthesis of the manifold in a phenomenon (following the guidance of the categories, which represent it as a series of conditions to a given conditioned) the unconditioned is necessarily contained — it being still left unascertained whether and how this totality exists; reason sets out from the idea of totality, although its proper and final aim is the unconditioned — of the whole series, or of a part thereof.

This unconditioned may be cogitated — either as existing only in the entire series, all the members of which therefore would be without exception conditioned and only the totality absolutely unconditioned — and in this case the regressus is called infinite; or the absolutely unconditioned is only a part of the series, to which the other members are subordinated, but which Is not itself submitted to any other condition.* In the former case the series is a parte priori unlimited (without beginning), that is, infinite, and nevertheless completely given. But the regress in it is never completed, and can only be called potentially infinite. In the second case there exists a first in the series. This first is called, in relation to past time, the beginning of the world; in relation to space, the limit of the world; in relation to the parts of a given limited whole, the simple; in relation to causes, absolute spontaneity (liberty); and in relation to the existence of changeable things, absolute physical necessity.

[Footnote: The absolute totality of the series of conditions to a given conditioned is always unconditioned; because beyond it there exist no other conditions, on which it might depend. But the absolute totality of such a series is only an idea, or rather a problematical conception, the possibility of which must be investigated — particularly in relation to the mode in which the unconditioned, as the transcendental idea which is the real subject of inquiry, may be contained therein.]

We possess two expressions, world and nature, which are generally interchanged. The first denotes the mathematical total of all phenomena and the totality of their synthesis — in its progress by means of composition, as well as by division. And the world is termed nature,* when it is regarded as a dynamical whole — when our attention is not directed to the aggregation in space and time, for the purpose of cogitating it as a quantity, but to the unity in the existence of phenomena. In this case the condition of that which happens is called a cause; the unconditioned causality of the cause in a phenomenon is termed liberty; the conditioned cause is called in a more limited sense a natural cause. The conditioned in existence is termed contingent, and the unconditioned necessary. The unconditioned necessity of phenomena may be called natural necessity.

[Footnote: Nature, understood adjective (formaliter), signifies the complex of the determinations of a thing, connected according to an internal principle of causality. On the other hand, we understand by nature, substantive (materialiter), the sum total of phenomena, in so far as they, by virtue of an internal principle of causality, are connected with each other throughout. In the former sense we speak of the nature of liquid matter, of fire, etc., and employ the word only adjective; while, if speaking of the objects of nature, we have in our minds the idea of a subsisting whole.]

The ideas which we are at present engaged in discussing I have called cosmological ideas; partly because by the term world is understood the entire content of all phenomena, and our ideas are directed solely to the unconditioned among phenomena; partly also, because world, in the transcendental sense, signifies the absolute totality of the content of existing things, and we are directing our attention only to the completeness of the synthesis — although, properly, only in regression. In regard to the fact that these ideas are all transcendent, and, although they do not transcend phenomena as regards their mode, but are concerned solely with the world of sense (and not with noumena), nevertheless carry their synthesis to a degree far above all possible experience — it still seems to me that we can, with perfect propriety, designate them cosmical conceptions. As regards the distinction between the mathematically and the dynamically unconditioned which is the aim of the regression of the synthesis, I should call the two former, in a more limited signification, cosmical conceptions, the remaining two transcendent physical conceptions. This distinction does not at present seem to be of particular importance, but we shall afterwards find it to be of some value.

SECTION II. Antithetic of Pure Reason.

Thetic is the term applied to every collection of dogmatical propositions. By antithetic I do not understand dogmatical assertions of the opposite, but the self-contradiction of seemingly dogmatical cognitions (thesis cum antithesis), in none of which we can discover any decided superiority. Antithetic is not, therefore, occupied with one-sided statements, but is engaged in considering the contradictory nature of the general cognitions of reason and its causes. Transcendental antithetic is an investigation into the antinomy of pure reason, its causes and result. If we employ our reason not merely in the application of the principles of the understanding to objects of experience, but venture with it beyond these boundaries, there arise certain sophistical propositions or theorems. These assertions have the following peculiarities: They can find neither confirmation nor confutation in experience; and each is in itself not only self-consistent, but possesses conditions of its necessity in the very nature of reason — only that, unluckily, there exist just as valid and necessary grounds for maintaining the contrary proposition.

The questions which naturally arise in the consideration of this dialectic of pure reason, are therefore: 1st. In what propositions is pure reason unavoidably subject to an antinomy? 2nd. What are the causes of

this antinomy? 3rd. Whether and in what way can reason free itself from this self-contradiction?

A dialectical proposition or theorem of pure reason must, according to what has been said, be distinguishable from all sophistical propositions, by the fact that it is not an answer to an arbitrary question, which may be raised at the mere pleasure of any person, but to one which human reason must necessarily encounter in its progress. In the second place, a dialectical proposition, with its opposite, does not carry the appearance of a merely artificial illusion, which disappears as soon as it is investigated, but a natural and unavoidable illusion, which, even when we are no longer deceived by it, continues to mock us and, although rendered harmless, can never be completely removed.

This dialectical doctrine will not relate to the unity of understanding in empirical conceptions, but to the unity of reason in pure ideas. The conditions of this doctrine are — inasmuch as it must, as a synthesis according to rules, be conformable to the understanding, and at the same time as the absolute unity of the synthesis, to the reason — that, if it is adequate to the unity of reason, it is too great for the understanding, if according with the understanding, it is too small for the reason. Hence arises a mutual opposition, which cannot be avoided, do what we will.

These sophistical assertions of dialectic open, as it were, a battle-field, where that side obtains the victory which has been permitted to make the attack, and he is compelled to yield who has been unfortunately obliged to stand on the defensive. And hence, champions of ability, whether on the right or on the wrong side, are certain to carry away the crown of victory, if they only take care to have the right to make the last attack, and are not obliged to sustain another onset from their opponent. We can easily believe that this arena has been often trampled by the feet of combatants, that many victories have been obtained on both sides, but that the last victory, decisive of the affair between the contending parties, was won by him who fought for the right, only if his adversary was forbidden to continue the tourney. As impartial umpires, we must lay aside entirely the consideration whether the combatants are fighting for the right or for the wrong side, for the true or for the false, and allow the combat to be first decided. Perhaps, after they have wearied more than injured each other, they will discover the nothingness of their cause of quarrel and part good friends.

This method of watching, or rather of originating, a conflict of assertions, not for the purpose of finally deciding in favour of either side, but to discover whether the object of the struggle is not a mere illusion, which each strives in vain to reach, but which would be no gain even when reached — this procedure, I say, may be termed the sceptical method. It is thoroughly distinct from scepticism — the principle of a technical and scientific ignorance, which undermines the foundations of all knowledge, in order, if possible, to destroy our belief and confidence therein. For the sceptical method aims at certainty, by endeavouring to discover in a conflict of this kind, conducted honestly and intelligently on both sides, the point of misunderstanding; just as wise legislators derive, from the embarrassment of judges in lawsuits, information in regard to the defective and ill-defined parts of their statutes. The antinomy which reveals itself in the application of laws, is for our limited wisdom the best criterion of legislation. For the attention of reason, which in abstract speculation does not easily become conscious of its errors, is thus roused to the momenta in the determination of its principles.

But this sceptical method is essentially peculiar to transcendental philosophy, and can perhaps be dispensed with in every other field of investigation. In mathematics its use would be absurd; because in it no false assertions can long remain hidden, inasmuch as its demonstrations must always proceed under the guidance of pure intuition, and by means of an always evident synthesis. In experimental philosophy, doubt and delay may be very useful; but no misunderstanding is possible, which cannot be easily removed; and in experience means of solving the difficulty and putting an end to the dissension must at last be found, whether sooner or later. Moral philosophy can always exhibit its principles, with their practical consequences, in concreto — at least in possible experiences, and thus escape the mistakes and ambiguities of abstraction. But transcendental propositions, which lay claim to insight beyond the region

of possible experience, cannot, on the one hand, exhibit their abstract synthesis in any a priori intuition, nor, on the other, expose a lurking error by the help of experience. Transcendental reason, therefore, presents us with no other criterion than that of an attempt to reconcile such assertions, and for this purpose to permit a free and unrestrained conflict between them. And this we now proceed to arrange.*

[Footnote: The antinomies stand in the order of the four transcendental ideas above detailed.]

FIRST CONFLICT OF THE TRANSCENDENTAL IDEAS. THESIS.

The world has a beginning in time, and is also limited in regard to space.

PROOF.

Granted that the world has no beginning in time; up to every given moment of time, an eternity must have elapsed, and therewith passed away an infinite series of successive conditions or states of things in the world. Now the infinity of a series consists in the fact that it never can be completed by means of a successive synthesis. It follows that an infinite series already elapsed is impossible and that, consequently, a beginning of the world is a necessary condition of its existence. And this was the first thing to be proved.

As regards the second, let us take the opposite for granted. In this case, the world must be an infinite given total of coexistent things. Now we cannot cogitate the dimensions of a quantity, which is not given within certain limits of an intuition,* in any other way than by means of the synthesis of its parts, and the total of such a quantity only by means of a completed synthesis, or the repeated addition of unity to itself. Accordingly, to cogitate the world, which fills all spaces, as a whole, the successive synthesis of the parts of an infinite world must be looked upon as completed, that is to say, an infinite time must be regarded as having elapsed in the enumeration of all co-existing things; which is impossible. For this reason an infinite aggregate of actual things cannot be considered as a given whole, consequently, not as a contemporaneously given whole. The world is consequently, as regards extension in space, not infinite, but enclosed in limits. And this was the second thing to be proved.

[Footnote: We may consider an undetermined quantity as a whole, when it is enclosed within limits, although we cannot construct or ascertain its totality by measurement, that is, by the successive synthesis of its parts. For its limits of themselves determine its completeness as a whole.]

ANTITHESIS.

The world has no beginning, and no limits in space, but is, in relation both to time and space, infinite.

PROOF.

For let it be granted that it has a beginning. A beginning is an existence which is preceded by a time in which the thing does not exist. On the above supposition, it follows that there must have been a time in which the world did not exist, that is, a void time. But in a void time the origination of a thing is impossible; because no part of any such time contains a distinctive condition of being, in preference to that of non-being (whether the supposed thing originate of itself, or by means of some other cause). Consequently, many series of things may have a beginning in the world, but the world itself cannot have a beginning, and is, therefore, in relation to past time, infinite.

As regards the second statement, let us first take the opposite for granted — that the world is finite and limited in space; it follows that it must exist in a void space, which is not limited. We should therefore meet not only with a relation of things in space, but also a relation of things to space. Now, as the world is an absolute whole, out of and beyond which no object of intuition, and consequently no correlate to which can be discovered, this relation of the world to a void space is merely a relation to no object. But such a relation, and consequently the limitation of the world by void space, is nothing. Consequently, the world,

as regards space, is not limited, that is, it is infinite in regard to extension.*

[Footnote: Space is merely the form of external intuition (formal intuition), and not a real object which can be externally perceived.

Space, prior to all things which determine it (fill or limit it), or, rather, which present an empirical intuition conformable to it, is, under the title of absolute space, nothing but the mere possibility of external phenomena, in so far as they either exist in themselves, or can annex themselves to given intuitions. Empirical intuition is therefore not a composition of phenomena and space (of perception and empty intuition). The one is not the correlate of the other in a synthesis, but they are vitally connected in the same empirical intuition, as matter and form. If we wish to set one of these two apart from the other — space from phenomena — there arise all sorts of empty determinations of external intuition, which are very far from being possible perceptions. For example, motion or rest of the world in an infinite empty space, or a determination of the mutual relation of both, cannot possibly be perceived, and is therefore merely the predicate of a notional entity.]

OBSERVATIONS ON THE FIRST ANTINOMY. ON THE THESIS.

In bringing forward these conflicting arguments, I have not been on the search for sophisms, for the purpose of availing myself of special pleading, which takes advantage of the carelessness of the opposite party, appeals to a misunderstood statute, and erects its unrighteous claims upon an unfair interpretation. Both proofs originate fairly from the nature of the case, and the advantage presented by the mistakes of the dogmatists of both parties has been completely set aside.

The thesis might also have been unfairly demonstrated, by the introduction of an erroneous conception of the infinity of a given quantity. A quantity is infinite, if a greater than itself cannot possibly exist. The quantity is measured by the number of given units — which are taken as a standard — contained in it. Now no number can be the greatest, because one or more units can always be added. It follows that an infinite given quantity, consequently an infinite world (both as regards time and extension) is impossible. It is, therefore, limited in both respects. In this manner I might have conducted my proof; but the conception given in it does not agree with the true conception of an infinite whole. In this there is no representation of its quantity, it is not said how large it is; consequently its conception is not the conception of a maximum. We cogitate in it merely its relation to an arbitrarily assumed unit, in relation to which it is greater than any number. Now, just as the unit which is taken is greater or smaller, the infinite will be greater or smaller; but the infinity, which consists merely in the relation to this given unit, must remain always the same, although the absolute quantity of the whole is not thereby cognized.

The true (transcendental) conception of infinity is: that the successive synthesis of unity in the measurement of a given quantum can never be completed.* Hence it follows, without possibility of mistake, that an eternity of actual successive states up to a given (the present) moment cannot have elapsed, and that the world must therefore have a beginning.

[Footnote: The quantum in this sense contains a congeries of given units, which is greater than any number — and this is the mathematical conception of the infinite.]

In regard to the second part of the thesis, the difficulty as to an infinite and yet elapsed series disappears; for the manifold of a world infinite in extension is contemporaneously given. But, in order to cogitate the total of this manifold, as we cannot have the aid of limits constituting by themselves this total in intuition, we are obliged to give some account of our conception, which in this case cannot proceed from the whole to the determined quantity of the parts, but must demonstrate the possibility of a whole by means of a successive synthesis of the parts. But as this synthesis must constitute a series that cannot be completed, it is impossible for us to cogitate prior to it, and consequently not by means of it, a totality. For the conception of totality itself is in the present case the representation of a completed synthesis of the parts; and this completion, and consequently its conception, is impossible.

ON THE ANTITHESIS.

The proof in favour of the infinity of the cosmical succession and the cosmical content is based upon the consideration that, in the opposite case, a void time and a void space must constitute the limits of the world. Now I am not unaware, that there are some ways of escaping this conclusion. It may, for example, be alleged, that a limit to the world, as regards both space and time, is quite possible, without at the same time holding the existence of an absolute time before the beginning of the world, or an absolute space extending beyond the actual world — which is impossible. I am quite well satisfied with the latter part of this opinion of the philosophers of the Leibnitzian school. Space is merely the form of external intuition, but not a real object which can itself be externally intuited; it is not a correlate of phenomena, it is the form of phenomena itself. Space, therefore, cannot be regarded as absolutely and in itself something determinative of the existence of things, because it is not itself an object, but only the form of possible objects. Consequently, things, as phenomena, determine space; that is to say, they render it possible that, of all the possible predicates of space (size and relation), certain may belong to reality. But we cannot affirm the converse, that space, as something self-subsistent, can determine real things in regard to size or shape, for it is in itself not a real thing. Space (filled or void)* may therefore be limited by phenomena, but phenomena cannot be limited by an empty space without them. This is true of time also. All this being granted, it is nevertheless indisputable, that we must assume these two nonentities, void space without and void time before the world, if we assume the existence of cosmical limits, relatively to space or time.

[Footnote: It is evident that what is meant here is, that empty space, in so far as it is limited by phenomena — space, that is, within the world — does not at least contradict transcendental principles, and may therefore, as regards them, be admitted, although its possibility cannot on that account be affirmed.]

For, as regards the subterfuge adopted by those who endeavour to evade the consequence — that, if the world is limited as to space and time, the infinite void must determine the existence of actual things in regard to their dimensions — it arises solely from the fact that instead of a sensuous world, an intelligible world — of which nothing is known — is cogitated; instead of a real beginning (an existence, which is preceded by a period in which nothing exists), an existence which presupposes no other condition than that of time; and, instead of limits of extension, boundaries of the universe. But the question relates to the mundus phaenomenon, and its quantity; and in this case we cannot make abstraction of the conditions of sensibility, without doing away with the essential reality of this world itself. The world of sense, if it is limited, must necessarily lie in the infinite void. If this, and with it space as the a priori condition of the possibility of phenomena, is left out of view, the whole world of sense disappears. In our problem is this alone considered as given. The mundus intelligibilis is nothing but the general conception of a world, in which abstraction has been made of all conditions of intuition, and in relation to which no synthetical proposition — either affirmative or negative — is possible.

SECOND CONFLICT OF TRANSCENDENTAL IDEAS. THESIS.

Every composite substance in the world consists of simple parts; and there exists nothing that is not either itself simple, or composed of simple parts.

PROOF.

For, grant that composite substances do not consist of simple parts; in this case, if all combination or composition were annihilated in thought, no composite part, and (as, by the supposition, there do not exist simple parts) no simple part would exist. Consequently, no substance; consequently, nothing would exist. Either, then, it is impossible to annihilate composition in thought; or, after such annihilation, there must remain something that subsists without composition, that is, something that is simple. But in the former case the composite could not itself consist of substances, because with substances composition is merely a contingent relation, apart from which they must still exist as self-subsistent beings. Now, as this case

contradicts the supposition, the second must contain the truth — that the substantial composite in the world consists of simple parts.

It follows, as an immediate inference, that the things in the world are all, without exception, simple beings — that composition is merely an external condition pertaining to them — and that, although we never can separate and isolate the elementary substances from the state of composition, reason must cogitate these as the primary subjects of all composition, and consequently, as prior thereto — and as simple substances.

ANTITHESIS.

No composite thing in the world consists of simple parts; and there does not exist in the world any simple substance.

PROOF.

Let it be supposed that a composite thing (as substance) consists of simple parts. Inasmuch as all external relation, consequently all composition of substances, is possible only in space; the space, occupied by that which is composite, must consist of the same number of parts as is contained in the composite. But space does not consist of simple parts, but of spaces. Therefore, every part of the composite must occupy a space. But the absolutely primary parts of what is composite are simple. It follows that what is simple occupies a space. Now, as everything real that occupies a space, contains a manifold the parts of which are external to each other, and is consequently composite — and a real composite, not of accidents (for these cannot exist external to each other apart from substance), but of substances — it follows that the simple must be a substantial composite, which is self-contradictory.

The second proposition of the antithesis — that there exists in the world nothing that is simple — is here equivalent to the following: The existence of the absolutely simple cannot be demonstrated from any experience or perception either external or internal; and the absolutely simple is a mere idea, the objective reality of which cannot be demonstrated in any possible experience; it is consequently, in the exposition of phenomena, without application and object. For, let us take for granted that an object may be found in experience for this transcendental idea; the empirical intuition of such an object must then be recognized to contain absolutely no manifold with its parts external to each other, and connected into unity. Now, as we cannot reason from the non-consciousness of such a manifold to the impossibility of its existence in the intuition of an object, and as the proof of this impossibility is necessary for the establishment and proof of absolute simplicity; it follows that this simplicity cannot be inferred from any perception whatever. As, therefore, an absolutely simple object cannot be given in any experience, and the world of sense must be considered as the sum total of all possible experiences: nothing simple exists in the world.

This second proposition in the antithesis has a more extended aim than the first. The first merely banishes the simple from the intuition of the composite; while the second drives it entirely out of nature. Hence we were unable to demonstrate it from the conception of a given object of external intuition (of the composite), but we were obliged to prove it from the relation of a given object to a possible experience in general.

OBSERVATIONS ON THE SECOND ANTINOMY. THESIS.

When I speak of a whole, which necessarily consists of simple parts, I understand thereby only a substantial whole, as the true composite; that is to say, I understand that contingent unity of the manifold which is given as perfectly isolated (at least in thought), placed in reciprocal connection, and thus constituted a unity. Space ought not to be called a compositum but a totum, for its parts are possible in the whole, and not the whole by means of the parts. It might perhaps be called a compositum ideale, but not a compositum reale. But this is of no importance. As space is not a composite of substances (and not even of real accidents), if I abstract all composition therein — nothing, not even a point, remains; for a point is possible only as the limit of a space — consequently of a composite. Space and time, therefore, do not

consist of simple parts. That which belongs only to the condition or state of a substance, even although it possesses a quantity (motion or change, for example), likewise does not consist of simple parts. That is to say, a certain degree of change does not originate from the addition of many simple changes. Our inference of the simple from the composite is valid only of self-subsisting things. But the accidents of a state are not self-subsistent. The proof, then, for the necessity of the simple, as the component part of all that is substantial and composite, may prove a failure, and the whole case of this thesis be lost, if we carry the proposition too far, and wish to make it valid of everything that is composite without distinction — as indeed has really now and then happened. Besides, I am here speaking only of the simple, in so far as it is necessarily given in the composite — the latter being capable of solution into the former as its component parts. The proper signification of the word monas (as employed by Leibnitz) ought to relate to the simple, given immediately as simple substance (for example, in consciousness), and not as an element of the composite. As an clement, the term atomus would be more appropriate. And as I wish to prove the existence of simple substances, only in relation to, and as the elements of, the composite, I might term the antithesis of the second Antinomy, transcendental Atomistic. But as this word has long been employed to designate a particular theory of corporeal phenomena (moleculae), and thus presupposes a basis of empirical conceptions, I prefer calling it the dialectical principle of Monadology.

ANTITHESIS.

Against the assertion of the infinite subdivisibility of matter whose ground of proof is purely mathematical, objections have been alleged by the Monadists. These objections lay themselves open, at first sight, to suspicion, from the fact that they do not recognize the clearest mathematical proofs as propositions relating to the constitution of space, in so far as it is really the formal condition of the possibility of all matter, but regard them merely as inferences from abstract but arbitrary conceptions, which cannot have any application to real things. Just as if it were possible to imagine another mode of intuition than that given in the primitive intuition of space; and just as if its a priori determinations did not apply to everything, the existence of which is possible, from the fact alone of its filling space. If we listen to them, we shall find ourselves required to cogitate, in addition to the mathematical point, which is simple — not, however, a part, but a mere limit of space — physical points, which are indeed likewise simple, but possess the peculiar property, as parts of space, of filling it merely by their aggregation. I shall not repeat here the common and clear refutations of this absurdity, which are to be found everywhere in numbers: every one knows that it is impossible to undermine the evidence of mathematics by mere discursive conceptions; I shall only remark that, if in this case philosophy endeavours to gain an advantage over mathematics by sophistical artifices, it is because it forgets that the discussion relates solely to Phenomena and their conditions. It is not sufficient to find the conception of the simple for the pure conception of the composite, but we must discover for the intuition of the composite (matter), the intuition of the simple. Now this, according to the laws of sensibility, and consequently in the case of objects of sense, is utterly impossible. In the case of a whole composed of substances, which is cogitated solely by the pure understanding, it may be necessary to be in possession of the simple before composition is possible. But this does not hold good of the Totum substantiale phaenomenon, which, as an empirical intuition in space, possesses the necessary property of containing no simple part, for the very reason that no part of space is simple. Meanwhile, the Monadists have been subtle enough to escape from this difficulty, by presupposing intuition and the dynamical relation of substances as the condition of the possibility of space, instead of regarding space as the condition of the possibility of the objects of external intuition, that is, of bodies. Now we have a conception of bodies only as phenomena, and, as such, they necessarily presuppose space as the condition of all external phenomena. The evasion is therefore in vain; as, indeed, we have sufficiently shown in our Aesthetic. If bodies were things in themselves, the proof of the Monadists would be unexceptionable.

The second dialectical assertion possesses the peculiarity of having opposed to it a dogmatical

proposition, which, among all such sophistical statements, is the only one that undertakes to prove in the case of an object of experience, that which is properly a transcendental idea — the absolute simplicity of substance. The proposition is that the object of the internal sense, the thinking Ego, is an absolute simple substance. Without at present entering upon this subject — as it has been considered at length in a former chapter — I shall merely remark that, if something is cogitated merely as an object, without the addition of any synthetical determination of its intuition — as happens in the case of the bare representation, I — it is certain that no manifold and no composition can be perceived in such a representation. As, moreover, the predicates whereby I cogitate this object are merely intuitions of the internal sense, there cannot be discovered in them anything to prove the existence of a manifold whose parts are external to each other, and, consequently, nothing to prove the existence of real composition. Consciousness, therefore, is so constituted that, inasmuch as the thinking subject is at the same time its own object, it cannot divide itself — although it can divide its inhering determinations. For every object in relation to itself is absolute unity. Nevertheless, if the subject is regarded externally, as an object of intuition, it must, in its character of phenomenon, possess the property of composition. And it must always be regarded in this manner, if we wish to know whether there is or is not contained in it a manifold whose parts are external to each other.

THIRD CONFLICT OF THE TRANSCENDENTAL IDEAS. THESIS.

Causality according to the laws of nature, is not the only causality operating to originate the phenomena of the world. A causality of freedom is also necessary to account fully for these phenomena.

PROOF.

Let it be supposed, that there is no other kind of causality than that according to the laws of nature. Consequently, everything that happens presupposes a previous condition, which it follows with absolute certainty, in conformity with a rule. But this previous condition must itself be something that has happened (that has arisen in time, as it did not exist before), for, if it has always been in existence, its consequence or effect would not thus originate for the first time, but would likewise have always existed. The causality, therefore, of a cause, whereby something happens, is itself a thing that has happened. Now this again presupposes, in conformity with the law of nature, a previous condition and its causality, and this another anterior to the former, and so on. If, then, everything happens solely in accordance with the laws of nature, there cannot be any real first beginning of things, but only a subaltern or comparative beginning. There cannot, therefore, be a completeness of series on the side of the causes which originate the one from the other. But the law of nature is that nothing can happen without a sufficient a priori determined cause. The proposition therefore — if all causality is possible only in accordance with the laws of nature — is, when stated in this unlimited and general manner, self-contradictory. It follows that this cannot be the only kind of causality.

From what has been said, it follows that a causality must be admitted, by means of which something happens, without its cause being determined according to necessary laws by some other cause preceding. That is to say, there must exist an absolute spontaneity of cause, which of itself originates a series of phenomena which proceeds according to natural laws — consequently transcendental freedom, without which even in the course of nature the succession of phenomena on the side of causes is never complete.

ANTITHESIS.

There is no such thing as freedom, but everything in the world happens solely according to the laws of nature.

PROOF.

Granted, that there does exist freedom in the transcendental sense, as a peculiar kind of causality, operating to produce events in the world — a faculty, that is to say, of originating a state, and consequently a series of consequences from that state. In this case, not only the series originated by this spontaneity, but the determination of this spontaneity itself to the production of the series, that is to say, the

causality itself must have an absolute commencement, such that nothing can precede to determine this action according to unvarying laws. But every beginning of action presupposes in the acting cause a state of inaction; and a dynamically primal beginning of action presupposes a state, which has no connection — as regards causality — with the preceding state of the cause — which does not, that is, in any wise result from it. Transcendental freedom is therefore opposed to the natural law of cause and effect, and such a conjunction of successive states in effective causes is destructive of the possibility of unity in experience and for that reason not to be found in experience — is consequently a mere fiction of thought.

We have, therefore, nothing but nature to which we must look for connection and order in cosmical events. Freedom — independence of the laws of nature — is certainly a deliverance from restraint, but it is also a relinquishing of the guidance of law and rule. For it cannot be alleged that, instead of the laws of nature, laws of freedom may be introduced into the causality of the course of nature. For, if freedom were determined according to laws, it would be no longer freedom, but merely nature. Nature, therefore, and transcendental freedom are distinguishable as conformity to law and lawlessness. The former imposes upon understanding the difficulty of seeking the origin of events ever higher and higher in the series of causes, inasmuch as causality is always conditioned thereby; while it compensates this labour by the guarantee of a unity complete and in conformity with law. The latter, on the contrary, holds out to the understanding the promise of a point of rest in the chain of causes, by conducting it to an unconditioned causality, which professes to have the power of spontaneous origination, but which, in its own utter blindness, deprives it of the guidance of rules, by which alone a completely connected experience is possible.

OBSERVATIONS ON THE THIRD ANTINOMY. ON THE THESIS.

The transcendental idea of freedom is far from constituting the entire content of the psychological conception so termed, which is for the most part empirical. It merely presents us with the conception of spontaneity of action, as the proper ground for imputing freedom to the cause of a certain class of objects. It is, however, the true stumbling-stone to philosophy, which meets with unconquerable difficulties in the way of its admitting this kind of unconditioned causality. That element in the question of the freedom of the will, which has for so long a time placed speculative reason in such perplexity, is properly only transcendental, and concerns the question, whether there must be held to exist a faculty of spontaneous origination of a series of successive things or states. How such a faculty is possible is not a necessary inquiry; for in the case of natural causality itself, we are obliged to content ourselves with the a priori knowledge that such a causality must be presupposed, although we are quite incapable of comprehending how the being of one thing is possible through the being of another, but must for this information look entirely to experience. Now we have demonstrated this necessity of a free first beginning of a series of phenomena, only in so far as it is required for the comprehension of an origin of the world, all following states being regarded as a succession according to laws of nature alone. But, as there has thus been proved the existence of a faculty which can of itself originate a series in time — although we are unable to explain how it can exist — we feel ourselves authorized to admit, even in the midst of the natural course of events, a beginning, as regards causality, of different successions of phenomena, and at the same time to attribute to all substances a faculty of free action. But we ought in this case not to allow ourselves to fall into a common misunderstanding, and to suppose that, because a successive series in the world can only have a comparatively first beginning — another state or condition of things always preceding — an absolutely first beginning of a series in the course of nature is impossible. For we are not speaking here of an absolutely first beginning in relation to time, but as regards causality alone. When, for example, I, completely of my own free will, and independently of the necessarily determinative influence of natural causes, rise from my chair, there commences with this event, including its material consequences in infinitum, an absolutely new series; although, in relation to time, this event is merely the continuation of a preceding series. For this resolution and act of mine do not form part of the succession of effects in

nature, and are not mere continuations of it; on the contrary, the determining causes of nature cease to operate in reference to this event, which certainly succeeds the acts of nature, but does not proceed from them. For these reasons, the action of a free agent must be termed, in regard to causality, if not in relation to time, an absolutely primal beginning of a series of phenomena.

The justification of this need of reason to rest upon a free act as the first beginning of the series of natural causes is evident from the fact, that all philosophers of antiquity (with the exception of the Epicurean school) felt themselves obliged, when constructing a theory of the motions of the universe, to accept a prime mover, that is, a freely acting cause, which spontaneously and prior to all other causes evolved this series of states. They always felt the need of going beyond mere nature, for the purpose of making a first beginning comprehensible.

ON THE ANTITHESIS.

The assertor of the all-sufficiency of nature in regard to causality (transcendental Physiocracy), in opposition to the doctrine of freedom, would defend his view of the question somewhat in the following manner. He would say, in answer to the sophistical arguments of the opposite party: If you do not accept a mathematical first, in relation to time, you have no need to seek a dynamical first, in regard to causality. Who compelled you to imagine an absolutely primal condition of the world, and therewith an absolute beginning of the gradually progressing successions of phenomena — and, as some foundation for this fancy of yours, to set bounds to unlimited nature? Inasmuch as the substances in the world have always existed — at least the unity of experience renders such a supposition quite necessary — there is no difficulty in believing also, that the changes in the conditions of these substances have always existed; and, consequently, that a first beginning, mathematical or dynamical, is by no means required. The possibility of such an infinite derivation, without any initial member from which all the others result, is certainly quite incomprehensible. But, if you are rash enough to deny the enigmatical secrets of nature for this reason, you will find yourselves obliged to deny also the existence of many fundamental properties of natural objects (such as fundamental forces), which you can just as little comprehend; and even the possibility of so simple a conception as that of change must present to you insuperable difficulties. For if experience did not teach you that it was real, you never could conceive a priori the possibility of this ceaseless sequence of being and non-being.

But if the existence of a transcendental faculty of freedom is granted — a faculty of originating changes in the world — this faculty must at least exist out of and apart from the world; although it is certainly a bold assumption, that, over and above the complete content of all possible intuitions, there still exists an object which cannot be presented in any possible perception. But, to attribute to substances in the world itself such a faculty, is quite inadmissible; for, in this case; the connection of phenomena reciprocally determining and determined according to general laws, which is termed nature, and along with it the criteria of empirical truth, which enable us to distinguish experience from mere visionary dreaming, would almost entirely disappear. In proximity with such a lawless faculty of freedom, a system of nature is hardly cogitable; for the laws of the latter would be continually subject to the intrusive influences of the former, and the course of phenomena, which would otherwise proceed regularly and uniformly, would become thereby confused and disconnected.

FOURTH CONFLICT OF THE TRANSCENDENTAL IDEAS. THESIS.

There exists either in, or in connection with the world — either as a part of it, or as the cause of it — an absolutely necessary being.

PROOF.

The world of sense, as the sum total of all phenomena, contains a series of changes. For, without such a series, the mental representation of the series of time itself, as the condition of the possibility of the sensuous world, could not be presented to us.* But every change stands under its condition, which precedes it in time and renders it necessary. Now the existence of a given condition presupposes a

complete series of conditions up to the absolutely unconditioned, which alone is absolutely necessary. It follows that something that is absolutely necessary must exist, if change exists as its consequence. But this necessary thing itself belongs to the sensuous world. For suppose it to exist out of and apart from it, the series of cosmical changes would receive from it a beginning, and yet this necessary cause would not itself belong to the world of sense. But this is impossible. For, as the beginning of a series in time is determined only by that which precedes it in time, the supreme condition of the beginning of a series of changes must exist in the time in which this series itself did not exist; for a beginning supposes a time preceding, in which the thing that begins to be was not in existence. The causality of the necessary cause of changes, and consequently the cause itself, must for these reasons belong to time — and to phenomena, time being possible only as the form of phenomena. Consequently, it cannot be cogitated as separated from the world of sense — the sum total of all phenomena. There is, therefore, contained in the world, something that is absolutely necessary — whether it be the whole cosmical series itself, or only a part of it.

[Footnote: Objectively, time, as the formal condition of the possibility of change, precedes all changes; but subjectively, and in consciousness, the representation of time, like every other, is given solely by occasion of perception.]

ANTITHESIS.

An absolutely necessary being does not exist, either in the world, or out of it — as its cause.

PROOF.

Grant that either the world itself is necessary, or that there is contained in it a necessary existence. Two cases are possible. First, there must either be in the series of cosmical changes a beginning, which is unconditionally necessary, and therefore uncaused — which is at variance with the dynamical law of the determination of all phenomena in time; or, secondly, the series itself is without beginning, and, although contingent and conditioned in all its parts, is nevertheless absolutely necessary and unconditioned as a whole — which is self-contradictory. For the existence of an aggregate cannot be necessary, if no single part of it possesses necessary existence.

Grant, on the other band, that an absolutely necessary cause exists out of and apart from the world. This cause, as the highest member in the series of the causes of cosmical changes, must originate or begin* the existence of the latter and their series. In this case it must also begin to act, and its causality would therefore belong to time, and consequently to the sum total of phenomena, that is, to the world. It follows that the cause cannot be out of the world; which is contradictory to the hypothesis. Therefore, neither in the world, nor out of it (but in causal connection with it), does there exist any absolutely necessary being.

[Footnote: The word begin is taken in two senses. The first is active — the cause being regarded as beginning a series of conditions as its effect (infit). The second is passive — the causality in the cause itself beginning to operate (fit). I reason here from the first to the second.]

OBSERVATIONS ON THE FOURTH ANTINOMY. ON THE THESIS.

To demonstrate the existence of a necessary being, I cannot be permitted in this place to employ any other than the cosmological argument, which ascends from the conditioned in phenomena to the unconditioned in conception — the unconditioned being considered the necessary condition of the absolute totality of the series. The proof, from the mere idea of a supreme being, belongs to another principle of reason and requires separate discussion.

The pure cosmological proof demonstrates the existence of a necessary being, but at the same time leaves it quite unsettled, whether this being is the world itself, or quite distinct from it. To establish the truth of the latter view, principles are requisite, which are not cosmological and do not proceed in the

series of phenomena. We should require to introduce into our proof conceptions of contingent beings — regarded merely as objects of the understanding, and also a principle which enables us to connect these, by means of mere conceptions, with a necessary being. But the proper place for all such arguments is a transcendent philosophy, which has unhappily not yet been established.

But, if we begin our proof cosmologically, by laying at the foundation of it the series of phenomena, and the regress in it according to empirical laws of causality, we are not at liberty to break off from this mode of demonstration and to pass over to something which is not itself a member of the series. The condition must be taken in exactly the same signification as the relation of the conditioned to its condition in the series has been taken, for the series must conduct us in an unbroken regress to this supreme condition. But if this relation is sensuous, and belongs to the possible empirical employment of understanding, the supreme condition or cause must close the regressive series according to the laws of sensibility and consequently, must belong to the series of time. It follows that this necessary existence must be regarded as the highest member of the cosmical series.

Certain philosophers have, nevertheless, allowed themselves the liberty of making such a saltus (metabasis eis allo gonos). From the changes in the world they have concluded their empirical contingency, that is, their dependence on empirically-determined causes, and they thus admitted an ascending series of empirical conditions: and in this they are quite right. But as they could not find in this series any primal beginning or any highest member, they passed suddenly from the empirical conception of contingency to the pure category, which presents us with a series — not sensuous, but intellectual — whose completeness does certainly rest upon the existence of an absolutely necessary cause. Nay, more, this intellectual series is not tied to any sensuous conditions; and is therefore free from the condition of time, which requires it spontaneously to begin its causality in time. But such a procedure is perfectly inadmissible, as will be made plain from what follows.

In the pure sense of the categories, that is contingent the contradictory opposite of which is possible. Now we cannot reason from empirical contingency to intellectual. The opposite of that which is changed — the opposite of its state — is actual at another time, and is therefore possible. Consequently, it is not the contradictory opposite of the former state. To be that, it is necessary that, in the same time in which the preceding state existed, its opposite could have existed in its place; but such a cognition is not given us in the mere phenomenon of change. A body that was in motion = A, comes into a state of rest = non-A. Now it cannot be concluded from the fact that a state opposite to the state A follows it, that the contradictory opposite of A is possible; and that A is therefore contingent. To prove this, we should require to know that the state of rest could have existed in the very same time in which the motion took place. Now we know nothing more than that the state of rest was actual in the time that followed the state of motion; consequently, that it was also possible. But motion at one time, and rest at another time, are not contradictorily opposed to each other. It follows from what has been said that the succession of opposite determinations, that is, change, does not demonstrate the fact of contingency as represented in the conceptions of the pure understanding; and that it cannot, therefore, conduct us to the fact of the existence of a necessary being. Change proves merely empirical contingency, that is to say, that the new state could not have existed without a cause, which belongs to the preceding time. This cause — even although it is regarded as absolutely necessary — must be presented to us in time, and must belong to the series of phenomena.

ON THE ANTITHESIS.

The difficulties which meet us, in our attempt to rise through the series of phenomena to the existence of an absolutely necessary supreme cause, must not originate from our inability to establish the truth of our mere conceptions of the necessary existence of a thing. That is to say, our objections not be ontological, but must be directed against the causal connection with a series of phenomena of a condition which is itself unconditioned. In one word, they must be cosmological and relate to empirical laws. We must show

that the regress in the series of causes (in the world of sense) cannot conclude with an empirically unconditioned condition, and that the cosmological argument from the contingency of the cosmical state — a contingency alleged to arise from change — does not justify us in accepting a first cause, that is, a prime originator of the cosmical series.

The reader will observe in this antinomy a very remarkable contrast. The very same grounds of proof which established in the thesis the existence of a supreme being, demonstrated in the antithesis — and with equal strictness — the non-existence of such a being. We found, first, that a necessary being exists, because the whole time past contains the series of all conditions, and with it, therefore, the unconditioned (the necessary); secondly, that there does not exist any necessary being, for the same reason, that the whole time past contains the series of all conditions — which are themselves, therefore, in the aggregate, conditioned. The cause of this seeming incongruity is as follows. We attend, in the first argument, solely to the absolute totality of the series of conditions, the one of which determines the other in time, and thus arrive at a necessary unconditioned. In the second, we consider, on the contrary, the contingency of everything that is determined in the series of time — for every event is preceded by a time, in which the condition itself must be determined as conditioned — and thus everything that is unconditioned or absolutely necessary disappears. In both, the mode of proof is quite in accordance with the common procedure of human reason, which often falls into discord with itself, from considering an object from two different points of view. Herr von Mairan regarded the controversy between two celebrated astronomers, which arose from a similar difficulty as to the choice of a proper standpoint, as a phenomenon of sufficient importance to warrant a separate treatise on the subject. The one concluded: the moon revolves on its own axis, because it constantly presents the same side to the earth; the other declared that the moon does not revolve on its own axis, for the same reason. Both conclusions were perfectly correct, according to the point of view from which the motions of the moon were considered.

SECTION III. Of the Interest of Reason in these Self-contradictions.

We have thus completely before us the dialectical procedure of the cosmological ideas. No possible experience can present us with an object adequate to them in extent. Nay, more, reason itself cannot cogitate them as according with the general laws of experience. And yet they are not arbitrary fictions of thought. On the contrary, reason, in its uninterrupted progress in the empirical synthesis, is necessarily conducted to them, when it endeavours to free from all conditions and to comprehend in its unconditioned totality that which can only be determined conditionally in accordance with the laws of experience. These dialectical propositions are so many attempts to solve four natural and unavoidable problems of reason. There are neither more, nor can there be less, than this number, because there are no other series of synthetical hypotheses, limiting a priori the empirical synthesis.

The brilliant claims of reason striving to extend its dominion beyond the limits of experience, have been represented above only in dry formulae, which contain merely the grounds of its pretensions. They have, besides, in conformity with the character of a transcendental philosophy, been freed from every empirical element; although the full splendour of the promises they hold out, and the anticipations they excite, manifests itself only when in connection with empirical cognitions. In the application of them, however, and in the advancing enlargement of the employment of reason, while struggling to rise from the region of experience and to soar to those sublime ideas, philosophy discovers a value and a dignity, which, if it could but make good its assertions, would raise it far above all other departments of human knowledge — professing, as it does, to present a sure foundation for our highest hopes and the ultimate aims of all the exertions of reason. The questions: whether the world has a beginning and a limit to its extension in space; whether there exists anywhere, or perhaps, in my own thinking Self, an indivisible and indestructible unity — or whether nothing but what is divisible and transitory exists; whether I am a free agent, or, like other beings, am bound in the chains of nature and fate; whether, finally, there is a supreme cause of the world, or all our thought and speculation must end with nature and the order of external things

— are questions for the solution of which the mathematician would willingly exchange his whole science; for in it there is no satisfaction for the highest aspirations and most ardent desires of humanity. Nay, it may even be said that the true value of mathematics — that pride of human reason — consists in this: that she guides reason to the knowledge of nature — in her greater as well as in her less manifestations — in her beautiful order and regularity — guides her, moreover, to an insight into the wonderful unity of the moving forces in the operations of nature, far beyond the expectations of a philosophy building only on experience; and that she thus encourages philosophy to extend the province of reason beyond all experience, and at the same time provides it with the most excellent materials for supporting its investigations, in so far as their nature admits, by adequate and accordant intuitions.

Unfortunately for speculation — but perhaps fortunately for the practical interests of humanity — reason, in the midst of her highest anticipations, finds herself hemmed in by a press of opposite and contradictory conclusions, from which neither her honour nor her safety will permit her to draw back. Nor can she regard these conflicting trains of reasoning with indifference as mere passages at arms, still less can she command peace; for in the subject of the conflict she has a deep interest. There is no other course left open to her than to reflect with herself upon the origin of this disunion in reason — whether it may not arise from a mere misunderstanding. After such an inquiry, arrogant claims would have to be given up on both sides; but the sovereignty of reason over understanding and sense would be based upon a sure foundation.

We shall at present defer this radical inquiry and, in the meantime, consider for a little what side in the controversy we should most willingly take, if we were obliged to become partisans at all. As, in this case, we leave out of sight altogether the logical criterion of truth, and merely consult our own interest in reference to the question, these considerations, although inadequate to settle the question of right in either party, will enable us to comprehend how those who have taken part in the struggle, adopt the one view rather than the other — no special insight into the subject, however, having influenced their choice. They will, at the same time, explain to us many other things by the way — for example, the fiery zeal on the one side and the cold maintenance of their cause on the other; why the one party has met with the warmest approbations, and the other has always been repulsed by irreconcilable prejudices.

There is one thing, however, that determines the proper point of view, from which alone this preliminary inquiry can be instituted and carried on with the proper completeness — and that is the comparison of the principles from which both sides, thesis and antithesis, proceed. My readers would remark in the propositions of the antithesis a complete uniformity in the mode of thought and a perfect unity of principle. Its principle was that of pure empiricism, not only in the explication of the phenomena in the world, but also in the solution of the transcendental ideas, even of that of the universe itself. The affirmations of the thesis, on the contrary, were based, in addition to the empirical mode of explanation employed in the series of phenomena, on intellectual propositions; and its principles were in so far not simple. I shall term the thesis, in view of its essential characteristic, the dogmatism of pure reason.

On the side of Dogmatism, or of the thesis, therefore, in the determination of the cosmological ideas, we find:

1. A practical interest, which must be very dear to every right-thinking man. That the word has a beginning — that the nature of my thinking self is simple, and therefore indestructible — that I am a free agent, and raised above the compulsion of nature and her laws — and, finally, that the entire order of things, which form the world, is dependent upon a Supreme Being, from whom the whole receives unity and connection — these are so many foundation-stones of morality and religion. The antithesis deprives us of all these supports — or, at least, seems so to deprive us.

2. A speculative interest of reason manifests itself on this side. For, if we take the transcendental ideas and employ them in the manner which the thesis directs, we can exhibit completely a priori the entire chain of conditions, and understand the derivation of the conditioned — beginning from the unconditioned.

This the antithesis does not do; and for this reason does not meet with so welcome a reception. For it can give no answer to our question respecting the conditions of its synthesis — except such as must be supplemented by another question, and so on to infinity. According to it, we must rise from a given beginning to one still higher; every part conducts us to a still smaller one; every event is preceded by another event which is its cause; and the conditions of existence rest always upon other and still higher conditions, and find neither end nor basis in some self-subsistent thing as the primal being.

3. This side has also the advantage of popularity; and this constitutes no small part of its claim to favour. The common understanding does not find the least difficulty in the idea of the unconditioned beginning of all synthesis — accustomed, as it is, rather to follow our consequences than to seek for a proper basis for cognition. In the conception of an absolute first, moreover — the possibility of which it does not inquire into — it is highly gratified to find a firmly-established point of departure for its attempts at theory; while in the restless and continuous ascent from the conditioned to the condition, always with one foot in the air, it can find no satisfaction.

On the side of the antithesis, or Empiricism, in the determination of the cosmological ideas:

1. We cannot discover any such practical interest arising from pure principles of reason as morality and religion present. On the contrary, pure empiricism seems to empty them of all their power and influence. If there does not exist a Supreme Being distinct from the world — if the world is without beginning, consequently without a Creator — if our wills are not free, and the soul is divisible and subject to corruption just like matter — the ideas and principles of morality lose all validity and fall with the transcendental ideas which constituted their theoretical support.

2. But empiricism, in compensation, holds out to reason, in its speculative interests, certain important advantages, far exceeding any that the dogmatist can promise us. For, when employed by the empiricist, understanding is always upon its proper ground of investigation — the field of possible experience, the laws of which it can explore, and thus extend its cognition securely and with clear intelligence without being stopped by limits in any direction. Here can it and ought it to find and present to intuition its proper object — not only in itself, but in all its relations; or, if it employ conceptions, upon this ground it can always present the corresponding images in clear and unmistakable intuitions. It is quite unnecessary for it to renounce the guidance of nature, to attach itself to ideas, the objects of which it cannot know; because, as mere intellectual entities, they cannot be presented in any intuition. On the contrary, it is not even permitted to abandon its proper occupation, under the pretence that it has been brought to a conclusion (for it never can be), and to pass into the region of idealizing reason and transcendent conceptions, which it is not required to observe and explore the laws of nature, but merely to think and to imagine — secure from being contradicted by facts, because they have not been called as witnesses, but passed by, or perhaps subordinated to the so-called higher interests and considerations of pure reason.

Hence the empiricist will never allow himself to accept any epoch of nature for the first — the absolutely primal state; he will not believe that there can be limits to his outlook into her wide domains, nor pass from the objects of nature, which he can satisfactorily explain by means of observation and mathematical thought — which he can determine synthetically in intuition, to those which neither sense nor imagination can ever present in concreto; he will not concede the existence of a faculty in nature, operating independently of the laws of nature — a concession which would introduce uncertainty into the procedure of the understanding, which is guided by necessary laws to the observation of phenomena; nor, finally, will he permit himself to seek a cause beyond nature, inasmuch as we know nothing but it, and from it alone receive an objective basis for all our conceptions and instruction in the unvarying laws of things.

In truth, if the empirical philosopher had no other purpose in the establishment of his antithesis than to check the presumption of a reason which mistakes its true destination, which boasts of its insight and its knowledge, just where all insight and knowledge cease to exist, and regards that which is valid only in

relation to a practical interest, as an advancement of the speculative interests of the mind (in order, when it is convenient for itself, to break the thread of our physical investigations, and, under pretence of extending our cognition, connect them with transcendental ideas, by means of which we really know only that we know nothing) — if, I say, the empiricist rested satisfied with this benefit, the principle advanced by him would be a maxim recommending moderation in the pretensions of reason and modesty in its affirmations, and at the same time would direct us to the right mode of extending the province of the understanding, by the help of the only true teacher, experience. In obedience to this advice, intellectual hypotheses and faith would not be called in aid of our practical interests; nor should we introduce them under the pompous titles of science and insight. For speculative cognition cannot find an objective basis any other where than in experience; and, when we overstep its limits our synthesis, which requires ever new cognitions independent of experience, has no substratum of intuition upon which to build.

But if — as often happens — empiricism, in relation to ideas, becomes itself dogmatic and boldly denies that which is above the sphere of its phenomenal cognition, it falls itself into the error of intemperance — an error which is here all the more reprehensible, as thereby the practical interest of reason receives an irreparable injury.

And this constitutes the opposition between Epicureanism* and Platonism.

[Footnote: It is, however, still a matter of doubt whether Epicurus ever propounded these principles as directions for the objective employment of the understanding. If, indeed, they were nothing more than maxims for the speculative exercise of reason, he gives evidence therein a more genuine philosophic spirit than any of the philosophers of antiquity. That, in the explanation of phenomena, we must proceed as if the field of inquiry had neither limits in space nor commencement in time; that we must be satisfied with the teaching of experience in reference to the material of which the world is posed; that we must not look for any other mode of the origination of events than that which is determined by the unalterable laws of nature; and finally, that we not employ the hypothesis of a cause distinct from the world to account for a phenomenon or for the world itself — are principles for the extension of speculative philosophy, and the discovery of the true sources of the principles of morals, which, however little conformed to in the present day, are undoubtedly correct. At the same time, any one desirous of ignoring, in mere speculation, these dogmatical propositions, need not for that reason be accused of denying them.]

Both Epicurus and Plato assert more in their systems than they know. The former encourages and advances science — although to the prejudice of the practical; the latter presents us with excellent principles for the investigation of the practical, but, in relation to everything regarding which we can attain to speculative cognition, permits reason to append idealistic explanations of natural phenomena, to the great injury of physical investigation.

3. In regard to the third motive for the preliminary choice of a party in this war of assertions, it seems very extraordinary that empiricism should be utterly unpopular. We should be inclined to believe that the common understanding would receive it with pleasure — promising as it does to satisfy it without passing the bounds of experience and its connected order; while transcendental dogmatism obliges it to rise to conceptions which far surpass the intelligence and ability of the most practised thinkers. But in this, in truth, is to be found its real motive. For the common understanding thus finds itself in a situation where not even the most learned can have the advantage of it. If it understands little or nothing about these transcendental conceptions, no one can boast of understanding any more; and although it may not express itself in so scholastically correct a manner as others, it can busy itself with reasoning and arguments without end, wandering among mere ideas, about which one can always be very eloquent, because we know nothing about them; while, in the observation and investigation of nature, it would be forced to remain dumb and to confess its utter ignorance. Thus indolence and vanity form of themselves strong recommendations of these principles. Besides, although it is a hard thing for a philosopher to assume a principle, of which he can give to himself no reasonable account, and still more to employ conceptions, the objective reality of which cannot be established, nothing is more usual with the common understanding. It wants something which will allow it to go to work with confidence. The difficulty of

even comprehending a supposition does not disquiet it, because — not knowing what comprehending means — it never even thinks of the supposition it may be adopting as a principle; and regards as known that with which it has become familiar from constant use. And, at last, all speculative interests disappear before the practical interests which it holds dear; and it fancies that it understands and knows what its necessities and hopes incite it to assume or to believe. Thus the empiricism of transcendentally idealizing reason is robbed of all popularity; and, however prejudicial it may be to the highest practical principles, there is no fear that it will ever pass the limits of the schools, or acquire any favour or influence in society or with the multitude.

Human reason is by nature architectonic. That is to say, it regards all cognitions as parts of a possible system, and hence accepts only such principles as at least do not incapacitate a cognition to which we may have attained from being placed along with others in a general system. But the propositions of the antithesis are of a character which renders the completion of an edifice of cognitions impossible. According to these, beyond one state or epoch of the world there is always to be found one more ancient; in every part always other parts themselves divisible; preceding every event another, the origin of which must itself be sought still higher; and everything in existence is conditioned, and still not dependent on an unconditioned and primal existence. As, therefore, the antithesis will not concede the existence of a first beginning which might be available as a foundation, a complete edifice of cognition, in the presence of such hypothesis, is utterly impossible. Thus the architectonic interest of reason, which requires a unity — not empirical, but a priori and rational — forms a natural recommendation for the assertions of the thesis in our antinomy.

But if any one could free himself entirely from all considerations of interest, and weigh without partiality the assertions of reason, attending only to their content, irrespective of the consequences which follow from them; such a person, on the supposition that he knew no other way out of the confusion than to settle the truth of one or other of the conflicting doctrines, would live in a state of continual hesitation. Today, he would feel convinced that the human will is free; to-morrow, considering the indissoluble chain of nature, he would look on freedom as a mere illusion and declare nature to be all-in-all. But, if he were called to action, the play of the merely speculative reason would disappear like the shapes of a dream, and practical interest would dictate his choice of principles. But, as it well befits a reflective and inquiring being to devote certain periods of time to the examination of its own reason — to divest itself of all partiality, and frankly to communicate its observations for the judgement and opinion of others; so no one can be blamed for, much less prevented from, placing both parties on their trial, with permission to end themselves, free from intimidation, before intimidation, before a sworn jury of equal condition with themselves — the condition of weak and fallible men.

SECTION IV. Of the necessity imposed upon Pure Reason of presenting a Solution of its Transcendental Problems.

To avow an ability to solve all problems and to answer all questions would be a profession certain to convict any philosopher of extravagant boasting and self-conceit, and at once to destroy the confidence that might otherwise have been reposed in him. There are, however, sciences so constituted that every question arising within their sphere must necessarily be capable of receiving an answer from the knowledge already possessed, for the answer must be received from the same sources whence the question arose. In such sciences it is not allowable to excuse ourselves on the plea of necessary and unavoidable ignorance; a solution is absolutely requisite. The rule of right and wrong must help us to the knowledge of what is right or wrong in all possible cases; otherwise, the idea of obligation or duty would be utterly null, for we cannot have any obligation to that which we cannot know. On the other hand, in our investigations of the phenomena of nature, much must remain uncertain, and many questions continue insoluble; because what we know of nature is far from being sufficient to explain all the phenomena that are presented to our observation. Now the question is: Whether there is in transcendental philosophy any

question, relating to an object presented to pure reason, which is unanswerable by this reason; and whether we must regard the subject of the question as quite uncertain, so far as our knowledge extends, and must give it a place among those subjects, of which we have just so much conception as is sufficient to enable us to raise a question — faculty or materials failing us, however, when we attempt an answer.

Now I maintain that, among all speculative cognition, the peculiarity of transcendental philosophy is that there is no question, relating to an object presented to pure reason, which is insoluble by this reason; and that the profession of unavoidable ignorance — the problem being alleged to be beyond the reach of our faculties — cannot free us from the obligation to present a complete and satisfactory answer. For the very conception which enables us to raise the question must give us the power of answering it; inasmuch as the object, as in the case of right and wrong, is not to be discovered out of the conception.

But, in transcendental philosophy, it is only the cosmological questions to which we can demand a satisfactory answer in relation to the constitution of their object; and the philosopher is not permitted to avail himself of the pretext of necessary ignorance and impenetrable obscurity. These questions relate solely to the cosmological ideas. For the object must be given in experience, and the question relates to the adequateness of the object to an idea. If the object is transcendental and therefore itself unknown; if the question, for example, is whether the object — the something, the phenomenon of which (internal — in ourselves) is thought — that is to say, the soul, is in itself a simple being; or whether there is a cause of all things, which is absolutely necessary — in such cases we are seeking for our idea an object, of which we may confess that it is unknown to us, though we must not on that account assert that it is impossible.* The cosmological ideas alone posses the peculiarity that we can presuppose the object of them and the empirical synthesis requisite for the conception of that object to be given; and the question, which arises from these ideas, relates merely to the progress of this synthesis, in so far as it must contain absolute totality — which, however, is not empirical, as it cannot be given in any experience. Now, as the question here is solely in regard to a thing as the object of a possible experience and not as a thing in itself, the answer to the transcendental cosmological question need not be sought out of the idea, for the question does not regard an object in itself. The question in relation to a possible experience is not, “What can be given in an experience in concreto” but “what is contained in the idea, to which the empirical synthesis must approximate.” The question must therefore be capable of solution from the idea alone. For the idea is a creation of reason itself, which therefore cannot disclaim the obligation to answer or refer us to the unknown object.

[Footnote: The question, “What is the constitution of a transcendental object?” is unanswerable — we are unable to say what it is; but we can perceive that the question itself is nothing; because it does not relate to any object that can be presented to us. For this reason, we must consider all the questions raised in transcendental psychology as answerable and as really answered; for they relate to the transcendental subject of all internal phenomena, which is not itself phenomenon and consequently not given as an object, in which, moreover, none of the categories — and it is to them that the question is properly directed — find any conditions of its application. Here, therefore, is a case where no answer is the only proper answer. For a question regarding the constitution of a something which cannot be cogitated by any determined predicate, being completely beyond the sphere of objects and experience, is perfectly null and void.]

It is not so extraordinary, as it at first sight appears, that a science should demand and expect satisfactory answers to all the questions that may arise within its own sphere (questiones domesticae), although, up to a certain time, these answers may not have been discovered. There are, in addition to transcendental philosophy, only two pure sciences of reason; the one with a speculative, the other with a practical content — pure mathematics and pure ethics. Has any one ever heard it alleged that, from our complete and necessary ignorance of the conditions, it is uncertain what exact relation the diameter of a circle bears to the circle in rational or irrational numbers? By the former the sum cannot be given exactly, by the latter only approximately; and therefore we decide that the impossibility of a solution of the question is evident. Lambert presented us with a demonstration of this. In the general principles of morals

there can be nothing uncertain, for the propositions are either utterly without meaning, or must originate solely in our rational conceptions. On the other hand, there must be in physical science an infinite number of conjectures, which can never become certainties; because the phenomena of nature are not given as objects dependent on our conceptions. The key to the solution of such questions cannot, therefore, be found in our conceptions, or in pure thought, but must lie without us and for that reason is in many cases not to be discovered; and consequently a satisfactory explanation cannot be expected. The questions of transcendental analytic, which relate to the deduction of our pure cognition, are not to be regarded as of the same kind as those mentioned above; for we are not at present treating of the certainty of judgements in relation to the origin of our conceptions, but only of that certainty in relation to objects.

We cannot, therefore, escape the responsibility of at least a critical solution of the questions of reason, by complaints of the limited nature of our faculties, and the seemingly humble confession that it is beyond the power of our reason to decide, whether the world has existed from all eternity or had a beginning — whether it is infinitely extended, or enclosed within certain limits — whether anything in the world is simple, or whether everything must be capable of infinite divisibility — whether freedom can originate phenomena, or whether everything is absolutely dependent on the laws and order of nature — and, finally, whether there exists a being that is completely unconditioned and necessary, or whether the existence of everything is conditioned and consequently dependent on something external to itself, and therefore in its own nature contingent. For all these questions relate to an object, which can be given nowhere else than in thought. This object is the absolutely unconditioned totality of the synthesis of phenomena. If the conceptions in our minds do not assist us to some certain result in regard to these problems, we must not defend ourselves on the plea that the object itself remains hidden from and unknown to us. For no such thing or object can be given — it is not to be found out of the idea in our minds. We must seek the cause of our failure in our idea itself, which is an insoluble problem and in regard to which we obstinately assume that there exists a real object corresponding and adequate to it. A clear explanation of the dialectic which lies in our conception, will very soon enable us to come to a satisfactory decision in regard to such a question.

The pretext that we are unable to arrive at certainty in regard to these problems may be met with this question, which requires at least a plain answer: “From what source do the ideas originate, the solution of which involves you in such difficulties? Are you seeking for an explanation of certain phenomena; and do you expect these ideas to give you the principles or the rules of this explanation?” Let it be granted, that all nature was laid open before you; that nothing was hid from your senses and your consciousness. Still, you could not cognize in concreto the object of your ideas in any experience. For what is demanded is not only this full and complete intuition, but also a complete synthesis and the consciousness of its absolute totality; and this is not possible by means of any empirical cognition. It follows that your question — your idea — is by no means necessary for the explanation of any phenomenon; and the idea cannot have been in any sense given by the object itself. For such an object can never be presented to us, because it cannot be given by any possible experience. Whatever perceptions you may attain to, you are still surrounded by conditions — in space, or in time — and you cannot discover anything unconditioned; nor can you decide whether this unconditioned is to be placed in an absolute beginning of the synthesis, or in an absolute totality of the series without beginning. A whole, in the empirical signification of the term, is always merely comparative. The absolute whole of quantity (the universe), of division, of derivation, of the condition of existence, with the question — whether it is to be produced by finite or infinite synthesis, no possible experience can instruct us concerning. You will not, for example, be able to explain the phenomena of a body in the least degree better, whether you believe it to consist of simple, or of composite parts; for a simple phenomenon — and just as little an infinite series of composition — can never be presented to your perception. Phenomena require and admit of explanation, only in so far as the conditions of that explanation are given in perception; but the sum total of that which is given in

phenomena, considered as an absolute whole, is itself a perception — and we cannot therefore seek for explanations of this whole beyond itself, in other perceptions. The explanation of this whole is the proper object of the transcendental problems of pure reason.

Although, therefore, the solution of these problems is unattainable through experience, we must not permit ourselves to say that it is uncertain how the object of our inquiries is constituted. For the object is in our own mind and cannot be discovered in experience; and we have only to take care that our thoughts are consistent with each other, and to avoid falling into the amphiboly of regarding our idea as a representation of an object empirically given, and therefore to be cognized according to the laws of experience. A dogmatical solution is therefore not only unsatisfactory but impossible. The critical solution, which may be a perfectly certain one, does not consider the question objectively, but proceeds by inquiring into the basis of the cognition upon which the question rests.

SECTION V. Sceptical Exposition of the Cosmological Problems presented in the four Transcendental Ideas.

We should be quite willing to desist from the demand of a dogmatical answer to our questions, if we understood beforehand that, be the answer what it may, it would only serve to increase our ignorance, to throw us from one incomprehensibility into another, from one obscurity into another still greater, and perhaps lead us into irreconcilable contradictions. If a dogmatical affirmative or negative answer is demanded, is it at all prudent to set aside the probable grounds of a solution which lie before us and to take into consideration what advantage we shall gain, if the answer is to favour the one side or the other? If it happens that in both cases the answer is mere nonsense, we have in this an irresistible summons to institute a critical investigation of the question, for the purpose of discovering whether it is based on a groundless presupposition and relates to an idea, the falsity of which would be more easily exposed in its application and consequences than in the mere representation of its content. This is the great utility of the sceptical mode of treating the questions addressed by pure reason to itself. By this method we easily rid ourselves of the confusions of dogmatism, and establish in its place a temperate criticism, which, as a genuine cathartic, will successfully remove the presumptuous notions of philosophy and their consequence — the vain pretension to universal science.

If, then, I could understand the nature of a cosmological idea and perceive, before I entered on the discussion of the subject at all, that, whatever side of the question regarding the unconditioned of the regressive synthesis of phenomena it favoured — it must either be too great or too small for every conception of the understanding — I would be able to comprehend how the idea, which relates to an object of experience — an experience which must be adequate to and in accordance with a possible conception of the understanding — must be completely void and without significance, inasmuch as its object is inadequate, consider it as we may. And this is actually the case with all cosmological conceptions, which, for the reason above mentioned, involve reason, so long as it remains attached to them, in an unavoidable antinomy. For suppose:

First, that the world has no beginning — in this case it is too large for our conception; for this conception, which consists in a successive regress, cannot overtake the whole eternity that has elapsed. Grant that it has a beginning, it is then too small for the conception of the understanding. For, as a beginning presupposes a time preceding, it cannot be unconditioned; and the law of the empirical employment of the understanding imposes the necessity of looking for a higher condition of time; and the world is, therefore, evidently too small for this law.

The same is the case with the double answer to the question regarding the extent, in space, of the world. For, if it is infinite and unlimited, it must be too large for every possible empirical conception. If it is finite and limited, we have a right to ask: “What determines these limits?” Void space is not a self-subsistent correlate of things, and cannot be a final condition — and still less an empirical condition, forming a part of a possible experience. For how can we have any experience or perception of an

absolute void? But the absolute totality of the empirical synthesis requires that the unconditioned be an empirical conception. Consequently, a finite world is too small for our conception.

Secondly, if every phenomenon (matter) in space consists of an infinite number of parts, the regress of the division is always too great for our conception; and if the division of space must cease with some member of the division (the simple), it is too small for the idea of the unconditioned. For the member at which we have discontinued our division still admits a regress to many more parts contained in the object.

Thirdly, suppose that every event in the world happens in accordance with the laws of nature; the causality of a cause must itself be an event and necessitates a regress to a still higher cause, and consequently the unceasing prolongation of the series of conditions a parte priori. Operative nature is therefore too large for every conception we can form in the synthesis of cosmical events.

If we admit the existence of spontaneously produced events, that is, of free agency, we are driven, in our search for sufficient reasons, on an unavoidable law of nature and are compelled to appeal to the empirical law of causality, and we find that any such totality of connection in our synthesis is too small for our necessary empirical conception.

Fourthly, if we assume the existence of an absolutely necessary being — whether it be the world or something in the world, or the cause of the world — we must place it in a time at an infinite distance from any given moment; for, otherwise, it must be dependent on some other and higher existence. Such an existence is, in this case, too large for our empirical conception, and unattainable by the continued regress of any synthesis.

But if we believe that everything in the world — be it condition or conditioned — is contingent; every given existence is too small for our conception. For in this case we are compelled to seek for some other existence upon which the former depends.

We have said that in all these cases the cosmological idea is either too great or too small for the empirical regress in a synthesis, and consequently for every possible conception of the understanding. Why did we not express ourselves in a manner exactly the reverse of this and, instead of accusing the cosmological idea of over stepping or of falling short of its true aim, possible experience, say that, in the first case, the empirical conception is always too small for the idea, and in the second too great, and thus attach the blame of these contradictions to the empirical regress? The reason is this. Possible experience can alone give reality to our conceptions; without it a conception is merely an idea, without truth or relation to an object. Hence a possible empirical conception must be the standard by which we are to judge whether an idea is anything more than an idea and fiction of thought, or whether it relates to an object in the world. If we say of a thing that in relation to some other thing it is too large or too small, the former is considered as existing for the sake of the latter, and requiring to be adapted to it. Among the trivial subjects of discussion in the old schools of dialectics was this question: "If a ball cannot pass through a hole, shall we say that the ball is too large or the hole too small?" In this case it is indifferent what expression we employ; for we do not know which exists for the sake of the other. On the other hand, we cannot say: "The man is too long for his coat"; but: "The coat is too short for the man."

We are thus led to the well-founded suspicion that the cosmological ideas, and all the conflicting sophistical assertions connected with them, are based upon a false and fictitious conception of the mode in which the object of these ideas is presented to us; and this suspicion will probably direct us how to expose the illusion that has so long led us astray from the truth.

SECTION VI. Transcendental Idealism as the Key to theSolution of Pure Cosmological Dialectic.

In the transcendental aesthetic we proved that everything intuited in space and time, all objects of a possible experience, are nothing but phenomena, that is, mere representations; and that these, as presented to us — as extended bodies, or as series of changes — have no self-subsistent existence apart from human thought. This doctrine I call Transcendental Idealism.* The realist in the transcendental sense regards

these modifications of our sensibility, these mere representations, as things subsisting in themselves.

[Footnote: I have elsewhere termed this theory formal idealism, to distinguish it from material idealism, which doubts or denies the existence of external things. To avoid ambiguity, it seems advisable in many cases to employ this term instead of that mentioned in the text.]

It would be unjust to accuse us of holding the long-decried theory of empirical idealism, which, while admitting the reality of space, denies, or at least doubts, the existence of bodies extended in it, and thus leaves us without a sufficient criterion of reality and illusion. The supporters of this theory find no difficulty in admitting the reality of the phenomena of the internal sense in time; nay, they go the length of maintaining that this internal experience is of itself a sufficient proof of the real existence of its object as a thing in itself.

Transcendental idealism allows that the objects of external intuition — as intuited in space, and all changes in time — as represented by the internal sense, are real. For, as space is the form of that intuition which we call external, and, without objects in space, no empirical representation could be given us, we can and ought to regard extended bodies in it as real. The case is the same with representations in time. But time and space, with all phenomena therein, are not in themselves things. They are nothing but representations and cannot exist out of and apart from the mind. Nay, the sensuous internal intuition of the mind (as the object of consciousness), the determination of which is represented by the succession of different states in time, is not the real, proper self, as it exists in itself — not the transcendental subject — but only a phenomenon, which is presented to the sensibility of this, to us, unknown being. This internal phenomenon cannot be admitted to be a self-subsisting thing; for its condition is time, and time cannot be the condition of a thing in itself. But the empirical truth of phenomena in space and time is guaranteed beyond the possibility of doubt, and sufficiently distinguished from the illusion of dreams or fancy — although both have a proper and thorough connection in an experience according to empirical laws. The objects of experience then are not things in themselves, but are given only in experience, and have no existence apart from and independently of experience. That there may be inhabitants in the moon, although no one has ever observed them, must certainly be admitted; but this assertion means only, that we may in the possible progress of experience discover them at some future time. For that which stands in connection with a perception according to the laws of the progress of experience is real. They are therefore really existent, if they stand in empirical connection with my actual or real consciousness, although they are not in themselves real, that is, apart from the progress of experience.

There is nothing actually given — we can be conscious of nothing as real, except a perception and the empirical progression from it to other possible perceptions. For phenomena, as mere representations, are real only in perception; and perception is, in fact, nothing but the reality of an empirical representation, that is, a phenomenon. To call a phenomenon a real thing prior to perception means either that we must meet with this phenomenon in the progress of experience, or it means nothing at all. For I can say only of a thing in itself that it exists without relation to the senses and experience. But we are speaking here merely of phenomena in space and time, both of which are determinations of sensibility, and not of things in themselves. It follows that phenomena are not things in themselves, but are mere representations, which if not given in us — in perception — are non-existent.

The faculty of sensuous intuition is properly a receptivity — a capacity of being affected in a certain manner by representations, the relation of which to each other is a pure intuition of space and time — the pure forms of sensibility. These representations, in so far as they are connected and determinable in this relation (in space and time) according to laws of the unity of experience, are called objects. The non-sensuous cause of these representations is completely unknown to us and hence cannot be intuited as an object. For such an object could not be represented either in space or in time; and without these conditions intuition or representation is impossible. We may, at the same time, term the non-sensuous

cause of phenomena the transcendental object — but merely as a mental correlate to sensibility, considered as a receptivity. To this transcendental object we may attribute the whole connection and extent of our possible perceptions, and say that it is given and exists in itself prior to all experience. But the phenomena, corresponding to it, are not given as things in themselves, but in experience alone. For they are mere representations, receiving from perceptions alone significance and relation to a real object, under the condition that this or that perception — indicating an object — is in complete connection with all others in accordance with the rules of the unity of experience. Thus we can say: "The things that really existed in past time are given in the transcendental object of experience." But these are to me real objects, only in so far as I can represent to my own mind, that a regressive series of possible perceptions — following the indications of history, or the footsteps of cause and effect — in accordance with empirical laws — that, in one word, the course of the world conducts us to an elapsed series of time as the condition of the present time. This series in past time is represented as real, not in itself, but only in connection with a possible experience. Thus, when I say that certain events occurred in past time, I merely assert the possibility of prolonging the chain of experience, from the present perception, upwards to the conditions that determine it according to time.

If I represent to myself all objects existing in all space and time, I do not thereby place these in space and time prior to all experience; on the contrary, such a representation is nothing more than the notion of a possible experience, in its absolute completeness. In experience alone are those objects, which are nothing but representations, given. But, when I say they existed prior to my experience, this means only that I must begin with the perception present to me and follow the track indicated until I discover them in some part or region of experience. The cause of the empirical condition of this progression — and consequently at what member therein I must stop, and at what point in the regress I am to find this member — is transcendental, and hence necessarily incognizable. But with this we have not to do; our concern is only with the law of progression in experience, in which objects, that is, phenomena, are given. It is a matter of indifference, whether I say, "I may in the progress of experience discover stars, at a hundred times greater distance than the most distant of those now visible," or, "Stars at this distance may be met in space, although no one has, or ever will discover them." For, if they are given as things in themselves, without any relation to possible experience, they are for me non-existent, consequently, are not objects, for they are not contained in the regressive series of experience. But, if these phenomena must be employed in the construction or support of the cosmological idea of an absolute whole, and when we are discussing a question that oversteps the limits of possible experience, the proper distinction of the different theories of the reality of sensuous objects is of great importance, in order to avoid the illusion which must necessarily arise from the misinterpretation of our empirical conceptions.

SECTION VII. Critical Solution of the Cosmological Problem.

The antinomy of pure reason is based upon the following dialectical argument: "If that which is conditioned is given, the whole series of its conditions is also given; but sensuous objects are given as conditioned; consequently..." This syllogism, the major of which seems so natural and evident, introduces as many cosmological ideas as there are different kinds of conditions in the synthesis of phenomena, in so far as these conditions constitute a series. These ideas require absolute totality in the series, and thus place reason in inextricable embarrassment. Before proceeding to expose the fallacy in this dialectical argument, it will be necessary to have a correct understanding of certain conceptions that appear in it.

In the first place, the following proposition is evident, and indubitably certain: "If the conditioned is given, a regress in the series of all its conditions is thereby imperatively required." For the very conception of a conditioned is a conception of something related to a condition, and, if this condition is itself conditioned, to another condition — and so on through all the members of the series. This proposition is, therefore, analytical and has nothing to fear from transcendental criticism. It is a logical postulate of reason: to pursue, as far as possible, the connection of a conception with its conditions.

If, in the second place, both the conditioned and the condition are things in themselves, and if the former is given, not only is the regress to the latter requisite, but the latter is really given with the former. Now, as this is true of all the members of the series, the entire series of conditions, and with them the unconditioned, is at the same time given in the very fact of the conditioned, the existence of which is possible only in and through that series, being given. In this case, the synthesis of the conditioned with its condition, is a synthesis of the understanding merely, which represents things as they are, without regarding whether and how we can cognize them. But if I have to do with phenomena, which, in their character of mere representations, are not given, if I do not attain to a cognition of them (in other words, to themselves, for they are nothing more than empirical cognitions), I am not entitled to say: "If the conditioned is given, all its conditions (as phenomena) are also given." I cannot, therefore, from the fact of a conditioned being given, infer the absolute totality of the series of its conditions. For phenomena are nothing but an empirical synthesis in apprehension or perception, and are therefore given only in it. Now, in speaking of phenomena it does not follow that, if the conditioned is given, the synthesis which constitutes its empirical condition is also thereby given and presupposed; such a synthesis can be established only by an actual regress in the series of conditions. But we are entitled to say in this case that a regress to the conditions of a conditioned, in other words, that a continuous empirical synthesis is enjoined; that, if the conditions are not given, they are at least required; and that we are certain to discover the conditions in this regress.

We can now see that the major, in the above cosmological syllogism, takes the conditioned in the transcendental signification which it has in the pure category, while the minor speaks of it in the empirical signification which it has in the category as applied to phenomena. There is, therefore, a dialectical fallacy in the syllogism — a sophisma figurae dictionis. But this fallacy is not a consciously devised one, but a perfectly natural illusion of the common reason of man. For, when a thing is given as conditioned, we presuppose in the major its conditions and their series, unperceived, as it were, and unseen; because this is nothing more than the logical requirement of complete and satisfactory premisses for a given conclusion. In this case, time is altogether left out in the connection of the conditioned with the condition; they are supposed to be given in themselves, and contemporaneously. It is, moreover, just as natural to regard phenomena (in the minor) as things in themselves and as objects presented to the pure understanding, as in the major, in which complete abstraction was made of all conditions of intuition. But it is under these conditions alone that objects are given. Now we overlooked a remarkable distinction between the conceptions. The synthesis of the conditioned with its condition, and the complete series of the latter (in the major) are not limited by time, and do not contain the conception of succession. On the contrary, the empirical synthesis and the series of conditions in the phenomenal world — subsumed in the minor — are necessarily successive and given in time alone. It follows that I cannot presuppose in the minor, as I did in the major, the absolute totality of the synthesis and of the series therein represented; for in the major all the members of the series are given as things in themselves — without any limitations or conditions of time, while in the minor they are possible only in and through a successive regress, which cannot exist, except it be actually carried into execution in the world of phenomena.

After this proof of the viciousness of the argument commonly employed in maintaining cosmological assertions, both parties may now be justly dismissed, as advancing claims without grounds or title. But the process has not been ended by convincing them that one or both were in the wrong and had maintained an assertion which was without valid grounds of proof. Nothing seems to be clearer than that, if one maintains: "The world has a beginning," and another: "The world has no beginning," one of the two must be right. But it is likewise clear that, if the evidence on both sides is equal, it is impossible to discover on what side the truth lies; and the controversy continues, although the parties have been recommended to peace before the tribunal of reason. There remains, then, no other means of settling the question than to convince the parties, who refute each other with such conclusiveness and ability, that they are disputing

about nothing, and that a transcendental illusion has been mocking them with visions of reality where there is none. The mode of adjusting a dispute which cannot be decided upon its own merits, we shall now proceed to lay before our readers.

Zeno of Elea, a subtle dialectician, was severely reprimanded by Plato as a sophist, who, merely from the base motive of exhibiting his skill in discussion, maintained and subverted the same proposition by arguments as powerful and convincing on the one side as on the other. He maintained, for example, that God (who was probably nothing more, in his view, than the world) is neither finite nor infinite, neither in motion nor in rest, neither similar nor dissimilar to any other thing. It seemed to those philosophers who criticized his mode of discussion that his purpose was to deny completely both of two self-contradictory propositions — which is absurd. But I cannot believe that there is any justice in this accusation. The first of these propositions I shall presently consider in a more detailed manner. With regard to the others, if by the word of God he understood merely the Universe, his meaning must have been — that it cannot be permanently present in one place — that is, at rest — nor be capable of changing its place — that is, of moving — because all places are in the universe, and the universe itself is, therefore, in no place. Again, if the universe contains in itself everything that exists, it cannot be similar or dissimilar to any other thing, because there is, in fact, no other thing with which it can be compared. If two opposite judgements presuppose a contingent impossible, or arbitrary condition, both — in spite of their opposition (which is, however, not properly or really a contradiction) — fall away; because the condition, which ensured the validity of both, has itself disappeared.

If we say: “Everybody has either a good or a bad smell,” we have omitted a third possible judgement — it has no smell at all; and thus both conflicting statements may be false. If we say: “It is either good-smelling or not good-smelling (vel suaveolens vel non-suaveolens),” both judgements are contradictorily opposed; and the contradictory opposite of the former judgement — some bodies are not good-smelling — embraces also those bodies which have no smell at all. In the preceding pair of opposed judgements (per disparata), the contingent condition of the conception of body (smell) attached to both conflicting statements, instead of having been omitted in the latter, which is consequently not the contradictory opposite of the former.

If, accordingly, we say: “The world is either infinite in extension, or it is not infinite (non est infinitus)”; and if the former proposition is false, its contradictory opposite — the world is not infinite — must be true. And thus I should deny the existence of an infinite, without, however affirming the existence of a finite world. But if we construct our proposition thus: “The world is either infinite or finite (non-infinite),” both statements may be false. For, in this case, we consider the world as per se determined in regard to quantity, and while, in the one judgement, we deny its infinite and consequently, perhaps, its independent existence; in the other, we append to the world, regarded as a thing in itself, a certain determination — that of finitude; and the latter may be false as well as the former, if the world is not given as a thing in itself, and thus neither as finite nor as infinite in quantity. This kind of opposition I may be allowed to term dialectical; that of contradictories may be called analytical opposition. Thus then, of two dialectically opposed judgements both may be false, from the fact, that the one is not a mere contradictory of the other, but actually enounces more than is requisite for a full and complete contradiction.

When we regard the two propositions— “The world is infinite in quantity,” and, “The world is finite in quantity,” as contradictory opposites, we are assuming that the world — the complete series of phenomena — is a thing in itself. For it remains as a permanent quantity, whether I deny the infinite or the finite regress in the series of its phenomena. But if we dismiss this assumption — this transcendental illusion — and deny that it is a thing in itself, the contradictory opposition is metamorphosed into a merely dialectical one; and the world, as not existing in itself — independently of the regressive series of my representations — exists in like manner neither as a whole which is infinite nor as a whole which is

finite in itself. The universe exists for me only in the empirical regress of the series of phenomena and not per se. If, then, it is always conditioned, it is never completely or as a whole; and it is, therefore, not an unconditioned whole and does not exist as such, either with an infinite, or with a finite quantity.

What we have here said of the first cosmological idea — that of the absolute totality of quantity in phenomena — applies also to the others. The series of conditions is discoverable only in the regressive synthesis itself, and not in the phenomenon considered as a thing in itself — given prior to all regress. Hence I am compelled to say: "The aggregate of parts in a given phenomenon is in itself neither finite nor infinite; and these parts are given only in the regressive synthesis of decomposition — a synthesis which is never given in absolute completeness, either as finite, or as infinite." The same is the case with the series of subordinated causes, or of the conditioned up to the unconditioned and necessary existence, which can never be regarded as in itself, ind in its totality, either as finite or as infinite; because, as a series of subordinate representations, it subsists only in the dynamical regress and cannot be regarded as existing previously to this regress, or as a self-subsistent series of things.

Thus the antinomy of pure reason in its cosmological ideas disappears. For the above demonstration has established the fact that it is merely the product of a dialectical and illusory opposition, which arises from the application of the idea of absolute totality — admissible only as a condition of things in themselves — to phenomena, which exist only in our representations, and — when constituting a series — in a successive regress. This antinomy of reason may, however, be really profitable to our speculative interests, not in the way of contributing any dogmatical addition, but as presenting to us another material support in our critical investigations. For it furnishes us with an indirect proof of the transcendental ideality of phenomena, if our minds were not completely satisfied with the direct proof set forth in the Trancendental Aesthetic. The proof would proceed in the following dilemma. If the world is a whole existing in itself, it must be either finite or infinite. But it is neither finite nor infinite — as has been shown, on the one side, by the thesis, on the other, by the antithesis. Therefore the world — the content of all phenomena — is not a whole existing in itself. It follows that phenomena are nothing, apart from our representations. And this is what we mean by transcendental ideality.

This remark is of some importance. It enables us to see that the proofs of the fourfold antinomy are not mere sophistries — are not fallacious, but grounded on the nature of reason, and valid — under the supposition that phenomena are things in themselves. The opposition of the judgements which follow makes it evident that a fallacy lay in the initial supposition, and thus helps us to discover the true constitution of objects of sense. This transcendental dialectic does not favour scepticism, although it presents us with a triumphant demonstration of the advantages of the sceptical method, the great utility of which is apparent in the antinomy, where the arguments of reason were allowed to confront each other in undiminished force. And although the result of these conflicts of reason is not what we expected — although we have obtained no positive dogmatical addition to metaphysical science — we have still reaped a great advantage in the correction of our judgements on these subjects of thought.

SECTION VIII. Regulative Principle of Pure Reason in relation to the Cosmological Ideas.

The cosmological principle of totality could not give us any certain knowledge in regard to the maximum in the series of conditions in the world of sense, considered as a thing in itself. The actual regress in the series is the only means of approaching this maximum. This principle of pure reason, therefore, may still be considered as valid — not as an axiom enabling us to cogitate totality in the object as actual, but as a problem for the understanding, which requires it to institute and to continue, in conformity with the idea of totality in the mind, the regress in the series of the conditions of a given conditioned. For in the world of sense, that is, in space and time, every condition which we discover in our investigation of phenomena is itself conditioned; because sensuous objects are not things in themselves (in which case an absolutely unconditioned might be reached in the progress of cognition), but are merely empirical representations the conditions of which must always be found in intuition. The

principle of reason is therefore properly a mere rule — prescribing a regress in the series of conditions for given phenomena, and prohibiting any pause or rest on an absolutely unconditioned. It is, therefore, not a principle of the possibility of experience or of the empirical cognition of sensuous objects — consequently not a principle of the understanding; for every experience is confined within certain proper limits determined by the given intuition. Still less is it a constitutive principle of reason authorizing us to extend our conception of the sensuous world beyond all possible experience. It is merely a principle for the enlargement and extension of experience as far as is possible for human faculties. It forbids us to consider any empirical limits as absolute. It is, hence, a principle of reason, which, as a rule, dictates how we ought to proceed in our empirical regress, but is unable to anticipate or indicate prior to the empirical regress what is given in the object itself. I have termed it for this reason a regulative principle of reason; while the principle of the absolute totality of the series of conditions, as existing in itself and given in the object, is a constitutive cosmological principle. This distinction will at once demonstrate the falsehood of the constitutive principle, and prevent us from attributing (by a transcendental subreptio) objective reality to an idea, which is valid only as a rule.

In order to understand the proper meaning of this rule of pure reason, we must notice first that it cannot tell us what the object is, but only how the empirical regress is to be proceeded with in order to attain to the complete conception of the object. If it gave us any information in respect to the former statement, it would be a constitutive principle — a principle impossible from the nature of pure reason. It will not therefore enable us to establish any such conclusions as: "The series of conditions for a given conditioned is in itself finite," or, "It is infinite." For, in this case, we should be cogitating in the mere idea of absolute totality, an object which is not and cannot be given in experience; inasmuch as we should be attributing a reality objective and independent of the empirical synthesis, to a series of phenomena. This idea of reason cannot then be regarded as valid — except as a rule for the regressive synthesis in the series of conditions, according to which we must proceed from the conditioned, through all intermediate and subordinate conditions, up to the unconditioned; although this goal is unattained and unattainable. For the absolutely unconditioned cannot be discovered in the sphere of experience.

We now proceed to determine clearly our notion of a synthesis which can never be complete. There are two terms commonly employed for this purpose. These terms are regarded as expressions of different and distinguishable notions, although the ground of the distinction has never been clearly exposed. The term employed by the mathematicians is progressus in infinitum. The philosophers prefer the expression progressus in indefinitum. Without detaining the reader with an examination of the reasons for such a distinction, or with remarks on the right or wrong use of the terms, I shall endeavour clearly to determine these conceptions, so far as is necessary for the purpose in this Critique.

We may, with propriety, say of a straight line, that it may be produced to infinity. In this case the distinction between a progressus in infinitum and a progressus in indefinitum is a mere piece of subtlety. For, although when we say, "Produce a straight line," it is more correct to say in indefinitum than in infinitum; because the former means, "Produce it as far as you please," the second, "You must not cease to produce it"; the expression in infinitum is, when we are speaking of the power to do it, perfectly correct, for we can always make it longer if we please — on to infinity. And this remark holds good in all cases, when we speak of a progressus, that is, an advancement from the condition to the conditioned; this possible advancement always proceeds to infinity. We may proceed from a given pair in the descending line of generation from father to son, and cogitate a never-ending line of descendants from it. For in such a case reason does not demand absolute totality in the series, because it does not presuppose it as a condition and as given (datum), but merely as conditioned, and as capable of being given (dabile).

Very different is the case with the problem: "How far the regress, which ascends from the given conditioned to the conditions, must extend"; whether I can say: "It is a regress in infinitum," or only "in indefinitum"; and whether, for example, setting out from the human beings at present alive in the world, I

may ascend in the series of their ancestors, in infinitum — mr whether all that can be said is, that so far as I have proceeded, I have discovered no empirical ground for considering the series limited, so that I am justified, and indeed, compelled to search for ancestors still further back, although I am not obliged by the idea of reason to presuppose them.

My answer to this question is: “If the series is given in empirical intuition as a whole, the regress in the series of its internal conditions proceeds in infinitum; but, if only one member of the series is given, from which the regress is to proceed to absolute totality, the regress is possible only in indefinitum.” For example, the division of a portion of matter given within certain limits — of a body, that is — proceeds in infinitum. For, as the condition of this whole is its part, and the condition of the part a part of the part, and so on, and as in this regress of decomposition an unconditioned indivisible member of the series of conditions is not to be found; there are no reasons or grounds in experience for stopping in the division, but, on the contrary, the more remote members of the division are actually and empirically given prior to this division. That is to say, the division proceeds to infinity. On the other hand, the series of ancestors of any given human being is not given, in its absolute totality, in any experience, and yet the regress proceeds from every genealogical member of this series to one still higher, and does not meet with any empirical limit presenting an absolutely unconditioned member of the series. But as the members of such a series are not contained in the empirical intuition of the whole, prior to the regress, this regress does not proceed to infinity, but only in indefinitum, that is, we are called upon to discover other and higher members, which are themselves always conditioned.

In neither case — the regressus in infinitum, nor the regressus in indefinitum, is the series of conditions to be considered as actually infinite in the object itself. This might be true of things in themselves, but it cannot be asserted of phenomena, which, as conditions of each other, are only given in the empirical regress itself. Hence, the question no longer is, “What is the quantity of this series of conditions in itself — is it finite or infinite?” for it is nothing in itself; but, “How is the empirical regress to be commenced, and how far ought we to proceed with it?” And here a signal distinction in the application of this rule becomes apparent. If the whole is given empirically, it is possible to recede in the series of its internal conditions to infinity. But if the whole is not given, and can only be given by and through the empirical regress, I can only say: “It is possible to infinity, to proceed to still higher conditions in the series.” In the first case, I am justified in asserting that more members are empirically given in the object than I attain to in the regress (of decomposition). In the second case, I am justified only in saying, that I can always proceed further in the regress, because no member of the series is given as absolutely conditioned, and thus a higher member is possible, and an inquiry with regard to it is necessary. In the one case it is necessary to find other members of the series, in the other it is necessary to inquire for others, inasmuch as experience presents no absolute limitation of the regress. For, either you do not possess a perception which absolutely limits your empirical regress, and in this case the regress cannot be regarded as complete; or, you do possess such a limitative perception, in which case it is not a part of your series (for that which limits must be distinct from that which is limited by it), and it is incumbent you to continue your regress up to this condition, and so on.

These remarks will be placed in their proper light by their application in the following section.

SECTION IX. Of the Empirical Use of the Regulative Principle of Reason with regard to the Cosmological Ideas.

We have shown that no transcendental use can be made either of the conceptions of reason or of understanding. We have shown, likewise, that the demand of absolute totality in the series of conditions in the world of sense arises from a transcendental employment of reason, resting on the opinion that phenomena are to be regarded as things in themselves. It follows that we are not required to answer the question respecting the absolute quantity of a series — whether it is in itself limited or unlimited. We are only called upon to determine how far we must proceed in the empirical regress from condition to

condition, in order to discover, in conformity with the rule of reason, a full and correct answer to the questions proposed by reason itself.

This principle of reason is hence valid only as a rule for the extension of a possible experience — its invalidity as a principle constitutive of phenomena in themselves having been sufficiently demonstrated. And thus, too, the antinomial conflict of reason with itself is completely put an end to; inasmuch as we have not only presented a critical solution of the fallacy lurking in the opposite statements of reason, but have shown the true meaning of the ideas which gave rise to these statements. The dialectical principle of reason has, therefore, been changed into a doctrinal principle. But in fact, if this principle, in the subjective signification which we have shown to be its only true sense, may be guaranteed as a principle of the unceasing extension of the employment of our understanding, its influence and value are just as great as if it were an axiom for the a priori determination of objects. For such an axiom could not exert a stronger influence on the extension and rectification of our knowledge, otherwise than by procuring for the principles of the understanding the most widely expanded employment in the field of experience.

I. Solution of the Cosmological Idea of the Totality of the Composition of Phenomena in the Universe.

Here, as well as in the case of the other cosmological problems, the ground of the regulative principle of reason is the proposition that in our empirical regress no experience of an absolute limit, and consequently no experience of a condition, which is itself absolutely unconditioned, is discoverable. And the truth of this proposition itself rests upon the consideration that such an experience must represent to us phenomena as limited by nothing or the mere void, on which our continued regress by means of perception must abut — which is impossible.

Now this proposition, which declares that every condition attained in the empirical regress must itself be considered empirically conditioned, contains the rule in terminis, which requires me, to whatever extent I may have proceeded in the ascending series, always to look for some higher member in the series — whether this member is to become known to me through experience, or not.

Nothing further is necessary, then, for the solution of the first cosmological problem, than to decide, whether, in the regress to the unconditioned quantity of the universe (as regards space and time), this never limited ascent ought to be called a regressus in infinitum or indefinitum.

The general representation which we form in our minds of the series of all past states or conditions of the world, or of all the things which at present exist in it, is itself nothing more than a possible empirical regress, which is cogitated — although in an undetermined manner — in the mind, and which gives rise to the conception of a series of conditions for a given object.* Now I have a conception of the universe, but not an intuition — that is, not an intuition of it as a whole. Thus I cannot infer the magnitude of the regress from the quantity or magnitude of the world, and determine the former by means of the latter; on the contrary, I must first of all form a conception of the quantity or magnitude of the world from the magnitude of the empirical regress. But of this regress I know nothing more than that I ought to proceed from every given member of the series of conditions to one still higher. But the quantity of the universe is not thereby determined, and we cannot affirm that this regress proceeds in infinitum. Such an affirmation would anticipate the members of the series which have not yet been reached, and represent the number of them as beyond the grasp of any empirical synthesis; it would consequently determine the cosmical quantity prior to the regress (although only in a negative manner) — which is impossible. For the world is not given in its totality in any intuition: consequently, its quantity cannot be given prior to the regress. It follows that we are unable to make any declaration respecting the cosmical quantity in itself — not even that the regress in it is a regress in infinitum; we must only endeavour to attain to a conception of the quantity of the universe, in conformity with the rule which determines the empirical regress in it. But this rule merely requires us never to admit an absolute limit to our series — how far soever we may have proceeded in it, but always, on the contrary, to subordinate every phenomenon to some other as its condition, and consequently to proceed to this higher phenomenon. Such a regress is, therefore, the regressus in

indefinitum, which, as not determining a quantity in the object, is clearly distinguishable from the regressus in infinitum.

[Footnote: The cosmical series can neither be greater nor smaller than the possible empirical regress, upon which its conception is based. And as this regress cannot be a determinate infinite regress, still less a determinate finite (absolutely limited), it is evident that we cannot regard the world as either finite or infinite, because the regress, which gives us the representation of the world, is neither finite nor infinite.]

It follows from what we have said that we are not justified in declaring the world to be infinite in space, or as regards past time. For this conception of an infinite given quantity is empirical; but we cannot apply the conception of an infinite quantity to the world as an object of the senses. I cannot say, “The regress from a given perception to everything limited either in space or time, proceeds in infinitum,” for this presupposes an infinite cosmical quantity; neither can I say, “It is finite,” for an absolute limit is likewise impossible in experience. It follows that I am not entitled to make any assertion at all respecting the whole object of experience — the world of sense; I must limit my declarations to the rule according to which experience or empirical knowledge is to be attained.

To the question, therefore, respecting the cosmical quantity, the first and negative answer is: “The world has no beginning in time, and no absolute limit in space.”

For, in the contrary case, it would be limited by a void time on the one hand, and by a void space on the other. Now, since the world, as a phenomenon, cannot be thus limited in itself for a phenomenon is not a thing in itself; it must be possible for us to have a perception of this limitation by a void time and a void space. But such a perception — such an experience is impossible; because it has no content. Consequently, an absolute cosmical limit is empirically, and therefore absolutely, impossible.*

[Footnote: The reader will remark that the proof presented above is very different from the dogmatical demonstration given in the antithesis of the first antinomy. In that demonstration, it was taken for granted that the world is a thing in itself — given in its totality prior to all regress, and a determined position in space and time was denied to it — if it was not considered as occupying all time and all space. Hence our conclusion differed from that given above; for we inferred in the antithesis the actual infinity of the world.]

From this follows the affirmative answer: “The regress in the series of phenomena — as a determination of the cosmical quantity, proceeds in indefinitum.” This is equivalent to saying: “The world of sense has no absolute quantity, but the empirical regress (through which alone the world of sense is presented to us on the side of its conditions) rests upon a rule, which requires it to proceed from every member of the series, as conditioned, to one still more remote (whether through personal experience, or by means of history, or the chain of cause and effect), and not to cease at any point in this extension of the possible empirical employment of the understanding.” And this is the proper and only use which reason can make of its principles.

The above rule does not prescribe an unceasing regress in one kind of phenomena. It does not, for example, forbid us, in our ascent from an individual human being through the line of his ancestors, to expect that we shall discover at some point of the regress a primeval pair, or to admit, in the series of heavenly bodies, a sun at the farthest possible distance from some centre. All that it demands is a perpetual progress from phenomena to phenomena, even although an actual perception is not presented by them (as in the case of our perceptions being so weak as that we are unable to become conscious of them), since they, nevertheless, belong to possible experience.

Every beginning is in time, and all limits to extension are in space. But space and time are in the world of sense. Consequently phenomena in the world are conditionally limited, but the world itself is not limited, either conditionally or unconditionally.

For this reason, and because neither the world nor the cosmical series of conditions to a given

conditioned can be completely given, our conception of the cosmical quantity is given only in and through the regress and not prior to it — in a collective intuition. But the regress itself is really nothing more than the determining of the cosmical quantity, and cannot therefore give us any determined conception of it — still less a conception of a quantity which is, in relation to a certain standard, infinite. The regress does not, therefore, proceed to infinity (an infinity given), but only to an indefinite extent, for or the of presenting to us a quantity — realized only in and through the regress itself.

II. Solution of the Cosmological Idea of the Totality of the Division of a Whole given in Intuition.

When I divide a whole which is given in intuition, I proceed from a conditioned to its conditions. The division of the parts of the whole (subdivisio or decompositio) is a regress in the series of these conditions. The absolute totality of this series would be actually attained and given to the mind, if the regress could arrive at simple parts. But if all the parts in a continuous decomposition are themselves divisible, the division, that is to say, the regress, proceeds from the conditioned to its conditions in infinitum; because the conditions (the parts) are themselves contained in the conditioned, and, as the latter is given in a limited intuition, the former are all given along with it. This regress cannot, therefore, be called a regressus in indefinitum, as happened in the case of the preceding cosmological idea, the regress in which proceeded from the conditioned to the conditions not given contemporaneously and along with it, but discoverable only through the empirical regress. We are not, however, entitled to affirm of a whole of this kind, which is divisible in infinitum, that it consists of an infinite number of parts. For, although all the parts are contained in the intuition of the whole, the whole division is not contained therein. The division is contained only in the progressing decomposition — in the regress itself, which is the condition of the possibility and actuality of the series. Now, as this regress is infinite, all the members (parts) to which it attains must be contained in the given whole as an aggregate. But the complete series of division is not contained therein. For this series, being infinite in succession and always incomplete, cannot represent an infinite number of members, and still less a composition of these members into a whole.

To apply this remark to space. Every limited part of space presented to intuition is a whole, the parts of which are always spaces — to whatever extent subdivided. Every limited space is hence divisible to infinity.

Let us again apply the remark to an external phenomenon enclosed in limits, that is, a body. The divisibility of a body rests upon the divisibility of space, which is the condition of the possibility of the body as an extended whole. A body is consequently divisible to infinity, though it does not, for that reason, consist of an infinite number of parts.

It certainly seems that, as a body must be cogitated as substance in space, the law of divisibility would not be applicable to it as substance. For we may and ought to grant, in the case of space, that division or decomposition, to any extent, never can utterly annihilate composition (that is to say, the smallest part of space must still consist of spaces); otherwise space would entirely cease to exist — which is impossible. But, the assertion on the other band that when all composition in matter is annihilated in thought, nothing remains, does not seem to harmonize with the conception of substance, which must be properly the subject of all composition and must remain, even after the conjunction of its attributes in space — which constituted a body — is annihilated in thought. But this is not the case with substance in the phenomenal world, which is not a thing in itself cogitated by the pure category. Phenomenal substance is not an absolute subject; it is merely a permanent sensuous image, and nothing more than an intuition, in which the unconditioned is not to be found.

But, although this rule of progress to infinity is legitimate and applicable to the subdivision of a phenomenon, as a mere occupation or filling of space, it is not applicable to a whole consisting of a number of distinct parts and constituting a quantum discretum — that is to say, an organized body. It cannot be admitted that every part in an organized whole is itself organized, and that, in analysing it to infinity, we must always meet with organized parts; although we may allow that the parts of the matter

which we decompose in infinitum, may be organized. For the infinity of the division of a phenomenon in space rests altogether on the fact that the divisibility of a phenomenon is given only in and through this infinity, that is, an undetermined number of parts is given, while the parts themselves are given and determined only in and through the subdivision; in a word, the infinity of the division necessarily presupposes that the whole is not already divided in se. Hence our division determines a number of parts in the whole — a number which extends just as far as the actual regress in the division; while, on the other hand, the very notion of a body organized to infinity represents the whole as already and in itself divided. We expect, therefore, to find in it a determinate, but at the same time, infinite, number of parts — which is self-contradictory. For we should thus have a whole containing a series of members which could not be completed in any regress — which is infinite, and at the same time complete in an organized composite. Infinite divisibility is applicable only to a quantum continuum, and is based entirely on the infinite divisibility of space, But in a quantum discretum the multitude of parts or units is always determined, and hence always equal to some number. To what extent a body may be organized, experience alone can inform us; and although, so far as our experience of this or that body has extended, we may not have discovered any inorganic part, such parts must exist in possible experience. But how far the transcendental division of a phenomenon must extend, we cannot know from experience — it is a question which experience cannot answer; it is answered only by the principle of reason which forbids us to consider the empirical regress, in the analysis of extended body, as ever absolutely complete.

Concluding Remark on the Solution of the Transcendental Mathematical Ideas — and Introductory to the Solution of the Dynamical Ideas.

We presented the antinomy of pure reason in a tabular form, and we endeavoured to show the ground of this self-contradiction on the part of reason, and the only means of bringing it to a conclusion — namely, by declaring both contradictory statements to be false. We represented in these antinomies the conditions of phenomena as belonging to the conditioned according to relations of space and time — which is the usual supposition of the common understanding. In this respect, all dialectical representations of totality, in the series of conditions to a given conditioned, were perfectly homogeneous. The condition was always a member of the series along with the conditioned, and thus the homogeneity of the whole series was assured. In this case the regress could never be cogitated as complete; or, if this was the case, a member really conditioned was falsely regarded as a primal member, consequently as unconditioned. In such an antinomy, therefore, we did not consider the object, that is, the conditioned, but the series of conditions belonging to the object, and the magnitude of that series. And thus arose the difficulty — a difficulty not to be settled by any decision regarding the claims of the two parties, but simply by cutting the knot — by declaring the series proposed by reason to be either too long or too short for the understanding, which could in neither case make its conceptions adequate with the ideas.

But we have overlooked, up to this point, an essential difference existing between the conceptions of the understanding which reason endeavours to raise to the rank of ideas — two of these indicating a mathematical, and two a dynamical synthesis of phenomena. Hitherto, it was necessary to signalize this distinction; for, just as in our general representation of all transcendental ideas, we considered them under phenomenal conditions, so, in the two mathematical ideas, our discussion is concerned solely with an object in the world of phenomena. But as we are now about to proceed to the consideration of the dynamical conceptions of the understanding, and their adequateness with ideas, we must not lose sight of this distinction. We shall find that it opens up to us an entirely new view of the conflict in which reason is involved. For, while in the first two antinomies, both parties were dismissed, on the ground of having advanced statements based upon false hypothesis; in the present case the hope appears of discovering a hypothesis which may be consistent with the demands of reason, and, the judge completing the statement of the grounds of claim, which both parties had left in an unsatisfactory state, the question may be settled on its own merits, not by dismissing the claimants, but by a comparison of the arguments on both sides. If

we consider merely their extension, and whether they are adequate with ideas, the series of conditions may be regarded as all homogeneous. But the conception of the understanding which lies at the basis of these ideas, contains either a synthesis of the homogeneous (presupposed in every quantity — in its composition as well as in its division) or of the heterogeneous, which is the case in the dynamical synthesis of cause and effect, as well as of the necessary and the contingent.

Thus it happens that in the mathematical series of phenomena no other than a sensuous condition is admissible — a condition which is itself a member of the series; while the dynamical series of sensuous conditions admits a heterogeneous condition, which is not a member of the series, but, as purely intelligible, lies out of and beyond it. And thus reason is satisfied, and an unconditioned placed at the head of the series of phenomena, without introducing confusion into or discontinuing it, contrary to the principles of the understanding.

Now, from the fact that the dynamical ideas admit a condition of phenomena which does not form a part of the series of phenomena, arises a result which we should not have expected from an antinomy. In former cases, the result was that both contradictory dialectical statements were declared to be false. In the present case, we find the conditioned in the dynamical series connected with an empirically unconditioned, but non-sensuous condition; and thus satisfaction is done to the understanding on the one hand and to the reason on the other.* While, moreover, the dialectical arguments for unconditioned totality in mere phenomena fall to the ground, both propositions of reason may be shown to be true in their proper signification. This could not happen in the case of the cosmological ideas which demanded a mathematically unconditioned unity; for no condition could be placed at the head of the series of phenomena, except one which was itself a phenomenon and consequently a member of the series.

[Footnote: For the understanding cannot admit among phenomena a condition which is itself empirically unconditioned. But if it is possible to cogitate an intelligible condition — one which is not a member of the series of phenomena — for a conditioned phenomenon, without breaking the series of empirical conditions, such a condition may be admissible as empirically unconditioned, and the empirical regress continue regular, unceasing, and intact.]

III. Solution of the Cosmological Idea of the Totality of the Deduction of Cosmical Events from their Causes.

There are only two modes of causality cogitable — the causality of nature or of freedom. The first is the conjunction of a particular state with another preceding it in the world of sense, the former following the latter by virtue of a law. Now, as the causality of phenomena is subject to conditions of time, and the preceding state, if it had always existed, could not have produced an effect which would make its first appearance at a particular time, the causality of a cause must itself be an effect — must itself have begun to be, and therefore, according to the principle of the understanding, itself requires a cause.

We must understand, on the contrary, by the term freedom, in the cosmological sense, a faculty of the spontaneous origination of a state; the causality of which, therefore, is not subordinated to another cause determining it in time. Freedom is in this sense a pure transcendental idea, which, in the first place, contains no empirical element; the object of which, in the second place, cannot be given or determined in any experience, because it is a universal law of the very possibility of experience, that everything which happens must have a cause, that consequently the causality of a cause, being itself something that has happened, must also have a cause. In this view of the case, the whole field of experience, how far soever it may extend, contains nothing that is not subject to the laws of nature. But, as we cannot by this means attain to an absolute totality of conditions in reference to the series of causes and effects, reason creates the idea of a spontaneity, which can begin to act of itself, and without any external cause determining it to action, according to the natural law of causality.

It is especially remarkable that the practical conception of freedom is based upon the transcendental

idea, and that the question of the possibility of the former is difficult only as it involves the consideration of the truth of the latter. Freedom, in the practical sense, is the independence of the will of coercion by sensuous impulses. A will is sensuous, in so far as it is pathologically affected (by sensuous impulses); it is termed animal (arbitrium brutum), when it is pathologically necessitated. The human will is certainly an arbitrium sensitivum, not brutum, but liberum; because sensuousness does not necessitate its action, a faculty existing in man of self-determination, independently of all sensuous coercion.

It is plain that, if all causality in the world of sense were natural — and natural only — every event would be determined by another according to necessary laws, and that, consequently, phenomena, in so far as they determine the will, must necessitate every action as a natural effect from themselves; and thus all practical freedom would fall to the ground with the transcendental idea. For the latter presupposes that although a certain thing has not happened, it ought to have happened, and that, consequently, its phenomenal cause was not so powerful and determinative as to exclude the causality of our will — a causality capable of producing effects independently of and even in opposition to the power of natural causes, and capable, consequently, of spontaneously originating a series of events.

Here, too, we find it to be the case, as we generally found in the self-contradictions and perplexities of a reason which strives to pass the bounds of possible experience, that the problem is properly not physiological, but transcendental. The question of the possibility of freedom does indeed concern psychology; but, as it rests upon dialectical arguments of pure reason, its solution must engage the attention of transcendental philosophy. Before attempting this solution, a task which transcendental philosophy cannot decline, it will be advisable to make a remark with regard to its procedure in the settlement of the question.

If phenomena were things in themselves, and time and space forms of the existence of things, condition and conditioned would always be members of the same series; and thus would arise in the present case the antinomy common to all transcendental ideas — that their series is either too great or too small for the understanding. The dynamical ideas, which we are about to discuss in this and the following section, possess the peculiarity of relating to an object, not considered as a quantity, but as an existence; and thus, in the discussion of the present question, we may make abstraction of the quantity of the series of conditions, and consider merely the dynamical relation of the condition to the conditioned. The question, then, suggests itself, whether freedom is possible; and, if it is, whether it can consist with the universality of the natural law of causality; and, consequently, whether we enounce a proper disjunctive proposition when we say: “Every effect must have its origin either in nature or in freedom,” or whether both cannot exist together in the same event in different relations. The principle of an unbroken connection between all events in the phenomenal world, in accordance with the unchangeable laws of nature, is a well-established principle of transcendental analytic which admits of no exception. The question, therefore, is: “Whether an effect, determined according to the laws of nature, can at the same time be produced by a free agent, or whether freedom and nature mutually exclude each other?” And here, the common but fallacious hypothesis of the absolute reality of phenomena manifests its injurious influence in embarrassing the procedure of reason. For if phenomena are things in themselves, freedom is impossible. In this case, nature is the complete and all-sufficient cause of every event; and condition and conditioned, cause and effect are contained in the same series, and necessitated by the same law. If, on the contrary, phenomena are held to be, as they are in fact, nothing more than mere representations, connected with each other in accordance with empirical laws, they must have a ground which is not phenomenal. But the causality of such an intelligible cause is not determined or determinable by phenomena; although its effects, as phenomena, must be determined by other phenomenal existences. This cause and its causality exist therefore out of and apart from the series of phenomena; while its effects do exist and are discoverable in the series of empirical conditions. Such an effect may therefore be considered to be free in relation to its intelligible cause, and necessary in relation to the phenomena from which it is a

necessary consequence — a distinction which, stated in this perfectly general and abstract manner, must appear in the highest degree subtle and obscure. The sequel will explain. It is sufficient, at present, to remark that, as the complete and unbroken connection of phenomena is an unalterable law of nature, freedom is impossible — on the supposition that phenomena are absolutely real. Hence those philosophers who adhere to the common opinion on this subject can never succeed in reconciling the ideas of nature and freedom.

Possibility of Freedom in Harmony with the Universal Law of Natural Necessity.

That element in a sensuous object which is not itself sensuous, I may be allowed to term intelligible. If, accordingly, an object which must be regarded as a sensuous phenomenon possesses a faculty which is not an object of sensuous intuition, but by means of which it is capable of being the cause of phenomena, the causality of an object or existence of this kind may be regarded from two different points of view. It may be considered to be intelligible, as regards its action — the action of a thing which is a thing in itself, and sensuous, as regards its effects — the effects of a phenomenon belonging to the sensuous world. We should accordingly, have to form both an empirical and an intellectual conception of the causality of such a faculty or power — both, however, having reference to the same effect. This twofold manner of cogitating a power residing in a sensuous object does not run counter to any of the conceptions which we ought to form of the world of phenomena or of a possible experience. Phenomena — not being things in themselves — must have a transcendental object as a foundation, which determines them as mere representations; and there seems to be no reason why we should not ascribe to this transcendental object, in addition to the property of self-phenomenization, a causality whose effects are to be met with in the world of phenomena, although it is not itself a phenomenon. But every effective cause must possess a character, that is to say, a law of its causality, without which it would cease to be a cause. In the above case, then, every sensuous object would possess an empirical character, which guaranteed that its actions, as phenomena, stand in complete and harmonious connection, conformably to unvarying natural laws, with all other phenomena, and can be deduced from these, as conditions, and that they do thus, in connection with these, constitute a series in the order of nature. This sensuous object must, in the second place, possess an intelligible character, which guarantees it to be the cause of those actions, as phenomena, although it is not itself a phenomenon nor subordinate to the conditions of the world of sense. The former may be termed the character of the thing as a phenomenon, the latter the character of the thing as a thing in itself.

Now this active subject would, in its character of intelligible subject, be subordinate to no conditions of time, for time is only a condition of phenomena, and not of things in themselves. No action would begin or cease to be in this subject; it would consequently be free from the law of all determination of time — the law of change, namely, that everything which happens must have a cause in the phenomena of a preceding state. In one word, the causality of the subject, in so far as it is intelligible, would not form part of the series of empirical conditions which determine and necessitate an event in the world of sense. Again, this intelligible character of a thing cannot be immediately cognized, because we can perceive nothing but phenomena, but it must be capable of being cogitated in harmony with the empirical character; for we always find ourselves compelled to place, in thought, a transcendental object at the basis of phenomena although we can never know what this object is in itself.

In virtue of its empirical character, this subject would at the same time be subordinate to all the empirical laws of causality, and, as a phenomenon and member of the sensuous world, its effects would have to be accounted for by a reference to preceding phenomena. Eternal phenomena must be capable of influencing it; and its actions, in accordance with natural laws, must explain to us how its empirical character, that is, the law of its causality, is to be cognized in and by means of experience. In a word, all requisites for a complete and necessary determination of these actions must be presented to us by experience.

In virtue of its intelligible character, on the other hand (although we possess only a general conception of this character), the subject must be regarded as free from all sensuous influences, and from all phenomenal determination. Moreover, as nothing happens in this subject — for it is a noumenon, and there does not consequently exist in it any change, demanding the dynamical determination of time, and for the same reason no connection with phenomena as causes — this active existence must in its actions be free from and independent of natural necessity, for or necessity exists only in the world of phenomena. It would be quite correct to say that it originates or begins its effects in the world of sense from itself, although the action productive of these effects does not begin in itself. We should not be in this case affirming that these sensuous effects began to exist of themselves, because they are always determined by prior empirical conditions — by virtue of the empirical character, which is the phenomenon of the intelligible character — and are possible only as constituting a continuation of the series of natural causes. And thus nature and freedom, each in the complete and absolute signification of these terms, can exist, without contradiction or disagreement, in the same action.

Exposition of the Cosmological Idea of Freedom in Harmony with the Universal Law of Natural Necessity.

I have thought it advisable to lay before the reader at first merely a sketch of the solution of this transcendental problem, in order to enable him to form with greater ease a clear conception of the course which reason must adopt in the solution. I shall now proceed to exhibit the several momenta of this solution, and to consider them in their order.

The natural law that everything which happens must have a cause, that the causality of this cause, that is, the action of the cause (which cannot always have existed, but must be itself an event, for it precedes in time some effect which it has originated), must have itself a phenomenal cause, by which it is determined and, and, consequently, all events are empirically determined in an order of nature — this law, I say, which lies at the foundation of the possibility of experience, and of a connected system of phenomena or nature is a law of the understanding, from which no departure, and to which no exception, can be admitted. For to except even a single phenomenon from its operation is to exclude it from the sphere of possible experience and thus to admit it to be a mere fiction of thought or phantom of the brain.

Thus we are obliged to acknowledge the existence of a chain of causes, in which, however, absolute totality cannot be found. But we need not detain ourselves with this question, for it has already been sufficiently answered in our discussion of the antinomies into which reason falls, when it attempts to reach the unconditioned in the series of phenomena. If we permit ourselves to be deceived by the illusion of transcendental idealism, we shall find that neither nature nor freedom exists. Now the question is: “Whether, admitting the existence of natural necessity in the world of phenomena, it is possible to consider an effect as at the same time an effect of nature and an effect of freedom — or, whether these two modes of causality are contradictory and incompatible?”

No phenomenal cause can absolutely and of itself begin a series. Every action, in so far as it is productive of an event, is itself an event or occurrence, and presupposes another preceding state, in which its cause existed. Thus everything that happens is but a continuation of a series, and an absolute beginning is impossible in the sensuous world. The actions of natural causes are, accordingly, themselves effects, and presuppose causes preceding them in time. A primal action which forms an absolute beginning, is beyond the causal power of phenomena.

Now, is it absolutely necessary that, granting that all effects are phenomena, the causality of the cause of these effects must also be a phenomenon and belong to the empirical world? Is it not rather possible that, although every effect in the phenomenal world must be connected with an empirical cause, according to the universal law of nature, this empirical causality may be itself the effect of a non-empirical and intelligible causality — its connection with natural causes remaining nevertheless intact? Such a causality would be considered, in reference to phenomena, as the primal action of a cause, which is in so far,

therefore, not phenomenal, but, by reason of this faculty or power, intelligible; although it must, at the same time, as a link in the chain of nature, be regarded as belonging to the sensuous world.

A belief in the reciprocal causality of phenomena is necessary, if we are required to look for and to present the natural conditions of natural events, that is to say, their causes. This being admitted as unexceptionably valid, the requirements of the understanding, which recognizes nothing but nature in the region of phenomena, are satisfied, and our physical explanations of physical phenomena may proceed in their regular course, without hindrance and without opposition. But it is no stumbling-block in the way, even assuming the idea to be a pure fiction, to admit that there are some natural causes in the possession of a faculty which is not empirical, but intelligible, inasmuch as it is not determined to action by empirical conditions, but purely and solely upon grounds brought forward by the understanding — this action being still, when the cause is phenomenized, in perfect accordance with the laws of empirical causality. Thus the acting subject, as a causal phenomenon, would continue to preserve a complete connection with nature and natural conditions; and the phenomenon only of the subject (with all its phenomenal causality) would contain certain conditions, which, if we ascend from the empirical to the transcendental object, must necessarily be regarded as intelligible. For, if we attend, in our inquiries with regard to causes in the world of phenomena, to the directions of nature alone, we need not trouble ourselves about the relation in which the transcendental subject, which is completely unknown to us, stands to these phenomena and their connection in nature. The intelligible ground of phenomena in this subject does not concern empirical questions. It has to do only with pure thought; and, although the effects of this thought and action of the pure understanding are discoverable in phenomena, these phenomena must nevertheless be capable of a full and complete explanation, upon purely physical grounds and in accordance with natural laws. And in this case we attend solely to their empirical and omit all consideration of their intelligible character (which is the transcendental cause of the former) as completely unknown, except in so far as it is exhibited by the latter as its empirical symbol. Now let us apply this to experience. Man is a phenomenon of the sensuous world and, at the same time, therefore, a natural cause, the causality of which must be regulated by empirical laws. As such, he must possess an empirical character, like all other natural phenomena. We remark this empirical character in his actions, which reveal the presence of certain powers and faculties. If we consider inanimate or merely animal nature, we can discover no reason for ascribing to ourselves any other than a faculty which is determined in a purely sensuous manner. But man, to whom nature reveals herself only through sense, cognizes himself not only by his senses, but also through pure apperception; and this in actions and internal determinations, which he cannot regard as sensuous impressions. He is thus to himself, on the one hand, a phenomenon, but on the other hand, in respect of certain faculties, a purely intelligible object — intelligible, because its action cannot be ascribed to sensuous receptivity. These faculties are understanding and reason. The latter, especially, is in a peculiar manner distinct from all empirically-conditioned faculties, for it employs ideas alone in the consideration of its objects, and by means of these determines the understanding, which then proceeds to make an empirical use of its own conceptions, which, like the ideas of reason, are pure and non-empirical.

That reason possesses the faculty of causality, or that at least we are compelled so to represent it, is evident from the imperatives, which in the sphere of the practical we impose on many of our executive powers. The words I ought express a species of necessity, and imply a connection with grounds which nature does not and cannot present to the mind of man. Understanding knows nothing in nature but that which is, or has been, or will be. It would be absurd to say that anything in nature ought to be other than it is in the relations of time in which it stands; indeed, the ought, when we consider merely the course of nature, has neither application nor meaning. The question, “What ought to happen in the sphere of nature?” is just as absurd as the question, “What ought to be the properties of a circle?” All that we are entitled to ask is, “What takes place in nature?” or, in the latter case, “What are the properties of a circle?”

But the idea of an ought or of duty indicates a possible action, the ground of which is a pure conception; while the ground of a merely natural action is, on the contrary, always a phenomenon. This action must certainly be possible under physical conditions, if it is prescribed by the moral imperative ought; but these physical or natural conditions do not concern the determination of the will itself, they relate to its effects alone, and the consequences of the effect in the world of phenomena. Whatever number of motives nature may present to my will, whatever sensuous impulses — the moral ought it is beyond their power to produce. They may produce a volition, which, so far from being necessary, is always conditioned — a volition to which the ought enunciated by reason, sets an aim and a standard, gives permission or prohibition. Be the object what it may, purely sensuous — as pleasure, or presented by pure reason — as good, reason will not yield to grounds which have an empirical origin. Reason will not follow the order of things presented by experience, but, with perfect spontaneity, rearranges them according to ideas, with which it compels empirical conditions to agree. It declares, in the name of these ideas, certain actions to be necessary which nevertheless have not taken place and which perhaps never will take place; and yet presupposes that it possesses the faculty of causality in relation to these actions. For, in the absence of this supposition, it could not expect its ideas to produce certain effects in the world of experience.

Now, let us stop here and admit it to be at least possible that reason does stand in a really causal relation to phenomena. In this case it must — pure reason as it is — exhibit an empirical character. For every cause supposes a rule, according to which certain phenomena follow as effects from the cause, and every rule requires uniformity in these effects; and this is the proper ground of the conception of a cause — as a faculty or power. Now this conception (of a cause) may be termed the empirical character of reason; and this character is a permanent one, while the effects produced appear, in conformity with the various conditions which accompany and partly limit them, in various forms.

Thus the volition of every man has an empirical character, which is nothing more than the causality of his reason, in so far as its effects in the phenomenal world manifest the presence of a rule, according to which we are enabled to examine, in their several kinds and degrees, the actions of this causality and the rational grounds for these actions, and in this way to decide upon the subjective principles of the volition. Now we learn what this empirical character is only from phenomenal effects, and from the rule of these which is presented by experience; and for this reason all the actions of man in the world of phenomena are determined by his empirical character, and the co-operative causes of nature. If, then, we could investigate all the phenomena of human volition to their lowest foundation in the mind, there would be no action which we could not anticipate with certainty, and recognize to be absolutely necessary from its preceding conditions. So far as relates to this empirical character, therefore, there can be no freedom; and it is only in the light of this character that we can consider the human will, when we confine ourselves to simple observation and, as is the case in anthropology, institute a physiological investigation of the motive causes of human actions.

But when we consider the same actions in relation to reason — not for the purpose of explaining their origin, that is, in relation to speculative reason, but to practical reason, as the producing cause of these actions — we shall discover a rule and an order very different from those of nature and experience. For the declaration of this mental faculty may be that what has and could not but take place in the course of nature, ought not to have taken place. Sometimes, too, we discover, or believe that we discover, that the ideas of reason did actually stand in a causal relation to certain actions of man; and that these actions have taken place because they were determined, not by empirical causes, but by the act of the will upon grounds of reason.

Now, granting that reason stands in a causal relation to phenomena; can an action of reason be called free, when we know that, sensuously, in its empirical character, it is completely determined and absolutely necessary? But this empirical character is itself determined by the intelligible character. The latter we cannot cognize; we can only indicate it by means of phenomena, which enable us to have an

immediate cognition only of the empirical character.* An action, then, in so far as it is to be ascribed to an intelligible cause, does not result from it in accordance with empirical laws. That is to say, not the conditions of pure reason, but only their effects in the internal sense, precede the act. Pure reason, as a purely intelligible faculty, is not subject to the conditions of time. The causality of reason in its intelligible character does not begin to be; it does not make its appearance at a certain time, for the purpose of producing an effect. If this were not the case, the causality of reason would be subservient to the natural law of phenomena, which determines them according to time, and as a series of causes and effects in time; it would consequently cease to be freedom and become a part of nature. We are therefore justified in saying: "If reason stands in a causal relation to phenomena, it is a faculty which originates the sensuous condition of an empirical series of effects." For the condition, which resides in the reason, is non-sensuous, and therefore cannot be originated, or begin to be. And thus we find — what we could not discover in any empirical series — a condition of a successive series of events itself empirically unconditioned. For, in the present case, the condition stands out of and beyond the series of phenomena — it is intelligible, and it consequently cannot be subjected to any sensuous condition, or to any time-determination by a preceding cause.

[Footnote: The real morality of actions — their merit or demerit, and even that of our own conduct, is completely unknown to us. Our estimates can relate only to their empirical character. How much is the result of the action of free will, how much is to be ascribed to nature and to blameless error, or to a happy constitution of temperament (merito fortunae), no one can discover, nor, for this reason, determine with perfect justice.]

But, in another respect, the same cause belongs also to the series of phenomena. Man is himself a phenomenon. His will has an empirical character, which is the empirical cause of all his actions. There is no condition — determining man and his volition in conformity with this character — which does not itself form part of the series of effects in nature, and is subject to their law — the law according to which an empirically undetermined cause of an event in time cannot exist. For this reason no given action can have an absolute and spontaneous origination, all actions being phenomena, and belonging to the world of experience. But it cannot be said of reason, that the state in which it determines the will is always preceded by some other state determining it. For reason is not a phenomenon, and therefore not subject to sensuous conditions; and, consequently, even in relation to its causality, the sequence or conditions of time do not influence reason, nor can the dynamical law of nature, which determines the sequence of time according to certain rules, be applied to it.

Reason is consequently the permanent condition of all actions of the human will. Each of these is determined in the empirical character of the man, even before it has taken place. The intelligible character, of which the former is but the sensuous schema, knows no before or after; and every action, irrespective of the time-relation in which it stands with other phenomena, is the immediate effect of the intelligible character of pure reason, which, consequently, enjoys freedom of action, and is not dynamically determined either by internal or external preceding conditions. This freedom must not be described, in a merely negative manner, as independence of empirical conditions, for in this case the faculty of reason would cease to be a cause of phenomena; but it must be regarded, positively, as a faculty which can spontaneously originate a series of events. At the same time, it must not be supposed that any beginning can take place in reason; on the contrary, reason, as the unconditioned condition of all action of the will, admits of no time-conditions, although its effect does really begin in a series of phenomena — a beginning which is not, however, absolutely primal.

I shall illustrate this regulative principle of reason by an example, from its employment in the world of experience; proved it cannot be by any amount of experience, or by any number of facts, for such arguments cannot establish the truth of transcendental propositions. Let us take a voluntary action — for

example, a falsehood — by means of which a man has introduced a certain degree of confusion into the social life of humanity, which is judged according to the motives from which it originated, and the blame of which and of the evil consequences arising from it, is imputed to the offender. We at first proceed to examine the empirical character of the offence, and for this purpose we endeavour to penetrate to the sources of that character, such as a defective education, bad company, a shameless and wicked disposition, frivolity, and want of reflection — not forgetting also the occasioning causes which prevailed at the moment of the transgression. In this the procedure is exactly the same as that pursued in the investigation of the series of causes which determine a given physical effect. Now, although we believe the action to have been determined by all these circumstances, we do not the less blame the offender. We do not blame him for his unhappy disposition, nor for the circumstances which influenced him, nay, not even for his former course of life; for we presuppose that all these considerations may be set aside, that the series of preceding conditions may be regarded as having never existed, and that the action may be considered as completely unconditioned in relation to any state preceding, just as if the agent commenced with it an entirely new series of effects. Our blame of the offender is grounded upon a law of reason, which requires us to regard this faculty as a cause, which could have and ought to have otherwise determined the behaviour of the culprit, independently of all empirical conditions. This causality of reason we do not regard as a co-operating agency, but as complete in itself. It matters not whether the sensuous impulses favoured or opposed the action of this causality, the offence is estimated according to its intelligible character — the offender is decidedly worthy of blame, the moment he utters a falsehood. It follows that we regard reason, in spite of the empirical conditions of the act, as completely free, and therefore, therefore, as in the present case, culpable.

The above judgement is complete evidence that we are accustomed to think that reason is not affected by sensuous conditions, that in it no change takes place — although its phenomena, in other words, the mode in which it appears in its effects, are subject to change — that in it no preceding state determines the following, and, consequently, that it does not form a member of the series of sensuous conditions which necessitate phenomena according to natural laws. Reason is present and the same in all human actions and at all times; but it does not itself exist in time, and therefore does not enter upon any state in which it did not formerly exist. It is, relatively to new states or conditions, determining, but not determinable. Hence we cannot ask: “Why did not reason determine itself in a different manner?” The question ought to be thus stated: “Why did not reason employ its power of causality to determine certain phenomena in a different manner?” But this is a question which admits of no answer. For a different intelligible character would have exhibited a different empirical character; and, when we say that, in spite of the course which his whole former life has taken, the offender could have refrained from uttering the falsehood, this means merely that the act was subject to the power and authority — permissive or prohibitive — of reason. Now, reason is not subject in its causality to any conditions of phenomena or of time; and a difference in time may produce a difference in the relation of phenomena to each other — for these are not things and therefore not causes in themselves — but it cannot produce any difference in the relation in which the action stands to the faculty of reason.

Thus, then, in our investigation into free actions and the causal power which produced them, we arrive at an intelligible cause, beyond which, however, we cannot go; although we can recognize that it is free, that is, independent of all sensuous conditions, and that, in this way, it may be the sensuously unconditioned condition of phenomena. But for what reason the intelligible character generates such and such phenomena and exhibits such and such an empirical character under certain circumstances, it is beyond the power of our reason to decide. The question is as much above the power and the sphere of reason as the following would be: “Why does the transcendental object of our external sensuous intuition allow of no other form than that of intuition in space?” But the problem, which we were called upon to solve, does not require us to entertain any such questions. The problem was merely this — whether

freedom and natural necessity can exist without opposition in the same action. To this question we have given a sufficient answer; for we have shown that, as the former stands in a relation to a different kind of condition from those of the latter, the law of the one does not affect the law of the other and that, consequently, both can exist together in independence of and without interference with each other.

The reader must be careful to remark that my intention in the above remarks has not been to prove the actual existence of freedom, as a faculty in which resides the cause of certain sensuous phenomena. For, not to mention that such an argument would not have a transcendental character, nor have been limited to the discussion of pure conceptions — all attempts at inferring from experience what cannot be cogitated in accordance with its laws, must ever be unsuccessful. Nay, more, I have not even aimed at demonstrating the possibility of freedom; for this too would have been a vain endeavour, inasmuch as it is beyond the power of the mind to cognize the possibility of a reality or of a causal power by the aid of mere a priori conceptions. Freedom has been considered in the foregoing remarks only as a transcendental idea, by means of which reason aims at originating a series of conditions in the world of phenomena with the help of that which is sensuously unconditioned, involving itself, however, in an antinomy with the laws which itself prescribes for the conduct of the understanding. That this antinomy is based upon a mere illusion, and that nature and freedom are at least not opposed — this was the only thing in our power to prove, and the question which it was our task to solve.

IV. Solution of the Cosmological Idea of the Totality of the Dependence of Phenomenal Existences.

In the preceding remarks, we considered the changes in the world of sense as constituting a dynamical series, in which each member is subordinated to another — as its cause. Our present purpose is to avail ourselves of this series of states or conditions as a guide to an existence which may be the highest condition of all changeable phenomena, that is, to a necessary being. Our endeavour to reach, not the unconditioned causality, but the unconditioned existence, of substance. The series before us is therefore a series of conceptions, and not of intuitions (in which the one intuition is the condition of the other).

But it is evident that, as all phenomena are subject to change and conditioned in their existence, the series of dependent existences cannot embrace an unconditioned member, the existence of which would be absolutely necessary. It follows that, if phenomena were things in themselves, and — as an immediate consequence from this supposition — condition and conditioned belonged to the same series of phenomena, the existence of a necessary being, as the condition of the existence of sensuous phenomena, would be perfectly impossible.

An important distinction, however, exists between the dynamical and the mathematical regress. The latter is engaged solely with the combination of parts into a whole, or with the division of a whole into its parts; and therefore are the conditions of its series parts of the series, and to be consequently regarded as homogeneous, and for this reason, as consisting, without exception, of phenomena. If the former regress, on the contrary, the aim of which is not to establish the possibility of an unconditioned whole consisting of given parts, or of an unconditioned part of a given whole, but to demonstrate the possibility of the deduction of a certain state from its cause, or of the contingent existence of substance from that which exists necessarily, it is not requisite that the condition should form part of an empirical series along with the conditioned.

In the case of the apparent antinomy with which we are at present dealing, there exists a way of escape from the difficulty; for it is not impossible that both of the contradictory statements may be true in different relations. All sensuous phenomena may be contingent, and consequently possess only an empirically conditioned existence, and yet there may also exist a non-empirical condition of the whole series, or, in other words, a necessary being. For this necessary being, as an intelligible condition, would not form a member — not even the highest member — of the series; the whole world of sense would be left in its empirically determined existence uninterfered with and uninfluenced. This would also form a ground of distinction between the modes of solution employed for the third and fourth antinomies. For, while in the

consideration of freedom in the former antinomy, the thing itself — the cause (substantia phaenomenon) — was regarded as belonging to the series of conditions, and only its causality to the intelligible world — we are obliged in the present case to cogitate this necessary being as purely intelligible and as existing entirely apart from the world of sense (as an ens extramundanum); for otherwise it would be subject to the phenomenal law of contingency and dependence.

In relation to the present problem, therefore, the regulative principle of reason is that everything in the sensuous world possesses an empirically conditioned existence — that no property of the sensuous world possesses unconditioned necessity — that we are bound to expect, and, so far as is possible, to seek for the empirical condition of every member in the series of conditions — and that there is no sufficient reason to justify us in deducing any existence from a condition which lies out of and beyond the empirical series, or in regarding any existence as independent and self-subsistent; although this should not prevent us from recognizing the possibility of the whole series being based upon a being which is intelligible, and for this reason free from all empirical conditions.

But it has been far from my intention, in these remarks, to prove the existence of this unconditioned and necessary being, or even to evidence the possibility of a purely intelligible condition of the existence or all sensuous phenomena. As bounds were set to reason, to prevent it from leaving the guiding thread of empirical conditions and losing itself in transcendent theories which are incapable of concrete presentation; so it was my purpose, on the other band, to set bounds to the law of the purely empirical understanding, and to protest against any attempts on its part at deciding on the possibility of things, or declaring the existence of the intelligible to be impossible, merely on the ground that it is not available for the explanation and exposition of phenomena. It has been shown, at the same time, that the contingency of all the phenomena of nature and their empirical conditions is quite consistent with the arbitrary hypothesis of a necessary, although purely intelligible condition, that no real contradiction exists between them and that, consequently, both may be true. The existence of such an absolutely necessary being may be impossible; but this can never be demonstrated from the universal contingency and dependence of sensuous phenomena, nor from the principle which forbids us to discontinue the series at some member of it, or to seek for its cause in some sphere of existence beyond the world of nature. Reason goes its way in the empirical world, and follows, too, its peculiar path in the sphere of the transcendental.

The sensuous world contains nothing but phenomena, which are mere representations, and always sensuously conditioned; things in themselves are not, and cannot be, objects to us. It is not to be wondered at, therefore, that we are not justified in leaping from some member of an empirical series beyond the world of sense, as if empirical representations were things in themselves, existing apart from their transcendental ground in the human mind, and the cause of whose existence may be sought out of the empirical series. This would certainly be the case with contingent things; but it cannot be with mere representations of things, the contingency of which is itself merely a phenomenon and can relate to no other regress than that which determines phenomena, that is, the empirical. But to cogitate an intelligible ground of phenomena, as free, moreover, from the contingency of the latter, conflicts neither with the unlimited nature of the empirical regress, nor with the complete contingency of phenomena. And the demonstration of this was the only thing necessary for the solution of this apparent antinomy. For if the condition of every conditioned — as regards its existence — is sensuous, and for this reason a part of the same series, it must be itself conditioned, as was shown in the antithesis of the fourth antinomy. The embarrassments into which a reason, which postulates the unconditioned, necessarily falls, must, therefore, continue to exist; or the unconditioned must be placed in the sphere of the intelligible. In this way, its necessity does not require, nor does it even permit, the presence of an empirical condition: and it is, consequently, unconditionally necessary.

The empirical employment of reason is not affected by the assumption of a purely intelligible being; it continues its operations on the principle of the contingency of all phenomena, proceeding from empirical

conditions to still higher and higher conditions, themselves empirical. Just as little does this regulative principle exclude the assumption of an intelligible cause, when the question regards merely the pure employment of reason — in relation to ends or aims. For, in this case, an intelligible cause signifies merely the transcendental and to us unknown ground of the possibility of sensuous phenomena, and its existence, necessary and independent of all sensuous conditions, is not inconsistent with the contingency of phenomena, or with the unlimited possibility of regress which exists in the series of empirical conditions.

Concluding Remarks on the Antinomy of Pure Reason.

So long as the object of our rational conceptions is the totality of conditions in the world of phenomena, and the satisfaction, from this source, of the requirements of reason, so long are our ideas transcendental and cosmological. But when we set the unconditioned — which is the aim of all our inquiries — in a sphere which lies out of the world of sense and possible experience, our ideas become transcendent. They are then not merely serviceable towards the completion of the exercise of reason (which remains an idea, never executed, but always to be pursued); they detach themselves completely from experience and construct for themselves objects, the material of which has not been presented by experience, and the objective reality of which is not based upon the completion of the empirical series, but upon pure a priori conceptions. The intelligible object of these transcendent ideas may be conceded, as a transcendental object. But we cannot cogitate it as a thing determinable by certain distinct predicates relating to its internal nature, for it has no connection with empirical conceptions; nor are we justified in affirming the existence of any such object. It is, consequently, a mere product of the mind alone. Of all the cosmological ideas, however, it is that occasioning the fourth antinomy which compels us to venture upon this step. For the existence of phenomena, always conditioned and never self-subsistent, requires us to look for an object different from phenomena — an intelligible object, with which all contingency must cease. But, as we have allowed ourselves to assume the existence of a self-subsistent reality out of the field of experience, and are therefore obliged to regard phenomena as merely a contingent mode of representing intelligible objects employed by beings which are themselves intelligences — no other course remains for us than to follow analogy and employ the same mode in forming some conception of intelligible things, of which we have not the least knowledge, which nature taught us to use in the formation of empirical conceptions. Experience made us acquainted with the contingent. But we are at present engaged in the discussion of things which are not objects of experience; and must, therefore, deduce our knowledge of them from that which is necessary absolutely and in itself, that is, from pure conceptions. Hence the first step which we take out of the world of sense obliges us to begin our system of new cognition with the investigation of a necessary being, and to deduce from our conceptions of it all our conceptions of intelligible things. This we propose to attempt in the following chapter.

CHAPTER III. The Ideal of Pure Reason.

SECTION I. Of the Ideal in General.

We have seen that pure conceptions do not present objects to the mind, except under sensuous conditions; because the conditions of objective reality do not exist in these conceptions, which contain, in fact, nothing but the mere form of thought. They may, however, when applied to phenomena, be presented in concreto; for it is phenomena that present to them the materials for the formation of empirical conceptions, which are nothing more than concrete forms of the conceptions of the understanding. But ideas are still further removed from objective reality than categories; for no phenomenon can ever present them to the human mind in concreto. They contain a certain perfection, attainable by no possible empirical cognition; and they give to reason a systematic unity, to which the unity of experience attempts to approximate, but can never completely attain.

But still further removed than the idea from objective reality is the Ideal, by which term I understand the idea, not in concreto, but in individuo — as an individual thing, determinable or determined by the idea alone. The idea of humanity in its complete perfection supposes not only the advancement of all the powers and faculties, which constitute our conception of human nature, to a complete attainment of their final aims, but also everything which is requisite for the complete determination of the idea; for of all contradictory predicates, only one can conform with the idea of the perfect man. What I have termed an ideal was in Plato's philosophy an idea of the divine mind — an individual object present to its pure intuition, the most perfect of every kind of possible beings, and the archetype of all phenomenal existences.

Without rising to these speculative heights, we are bound to confess that human reason contains not only ideas, but ideals, which possess, not, like those of Plato, creative, but certainly practical power — as regulative principles, and form the basis of the perfectibility of certain actions. Moral conceptions are not perfectly pure conceptions of reason, because an empirical element — of pleasure or pain — lies at the foundation of them. In relation, however, to the principle, whereby reason sets bounds to a freedom which is in itself without law, and consequently when we attend merely to their form, they may be considered as pure conceptions of reason. Virtue and wisdom in their perfect purity are ideas. But the wise man of the Stoics is an ideal, that is to say, a human being existing only in thought and in complete conformity with the idea of wisdom. As the idea provides a rule, so the ideal serves as an archetype for the perfect and complete determination of the copy. Thus the conduct of this wise and divine man serves us as a standard of action, with which we may compare and judge ourselves, which may help us to reform ourselves, although the perfection it demands can never be attained by us. Although we cannot concede objective reality to these ideals, they are not to be considered as chimeras; on the contrary, they provide reason with a standard, which enables it to estimate, by comparison, the degree of incompleteness in the objects presented to it. But to aim at realizing the ideal in an example in the world of experience — to describe, for instance, the character of the perfectly wise man in a romance — is impracticable. Nay more, there is something absurd in the attempt; and the result must be little edifying, as the natural limitations, which are continually breaking in upon the perfection and completeness of the idea, destroy the illusion in the story and throw an air of suspicion even on what is good in the idea, which hence appears fictitious and unreal.

Such is the constitution of the ideal of reason, which is always based upon determinate conceptions, and serves as a rule and a model for limitation or of criticism. Very different is the nature of the ideals of the imagination. Of these it is impossible to present an intelligible conception; they are a kind of monogram, drawn according to no determinate rule, and forming rather a vague picture — the production of many diverse experiences — than a determinate image. Such are the ideals which painters and physiognomists profess to have in their minds, and which can serve neither as a model for production nor

as a standard for appreciation. They may be termed, though improperly, sensuous ideals, as they are declared to be models of certain possible empirical intuitions. They cannot, however, furnish rules or standards for explanation or examination.

In its ideals, reason aims at complete and perfect determination according to a priori rules; and hence it cogitates an object, which must be completely determinable in conformity with principles, although all empirical conditions are absent, and the conception of the object is on this account transcendent.

SECTION II. Of the Transcendental Ideal (Prototypon Trancendentale).

Every conception is, in relation to that which is not contained in it, undetermined and subject to the principle of determinability. This principle is that, of every two contradictorily opposed predicates, only one can belong to a conception. It is a purely logical principle, itself based upon the principle of contradiction; inasmuch as it makes complete abstraction of the content and attends merely to the logical form of the cognition.

But again, everything, as regards its possibility, is also subject to the principle of complete determination, according to which one of all the possible contradictory predicates of things must belong to it. This principle is not based merely upon that of contradiction; for, in addition to the relation between two contradictory predicates, it regards everything as standing in a relation to the sum of possibilities, as the sum total of all predicates of things, and, while presupposing this sum as an a priori condition, presents to the mind everything as receiving the possibility of its individual existence from the relation it bears to, and the share it possesses in, the aforesaid sum of possibilities.* The principle of complete determination relates the content and not to the logical form. It is the principle of the synthesis of all the predicates which are required to constitute the complete conception of a thing, and not a mere principle analytical representation, which enounces that one of two contradictory predicates must belong to a conception. It contains, moreover, a transcendental presupposition — that, namely, of the material for all possibility, which must contain a priori the data for this or that particular possibility.

[Footnote: Thus this principle declares everything to possess a relation to a common correlate — the sum-total of possibility, which, if discovered to exist in the idea of one individual thing, would establish the affinity of all possible things, from the identity of the ground of their complete determination. The determinability of every conception is subordinate to the universality (Allgemeinheit, universalitas) of the principle of excluded middle; the determination of a thing to the totality (Allheit, universitas) of all possible predicates.]

The proposition, everything which exists is completely determined, means not only that one of every pair of given contradictory attributes, but that one of all possible attributes, is always predicable of the thing; in it the predicates are not merely compared logically with each other, but the thing itself is transcendentally compared with the sum-total of all possible predicates. The proposition is equivalent to saying: “To attain to a complete knowledge of a thing, it is necessary to possess a knowledge of everything that is possible, and to determine it thereby in a positive or negative manner.” The conception of complete determination is consequently a conception which cannot be presented in its totality in concreto, and is therefore based upon an idea, which has its seat in the reason — the faculty which prescribes to the understanding the laws of its harmonious and perfect exercise.

Now, although this idea of the sum-total of all possibility, in so far as it forms the condition of the complete determination of everything, is itself undetermined in relation to the predicates which may constitute this sum-total, and we cogitate in it merely the sum-total of all possible predicates — we nevertheless find, upon closer examination, that this idea, as a primitive conception of the mind, excludes a large number of predicates — those deduced and those irreconcilable with others, and that it is evolved as a conception completely determined a priori. Thus it becomes the conception of an individual object, which is completely determined by and through the mere idea, and must consequently be termed an ideal of pure reason.

When we consider all possible predicates, not merely logically, but transcendentally, that is to say, with reference to the content which may be cogitated as existing in them a priori, we shall find that some indicate a being, others merely a non-being. The logical negation expressed in the word not does not properly belong to a conception, but only to the relation of one conception to another in a judgement, and is consequently quite insufficient to present to the mind the content of a conception. The expression not mortal does not indicate that a non-being is cogitated in the object; it does not concern the content at all. A transcendental negation, on the contrary, indicates non-being in itself, and is opposed to transcendental affirmation, the conception of which of itself expresses a being. Hence this affirmation indicates a reality, because in and through it objects are considered to be something — to be things; while the opposite negation, on the other band, indicates a mere want, or privation, or absence, and, where such negations alone are attached to a representation, the non-existence of anything corresponding to the representation.

Now a negation cannot be cogitated as determined, without cogitating at the same time the opposite affirmation. The man born blind has not the least notion of darkness, because he has none of light; the vagabond knows nothing of poverty, because he has never known what it is to be in comfort;* the ignorant man has no conception of his ignorance, because he has no conception of knowledge. All conceptions of negatives are accordingly derived or deduced conceptions; and realities contain the data, and, so to speak, the material or transcendental content of the possibility and complete determination of all things.

[Footnote: The investigations and calculations of astronomers have taught us much that is wonderful; but the most important lesson we have received from them is the discovery of the abyss of our ignorance in relation to the universe — an ignorance the magnitude of which reason, without the information thus derived, could never have conceived.

This discovery of our deficiencies must produce a great change in the determination of the aims of human reason.]

If, therefore, a transcendental substratum lies at the foundation of the complete determination of things — a substratum which is to form the fund from which all possible predicates of things are to be supplied, this substratum cannot be anything else than the idea of a sum-total of reality (omnitudo realitatis). In this view, negations are nothing but limitations — a term which could not, with propriety, be applied to them, if the unlimited (the all) did not form the true basis of our conception.

This conception of a sum-total of reality is the conception of a thing in itself, regarded as completely determined; and the conception of an ens realissimum is the conception of an individual being, inasmuch as it is determined by that predicate of all possible contradictory predicates, which indicates and belongs to being. It is, therefore, a transcendental ideal which forms the basis of the complete determination of everything that exists, and is the highest material condition of its possibility — a condition on which must rest the cogitation of all objects with respect to their content. Nay, more, this ideal is the only proper ideal of which the human mind is capable; because in this case alone a general conception of a thing is completely determined by and through itself, and cognized as the representation of an individuum.

The logical determination of a conception is based upon a disjunctive syllogism, the major of which contains the logical division of the extent of a general conception, the minor limits this extent to a certain part, while the conclusion determines the conception by this part. The general conception of a reality cannot be divided a priori, because, without the aid of experience, we cannot know any determinate kinds of reality, standing under the former as the genus. The transcendental principle of the complete determination of all things is therefore merely the representation of the sum-total of all reality; it is not a conception which is the genus of all predicates under itself, but one which comprehends them all within itself. The complete determination of a thing is consequently based upon the limitation of this total of reality, so much being predicated of the thing, while all that remains over is excluded — a procedure

which is in exact agreement with that of the disjunctive syllogism and the determination of the objects in the conclusion by one of the members of the division. It follows that reason, in laying the transcendental ideal at the foundation of its determination of all possible things, takes a course in exact analogy with that which it pursues in disjunctive syllogisms — a proposition which formed the basis of the systematic division of all transcendental ideas, according to which they are produced in complete parallelism with the three modes of syllogistic reasoning employed by the human mind.

It is self-evident that reason, in cogitating the necessary complete determination of things, does not presuppose the existence of a being corresponding to its ideal, but merely the idea of the ideal — for the purpose of deducing from the unconditional totality of complete determination, The ideal is therefore the prototype of all things, which, as defective copies (ectypa), receive from it the material of their possibility, and approximate to it more or less, though it is impossible that they can ever attain to its perfection.

The possibility of things must therefore be regarded as derived — except that of the thing which contains in itself all reality, which must be considered to be primitive and original. For all negations — and they are the only predicates by means of which all other things can be distinguished from the ens realissimum — are mere limitations of a greater and a higher — nay, the highest reality; and they consequently presuppose this reality, and are, as regards their content, derived from it. The manifold nature of things is only an infinitely various mode of limiting the conception of the highest reality, which is their common substratum; just as all figures are possible only as different modes of limiting infinite space. The object of the ideal of reason — an object existing only in reason itself — is also termed the primal being (ens originarium); as having no existence superior to him, the supreme being (ens summum); and as being the condition of all other beings, which rank under it, the being of all beings (ens entium). But none of these terms indicate the objective relation of an actually existing object to other things, but merely that of an idea to conceptions; and all our investigations into this subject still leave us in perfect uncertainty with regard to the existence of this being.

A primal being cannot be said to consist of many other beings with an existence which is derivative, for the latter presuppose the former, and therefore cannot be constitutive parts of it. It follows that the ideal of the primal being must be cogitated as simple.

The deduction of the possibility of all other things from this primal being cannot, strictly speaking, be considered as a limitation, or as a kind of division of its reality; for this would be regarding the primal being as a mere aggregate — which has been shown to be impossible, although it was so represented in our first rough sketch. The highest reality must be regarded rather as the ground than as the sum-total of the possibility of all things, and the manifold nature of things be based, not upon the limitation of the primal being itself, but upon the complete series of effects which flow from it. And thus all our powers of sense, as well as all phenomenal reality, phenomenal reality, may be with propriety regarded as belonging to this series of effects, while they could not have formed parts of the idea, considered as an aggregate. Pursuing this track, and hypostatizing this idea, we shall find ourselves authorized to determine our notion of the Supreme Being by means of the mere conception of a highest reality, as one, simple, all-sufficient, eternal, and so on — in one word, to determine it in its unconditioned completeness by the aid of every possible predicate. The conception of such a being is the conception of God in its transcendental sense, and thus the ideal of pure reason is the object-matter of a transcendental theology.

But, by such an employment of the transcendental idea, we should be over stepping the limits of its validity and purpose. For reason placed it, as the conception of all reality, at the basis of the complete determination of things, without requiring that this conception be regarded as the conception of an objective existence. Such an existence would be purely fictitious, and the hypostatizing of the content of the idea into an ideal, as an individual being, is a step perfectly unauthorized. Nay, more, we are not even called upon to assume the possibility of such an hypothesis, as none of the deductions drawn from such an

ideal would affect the complete determination of things in general — for the sake of which alone is the idea necessary.

It is not sufficient to circumscribe the procedure and the dialectic of reason; we must also endeavour to discover the sources of this dialectic, that we may have it in our power to give a rational explanation of this illusion, as a phenomenon of the human mind. For the ideal, of which we are at present speaking, is based, not upon an arbitrary, but upon a natural, idea. The question hence arises: How happens it that reason regards the possibility of all things as deduced from a single possibility, that, to wit, of the highest reality, and presupposes this as existing in an individual and primal being?

The answer is ready; it is at once presented by the procedure of transcendental analytic. The possibility of sensuous objects is a relation of these objects to thought, in which something (the empirical form) may be cogitated a priori; while that which constitutes the matter — the reality of the phenomenon (that element which corresponds to sensation) — must be given from without, as otherwise it could not even be cogitated by, nor could its possibility be presentable to the mind. Now, a sensuous object is completely determined, when it has been compared with all phenomenal predicates, and represented by means of these either positively or negatively. But, as that which constitutes the thing itself — the real in a phenomenon, must be given, and that, in which the real of all phenomena is given, is experience, one, sole, and all-embracing — the material of the possibility of all sensuous objects must be presupposed as given in a whole, and it is upon the limitation of this whole that the possibility of all empirical objects, their distinction from each other and their complete determination, are based. Now, no other objects are presented to us besides sensuous objects, and these can be given only in connection with a possible experience; it follows that a thing is not an object to us, unless it presupposes the whole or sum-total of empirical reality as the condition of its possibility. Now, a natural illusion leads us to consider this principle, which is valid only of sensuous objects, as valid with regard to things in general. And thus we are induced to hold the empirical principle of our conceptions of the possibility of things, as phenomena, by leaving out this limitative condition, to be a transcendental principle of the possibility of things in general.

We proceed afterwards to hypostatize this idea of the sum-total of all reality, by changing the distributive unity of the empirical exercise of the understanding into the collective unity of an empirical whole — a dialectical illusion, and by cogitating this whole or sum of experience as an individual thing, containing in itself all empirical reality. This individual thing or being is then, by means of the above-mentioned transcendental subreption, substituted for our notion of a thing which stands at the head of the possibility of all things, the real conditions of whose complete determination it presents.*

[Footnote: This ideal of the ens realissimum — although merely a mental representation — is first objectivized, that is, has an objective existence attributed to it, then hypostatized, and finally, by the natural progress of reason to the completion of unity, personified, as we shall show presently. For the regulative unity of experience is not based upon phenomena themselves, but upon the connection of the variety of phenomena by the understanding in a consciousness, and thus the unity of the supreme reality and the complete determinability of all things, seem to reside in a supreme understanding, and, consequently, in a conscious intelligence.]

SECTION III. Of the Arguments employed by Speculative Reason in Proof of the Existence of a Supreme Being.

Notwithstanding the pressing necessity which reason feels, to form some presupposition that shall serve the understanding as a proper basis for the complete determination of its conceptions, the idealistic and factitious nature of such a presupposition is too evident to allow reason for a moment to persuade itself into a belief of the objective existence of a mere creation of its own thought. But there are other considerations which compel reason to seek out some resting place in the regress from the conditioned to the unconditioned, which is not given as an actual existence from the mere conception of it, although it

alone can give completeness to the series of conditions. And this is the natural course of every human reason, even of the most uneducated, although the path at first entered it does not always continue to follow. It does not begin from conceptions, but from common experience, and requires a basis in actual existence. But this basis is insecure, unless it rests upon the immovable rock of the absolutely necessary. And this foundation is itself unworthy of trust, if it leave under and above it empty space, if it do not fill all, and leave no room for a why or a wherefore, if it be not, in one word, infinite in its reality.

If we admit the existence of some one thing, whatever it may be, we must also admit that there is something which exists necessarily. For what is contingent exists only under the condition of some other thing, which is its cause; and from this we must go on to conclude the existence of a cause which is not contingent, and which consequently exists necessarily and unconditionally. Such is the argument by which reason justifies its advances towards a primal being.

Now reason looks round for the conception of a being that may be admitted, without inconsistency, to be worthy of the attribute of absolute necessity, not for the purpose of inferring a priori, from the conception of such a being, its objective existence (for if reason allowed itself to take this course, it would not require a basis in given and actual existence, but merely the support of pure conceptions), but for the purpose of discovering, among all our conceptions of possible things, that conception which possesses no element inconsistent with the idea of absolute necessity. For that there must be some absolutely necessary existence, it regards as a truth already established. Now, if it can remove every existence incapable of supporting the attribute of absolute necessity, excepting one — this must be the absolutely necessary being, whether its necessity is comprehensible by us, that is, deducible from the conception of it alone, or not.

Now that, the conception of which contains a therefore to every wherefore, which is not defective in any respect whatever, which is all-sufficient as a condition, seems to be the being of which we can justly predicate absolute necessity — for this reason, that, possessing the conditions of all that is possible, it does not and cannot itself require any condition. And thus it satisfies, in one respect at least, the requirements of the conception of absolute necessity. In this view, it is superior to all other conceptions, which, as deficient and incomplete, do not possess the characteristic of independence of all higher conditions. It is true that we cannot infer from this that what does not contain in itself the supreme and complete condition — the condition of all other things — must possess only a conditioned existence; but as little can we assert the contrary, for this supposed being does not possess the only characteristic which can enable reason to cognize by means of an a priori conception the unconditioned and necessary nature of its existence.

The conception of an ens realissimum is that which best agrees with the conception of an unconditioned and necessary being. The former conception does not satisfy all the requirements of the latter; but we have no choice, we are obliged to adhere to it, for we find that we cannot do without the existence of a necessary being; and even although we admit it, we find it out of our power to discover in the whole sphere of possibility any being that can advance well-grounded claims to such a distinction.

The following is, therefore, the natural course of human reason. It begins by persuading itself of the existence of some necessary being. In this being it recognizes the characteristics of unconditioned existence. It then seeks the conception of that which is independent of all conditions, and finds it in that which is itself the sufficient condition of all other things — in other words, in that which contains all reality. But the unlimited all is an absolute unity, and is conceived by the mind as a being one and supreme; and thus reason concludes that the Supreme Being, as the primal basis of all things, possesses an existence which is absolutely necessary.

This conception must be regarded as in some degree satisfactory, if we admit the existence of a necessary being, and consider that there exists a necessity for a definite and final answer to these questions. In such a case, we cannot make a better choice, or rather we have no choice at all, but feel

ourselves obliged to declare in favour of the absolute unity of complete reality, as the highest source of the possibility of things. But if there exists no motive for coming to a definite conclusion, and we may leave the question unanswered till we have fully weighed both sides — in other words, when we are merely called upon to decide how much we happen to know about the question, and how much we merely flatter ourselves that we know — the above conclusion does not appear to be so great advantage, but, on the contrary, seems defective in the grounds upon which it is supported.

For, admitting the truth of all that has been said, that, namely, the inference from a given existence (my own, for example) to the existence of an unconditioned and necessary being is valid and unassailable; that, in the second place, we must consider a being which contains all reality, and consequently all the conditions of other things, to be absolutely unconditioned; and admitting too, that we have thus discovered the conception of a thing to which may be attributed, without inconsistency, absolute necessity — it does not follow from all this that the conception of a limited being, in which the supreme reality does not reside, is therefore incompatible with the idea of absolute necessity. For, although I do not discover the element of the unconditioned in the conception of such a being — an element which is manifestly existent in the sum-total of all conditions — I am not entitled to conclude that its existence is therefore conditioned; just as I am not entitled to affirm, in a hypothetical syllogism, that where a certain condition does not exist (in the present, completeness, as far as pure conceptions are concerned), the conditioned does not exist either. On the contrary, we are free to consider all limited beings as likewise unconditionally necessary, although we are unable to infer this from the general conception which we have of them. Thus conducted, this argument is incapable of giving us the least notion of the properties of a necessary being, and must be in every respect without result.

This argument continues, however, to possess a weight and an authority, which, in spite of its objective insufficiency, it has never been divested of. For, granting that certain responsibilities lie upon us, which, as based on the ideas of reason, deserve to be respected and submitted to, although they are incapable of a real or practical application to our nature, or, in other words, would be responsibilities without motives, except upon the supposition of a Supreme Being to give effect and influence to the practical laws: in such a case we should be bound to obey our conceptions, which, although objectively insufficient, do, according to the standard of reason, preponderate over and are superior to any claims that may be advanced from any other quarter. The equilibrium of doubt would in this case be destroyed by a practical addition; indeed, Reason would be compelled to condemn herself, if she refused to comply with the demands of the judgement, no superior to which we know — however defective her understanding of the grounds of these demands might be.

This argument, although in fact transcendental, inasmuch as it rests upon the intrinsic insufficiency of the contingent, is so simple and natural, that the commonest understanding can appreciate its value. We see things around us change, arise, and pass away; they, or their condition, must therefore have a cause. The same demand must again be made of the cause itself — as a datum of experience. Now it is natural that we should place the highest causality just where we place supreme causality, in that being, which contains the conditions of all possible effects, and the conception of which is so simple as that of an all-embracing reality. This highest cause, then, we regard as absolutely necessary, because we find it absolutely necessary to rise to it, and do not discover any reason for proceeding beyond it. Thus, among all nations, through the darkest polytheism glimmer some faint sparks of monotheism, to which these idolaters have been led, not from reflection and profound thought, but by the study and natural progress of the common understanding.

There are only three modes of proving the existence of a Deity, on the grounds of speculative reason.

All the paths conducting to this end begin either from determinate experience and the peculiar constitution of the world of sense, and rise, according to the laws of causality, from it to the highest cause existing apart from the world — or from a purely indeterminate experience, that is, some empirical

existence — or abstraction is made of all experience, and the existence of a supreme cause is concluded from a priori conceptions alone. The first is the physico-theological argument, the second the cosmological, the third the ontological. More there are not, and more there cannot be.

I shall show it is as unsuccessful on the one path — the empirical — as on the other — the transcendental, and that it stretches its wings in vain, to soar beyond the world of sense by the mere might of speculative thought. As regards the order in which we must discuss those arguments, it will be exactly the reverse of that in which reason, in the progress of its development, attains to them — the order in which they are placed above. For it will be made manifest to the reader that, although experience presents the occasion and the starting-point, it is the transcendental idea of reason which guides it in its pilgrimage and is the goal of all its struggles. I shall therefore begin with an examination of the transcendental argument, and afterwards inquire what additional strength has accrued to this mode of proof from the addition of the empirical element.

SECTION IV. Of the Impossibility of an Ontological Proof of the Existence of God.

It is evident from what has been said that the conception of an absolutely necessary being is a mere idea, the objective reality of which is far from being established by the mere fact that it is a need of reason. On the contrary, this idea serves merely to indicate a certain unattainable perfection, and rather limits the operations than, by the presentation of new objects, extends the sphere of the understanding. But a strange anomaly meets us at the very threshold; for the inference from a given existence in general to an absolutely necessary existence seems to be correct and unavoidable, while the conditions of the understanding refuse to aid us in forming any conception of such a being.

Philosophers have always talked of an absolutely necessary being, and have nevertheless declined to take the trouble of conceiving whether — and how — a being of this nature is even cogitable, not to mention that its existence is actually demonstrable. A verbal definition of the conception is certainly easy enough: it is something the non-existence of which is impossible. But does this definition throw any light upon the conditions which render it impossible to cogitate the non-existence of a thing — conditions which we wish to ascertain, that we may discover whether we think anything in the conception of such a being or not? For the mere fact that I throw away, by means of the word unconditioned, all the conditions which the understanding habitually requires in order to regard anything as necessary, is very far from making clear whether by means of the conception of the unconditionally necessary I think of something, or really of nothing at all.

Nay, more, this chance-conception, now become so current, many have endeavoured to explain by examples which seemed to render any inquiries regarding its intelligibility quite needless. Every geometrical proposition — a triangle has three angles — it was said, is absolutely necessary; and thus people talked of an object which lay out of the sphere of our understanding as if it were perfectly plain what the conception of such a being meant.

All the examples adduced have been drawn, without exception, from judgements, and not from things. But the unconditioned necessity of a judgement does not form the absolute necessity of a thing. On the contrary, the absolute necessity of a judgement is only a conditioned necessity of a thing, or of the predicate in a judgement. The proposition above-mentioned does not enounce that three angles necessarily exist, but, upon condition that a triangle exists, three angles must necessarily exist — in it. And thus this logical necessity has been the source of the greatest delusions. Having formed an a priori conception of a thing, the content of which was made to embrace existence, we believed ourselves safe in concluding that, because existence belongs necessarily to the object of the conception (that is, under the condition of my positing this thing as given), the existence of the thing is also posited necessarily, and that it is therefore absolutely necessary — merely because its existence has been cogitated in the conception.

If, in an identical judgement, I annihilate the predicate in thought, and retain the subject, a contradiction is the result; and hence I say, the former belongs necessarily to the latter. But if I suppress both subject and

predicate in thought, no contradiction arises; for there is nothing at all, and therefore no means of forming a contradiction. To suppose the existence of a triangle and not that of its three angles, is self-contradictory; but to suppose the non-existence of both triangle and angles is perfectly admissible. And so is it with the conception of an absolutely necessary being. Annihilate its existence in thought, and you annihilate the thing itself with all its predicates; how then can there be any room for contradiction? Externally, there is nothing to give rise to a contradiction, for a thing cannot be necessary externally; nor internally, for, by the annihilation or suppression of the thing itself, its internal properties are also annihilated. God is omnipotent — that is a necessary judgement. His omnipotence cannot be denied, if the existence of a Deity is posited — the existence, that is, of an infinite being, the two conceptions being identical. But when you say, God does not exist, neither omnipotence nor any other predicate is affirmed; they must all disappear with the subject, and in this judgement there cannot exist the least self-contradiction.

You have thus seen that when the predicate of a judgement is annihilated in thought along with the subject, no internal contradiction can arise, be the predicate what it may. There is no possibility of evading the conclusion — you find yourselves compelled to declare: There are certain subjects which cannot be annihilated in thought. But this is nothing more than saying: There exist subjects which are absolutely necessary — the very hypothesis which you are called upon to establish. For I find myself unable to form the slightest conception of a thing which when annihilated in thought with all its predicates, leaves behind a contradiction; and contradiction is the only criterion of impossibility in the sphere of pure a priori conceptions.

Against these general considerations, the justice of which no one can dispute, one argument is adduced, which is regarded as furnishing a satisfactory demonstration from the fact. It is affirmed that there is one and only one conception, in which the non-being or annihilation of the object is self-contradictory, and this is the conception of an ens realissimum. It possesses, you say, all reality, and you feel yourselves justified in admitting the possibility of such a being. (This I am willing to grant for the present, although the existence of a conception which is not self-contradictory is far from being sufficient to prove the possibility of an object.)* Now the notion of all reality embraces in it that of existence; the notion of existence lies, therefore, in the conception of this possible thing. If this thing is annihilated in thought, the internal possibility of the thing is also annihilated, which is self-contradictory.

[Footnote: A conception is always possible, if it is not self-contradictory. This is the logical criterion of possibility, distinguishing the object of such a conception from the nihil negativum.

But it may be, notwithstanding, an empty conception, unless the objective reality of this synthesis, but which it is generated, is demonstrated; and a proof of this kind must be based upon principles of possible experience, and not upon the principle of analysis or contradiction. This remark may be serviceable as a warning against concluding, from the possibility of a conception — which is logical — the possibility of a thing — which is real.]

I answer: It is absurd to introduce — under whatever term disguised — into the conception of a thing, which is to be cogitated solely in reference to its possibility, the conception of its existence. If this is admitted, you will have apparently gained the day, but in reality have enounced nothing but a mere tautology. I ask, is the proposition, this or that thing (which I am admitting to be possible) exists, an analytical or a synthetical proposition? If the former, there is no addition made to the subject of your thought by the affirmation of its existence; but then the conception in your minds is identical with the thing itself, or you have supposed the existence of a thing to be possible, and then inferred its existence from its internal possibility — which is but a miserable tautology. The word reality in the conception of the thing, and the word existence in the conception of the predicate, will not help you out of the difficulty. For,

supposing you were to term all positing of a thing reality, you have thereby posited the thing with all its predicates in the conception of the subject and assumed its actual existence, and this you merely repeat in the predicate. But if you confess, as every reasonable person must, that every existential proposition is synthetical, how can it be maintained that the predicate of existence cannot be denied without contradiction? — a property which is the characteristic of analytical propositions, alone.

I should have a reasonable hope of putting an end for ever to this sophistical mode of argumentation, by a strict definition of the conception of existence, did not my own experience teach me that the illusion arising from our confounding a logical with a real predicate (a predicate which aids in the determination of a thing) resists almost all the endeavours of explanation and illustration. A logical predicate may be what you please, even the subject may be predicated of itself; for logic pays no regard to the content of a judgement. But the determination of a conception is a predicate, which adds to and enlarges the conception. It must not, therefore, be contained in the conception.

Being is evidently not a real predicate, that is, a conception of something which is added to the conception of some other thing. It is merely the positing of a thing, or of certain determinations in it. Logically, it is merely the copula of a judgement. The proposition, God is omnipotent, contains two conceptions, which have a certain object or content; the word is, is no additional predicate — it merely indicates the relation of the predicate to the subject. Now, if I take the subject (God) with all its predicates (omnipotence being one), and say: God is, or, There is a God, I add no new predicate to the conception of God, I merely posit or affirm the existence of the subject with all its predicates — I posit the object in relation to my conception. The content of both is the same; and there is no addition made to the conception, which expresses merely the possibility of the object, by my cogitating the object — in the expression, it is — as absolutely given or existing. Thus the real contains no more than the possible. A hundred real dollars contain no more than a hundred possible dollars. For, as the latter indicate the conception, and the former the object, on the supposition that the content of the former was greater than that of the latter, my conception would not be an expression of the whole object, and would consequently be an inadequate conception of it. But in reckoning my wealth there may be said to be more in a hundred real dollars than in a hundred possible dollars — that is, in the mere conception of them. For the real object — the dollars — is not analytically contained in my conception, but forms a synthetical addition to my conception (which is merely a determination of my mental state), although this objective reality — this existence — apart from my conceptions, does not in the least degree increase the aforesaid hundred dollars.

By whatever and by whatever number of predicates — even to the complete determination of it — I may cogitate a thing, I do not in the least augment the object of my conception by the addition of the statement: This thing exists. Otherwise, not exactly the same, but something more than what was cogitated in my conception, would exist, and I could not affirm that the exact object of my conception had real existence. If I cogitate a thing as containing all modes of reality except one, the mode of reality which is absent is not added to the conception of the thing by the affirmation that the thing exists; on the contrary, the thing exists — if it exist at all — with the same defect as that cogitated in its conception; otherwise not that which was cogitated, but something different, exists. Now, if I cogitate a being as the highest reality, without defect or imperfection, the question still remains — whether this being exists or not? For, although no element is wanting in the possible real content of my conception, there is a defect in its relation to my mental state, that is, I am ignorant whether the cognition of the object indicated by the conception is possible a posteriori. And here the cause of the present difficulty becomes apparent. If the question regarded an object of sense merely, it would be impossible for me to confound the conception with the existence of a thing. For the conception merely enables me to cogitate an object as according with the general conditions of experience; while the existence of the object permits me to cogitate it as contained in the sphere of actual experience. At the same time, this connection with the world of

experience does not in the least augment the conception, although a possible perception has been added to the experience of the mind. But if we cogitate existence by the pure category alone, it is not to be wondered at, that we should find ourselves unable to present any criterion sufficient to distinguish it from mere possibility.

Whatever be the content of our conception of an object, it is necessary to go beyond it, if we wish to predicate existence of the object. In the case of sensuous objects, this is attained by their connection according to empirical laws with some one of my perceptions; but there is no means of cognizing the existence of objects of pure thought, because it must be cognized completely a priori. But all our knowledge of existence (be it immediately by perception, or by inferences connecting some object with a perception) belongs entirely to the sphere of experience — which is in perfect unity with itself; and although an existence out of this sphere cannot be absolutely declared to be impossible, it is a hypothesis the truth of which we have no means of ascertaining.

The notion of a Supreme Being is in many respects a highly useful idea; but for the very reason that it is an idea, it is incapable of enlarging our cognition with regard to the existence of things. It is not even sufficient to instruct us as to the possibility of a being which we do not know to exist. The analytical criterion of possibility, which consists in the absence of contradiction in propositions, cannot be denied it. But the connection of real properties in a thing is a synthesis of the possibility of which an a priori judgement cannot be formed, because these realities are not presented to us specifically; and even if this were to happen, a judgement would still be impossible, because the criterion of the possibility of synthetical cognitions must be sought for in the world of experience, to which the object of an idea cannot belong. And thus the celebrated Leibnitz has utterly failed in his attempt to establish upon a priori grounds the possibility of this sublime ideal being.

The celebrated ontological or Cartesian argument for the existence of a Supreme Being is therefore insufficient; and we may as well hope to increase our stock of knowledge by the aid of mere ideas, as the merchant to augment his wealth by the addition of noughts to his cash account.

SECTION V. Of the Impossibility of a Cosmological Proof of the Existence of God.

It was by no means a natural course of proceeding, but, on the contrary, an invention entirely due to the subtlety of the schools, to attempt to draw from a mere idea a proof of the existence of an object corresponding to it. Such a course would never have been pursued, were it not for that need of reason which requires it to suppose the existence of a necessary being as a basis for the empirical regress, and that, as this necessity must be unconditioned and a priori, reason is bound to discover a conception which shall satisfy, if possible, this requirement, and enable us to attain to the a priori cognition of such a being. This conception was thought to be found in the idea of an ens realissimum, and thus this idea was employed for the attainment of a better defined knowledge of a necessary being, of the existence of which we were convinced, or persuaded, on other grounds. Thus reason was seduced from her natural courage; and, instead of concluding with the conception of an ens realissimum, an attempt was made to begin with it, for the purpose of inferring from it that idea of a necessary existence which it was in fact called in to complete. Thus arose that unfortunate ontological argument, which neither satisfies the healthy common sense of humanity, nor sustains the scientific examination of the philosopher.

The cosmological proof, which we are about to examine, retains the connection between absolute necessity and the highest reality; but, instead of reasoning from this highest reality to a necessary existence, like the preceding argument, it concludes from the given unconditioned necessity of some being its unlimited reality. The track it pursues, whether rational or sophistical, is at least natural, and not only goes far to persuade the common understanding, but shows itself deserving of respect from the speculative intellect; while it contains, at the same time, the outlines of all the arguments employed in natural theology — arguments which always have been, and still will be, in use and authority. These, however adorned, and hid under whatever embellishments of rhetoric and sentiment, are at bottom identical with the

arguments we are at present to discuss. This proof, termed by Leibnitz the argumentum a contingentia mundi, I shall now lay before the reader, and subject to a strict examination.

It is framed in the following manner: If something exists, an absolutely necessary being must likewise exist. Now I, at least, exist. Consequently, there exists an absolutely necessary being. The minor contains an experience, the major reasons from a general experience to the existence of a necessary being.* Thus this argument really begins at experience, and is not completely a priori, or ontological. The object of all possible experience being the world, it is called the cosmological proof. It contains no reference to any peculiar property of sensuous objects, by which this world of sense might be distinguished from other possible worlds; and in this respect it differs from the physico-theological proof, which is based upon the consideration of the peculiar constitution of our sensuous world.

[Footnote: This inference is too well known to require more detailed discussion. It is based upon the spurious transcendental law of causality, that everything which is contingent has a cause, which, if itself contingent, must also have a cause; and so on, till the series of subordinated causes must end with an absolutely necessary cause, without which it would not possess completeness.]

The proof proceeds thus: A necessary being can be determined only in one way, that is, it can be determined by only one of all possible opposed predicates; consequently, it must be completely determined in and by its conception. But there is only a single conception of a thing possible, which completely determines the thing a priori: that is, the conception of the ens realissimum. It follows that the conception of the ens realissimum is the only conception by and in which we can cogitate a necessary being. Consequently, a Supreme Being necessarily exists.

In this cosmological argument are assembled so many sophistical propositions that speculative reason seems to have exerted in it all her dialectical skill to produce a transcendental illusion of the most extreme character. We shall postpone an investigation of this argument for the present, and confine ourselves to exposing the stratagem by which it imposes upon us an old argument in a new dress, and appeals to the agreement of two witnesses, the one with the credentials of pure reason, and the other with those of empiricism; while, in fact, it is only the former who has changed his dress and voice, for the purpose of passing himself off for an additional witness. That it may possess a secure foundation, it bases its conclusions upon experience, and thus appears to be completely distinct from the ontological argument, which places its confidence entirely in pure a priori conceptions. But this experience merely aids reason in making one step — to the existence of a necessary being. What the properties of this being are cannot be learned from experience; and therefore reason abandons it altogether, and pursues its inquiries in the sphere of pure conception, for the purpose of discovering what the properties of an absolutely necessary being ought to be, that is, what among all possible things contain the conditions (requisita) of absolute necessity. Reason believes that it has discovered these requisites in the conception of an ens realissimum — and in it alone, and hence concludes: The ens realissimum is an absolutely necessary being. But it is evident that reason has here presupposed that the conception of an ens realissimum is perfectly adequate to the conception of a being of absolute necessity, that is, that we may infer the existence of the latter from that of the former — a proposition which formed the basis of the ontological argument, and which is now employed in the support of the cosmological argument, contrary to the wish and professions of its inventors. For the existence of an absolutely necessary being is given in conceptions alone. But if I say: "The conception of the ens realissimum is a conception of this kind, and in fact the only conception which is adequate to our idea of a necessary being," I am obliged to admit, that the latter may be inferred from the former. Thus it is properly the ontological argument which figures in the cosmological, and constitutes the whole strength of the latter; while the spurious basis of experience has been of no further use than to conduct us to the conception of absolute necessity, being utterly insufficient to demonstrate the presence of this attribute in any determinate existence or thing. For when we propose to ourselves an aim of this

character, we must abandon the sphere of experience, and rise to that of pure conceptions, which we examine with the purpose of discovering whether any one contains the conditions of the possibility of an absolutely necessary being. But if the possibility of such a being is thus demonstrated, its existence is also proved; for we may then assert that, of all possible beings there is one which possesses the attribute of necessity — in other words, this being possesses an absolutely necessary existence.

All illusions in an argument are more easily detected when they are presented in the formal manner employed by the schools, which we now proceed to do.

If the proposition: "Every absolutely necessary being is likewise an ens realissimum," is correct (and it is this which constitutes the nervus probandi of the cosmological argument), it must, like all affirmative judgements, be capable of conversion — the conversio per accidens, at least. It follows, then, that some entia realissima are absolutely necessary beings. But no ens realissimum is in any respect different from another, and what is valid of some is valid of all. In this present case, therefore, I may employ simple conversion, and say: "Every ens realissimum is a necessary being." But as this proposition is determined a priori by the conceptions contained in it, the mere conception of an ens realissimum must possess the additional attribute of absolute necessity. But this is exactly what was maintained in the ontological argument, and not recognized by the cosmological, although it formed the real ground of its disguised and illusory reasoning.

Thus the second mode employed by speculative reason of demonstrating the existence of a Supreme Being, is not only, like the first, illusory and inadequate, but possesses the additional blemish of an ignoratio elenchi — professing to conduct us by a new road to the desired goal, but bringing us back, after a short circuit, to the old path which we had deserted at its call.

I mentioned above that this cosmological argument contains a perfect nest of dialectical assumptions, which transcendental criticism does not find it difficult to expose and to dissipate. I shall merely enumerate these, leaving it to the reader, who must by this time be well practised in such matters, to investigate the fallacies residing therein.

The following fallacies, for example, are discoverable in this mode of proof: 1. The transcendental principle: "Everything that is contingent must have a cause" — a principle without significance, except in the sensuous world. For the purely intellectual conception of the contingent cannot produce any synthetical proposition, like that of causality, which is itself without significance or distinguishing characteristic except in the phenomenal world. But in the present case it is employed to help us beyond the limits of its sphere. 2. "From the impossibility of an infinite ascending series of causes in the world of sense a first cause is inferred"; a conclusion which the principles of the employment of reason do not justify even in the sphere of experience, and still less when an attempt is made to pass the limits of this sphere. 3. Reason allows itself to be satisfied upon insufficient grounds, with regard to the completion of this series. It removes all conditions (without which, however, no conception of Necessity can take place); and, as after this it is beyond our power to form any other conceptions, it accepts this as a completion of the conception it wishes to form of the series. 4. The logical possibility of a conception of the total of reality (the criterion of this possibility being the absence of contradiction) is confounded with the transcendental, which requires a principle of the practicability of such a synthesis — a principle which again refers us to the world of experience. And so on.

The aim of the cosmological argument is to avoid the necessity of proving the existence of a necessary being priori from mere conceptions — a proof which must be ontological, and of which we feel ourselves quite incapable. With this purpose, we reason from an actual existence — an experience in general, to an absolutely necessary condition of that existence. It is in this case unnecessary to demonstrate its possibility. For after having proved that it exists, the question regarding its possibility is superfluous. Now, when we wish to define more strictly the nature of this necessary being, we do not look out for some being the conception of which would enable us to comprehend the necessity of its being — for if we

could do this, an empirical presupposition would be unnecessary; no, we try to discover merely the negative condition (conditio sine qua non), without which a being would not be absolutely necessary. Now this would be perfectly admissible in every sort of reasoning, from a consequence to its principle; but in the present case it unfortunately happens that the condition of absolute necessity can be discovered in but a single being, the conception of which must consequently contain all that is requisite for demonstrating the presence of absolute necessity, and thus entitle me to infer this absolute necessity a priori. That is, it must be possible to reason conversely, and say: The thing, to which the conception of the highest reality belongs, is absolutely necessary. But if I cannot reason thus — and I cannot, unless I believe in the sufficiency of the ontological argument — I find insurmountable obstacles in my new path, and am really no farther than the point from which I set out. The conception of a Supreme Being satisfies all questions a priori regarding the internal determinations of a thing, and is for this reason an ideal without equal or parallel, the general conception of it indicating it as at the same time an ens individuum among all possible things. But the conception does not satisfy the question regarding its existence — which was the purpose of all our inquiries; and, although the existence of a necessary being were admitted, we should find it impossible to answer the question: What of all things in the world must be regarded as such?

It is certainly allowable to admit the existence of an all-sufficient being — a cause of all possible effects — for the purpose of enabling reason to introduce unity into its mode and grounds of explanation with regard to phenomena. But to assert that such a being necessarily exists, is no longer the modest enunciation of an admissible hypothesis, but the boldest declaration of an apodeictic certainty; for the cognition of that which is absolutely necessary must itself possess that character.

The aim of the transcendental ideal formed by the mind is either to discover a conception which shall harmonize with the idea of absolute necessity, or a conception which shall contain that idea. If the one is possible, so is the other; for reason recognizes that alone as absolutely necessary which is necessary from its conception. But both attempts are equally beyond our power — we find it impossible to satisfy the understanding upon this point, and as impossible to induce it to remain at rest in relation to this incapacity.

Unconditioned necessity, which, as the ultimate support and stay of all existing things, is an indispensable requirement of the mind, is an abyss on the verge of which human reason trembles in dismay. Even the idea of eternity, terrible and sublime as it is, as depicted by Haller, does not produce upon the mental vision such a feeling of awe and terror; for, although it measures the duration of things, it does not support them. We cannot bear, nor can we rid ourselves of the thought that a being, which we regard as the greatest of all possible existences, should say to himself: I am from eternity to eternity; beside me there is nothing, except that which exists by my will; whence then am I? Here all sinks away from under us; and the greatest, as the smallest, perfection, hovers without stay or footing in presence of the speculative reason, which finds it as easy to part with the one as with the other.

Many physical powers, which evidence their existence by their effects, are perfectly inscrutable in their nature; they elude all our powers of observation. The transcendental object which forms the basis of phenomena, and, in connection with it, the reason why our sensibility possesses this rather than that particular kind of conditions, are and must ever remain hidden from our mental vision; the fact is there, the reason of the fact we cannot see. But an ideal of pure reason cannot be termed mysterious or inscrutable, because the only credential of its reality is the need of it felt by reason, for the purpose of giving completeness to the world of synthetical unity. An ideal is not even given as a cogitable object, and therefore cannot be inscrutable; on the contrary, it must, as a mere idea, be based on the constitution of reason itself, and on this account must be capable of explanation and solution. For the very essence of reason consists in its ability to give an account, of all our conceptions, opinions, and assertions — upon objective, or, when they happen to be illusory and fallacious, upon subjective grounds.

Detection and Explanation of the Dialectical Illusion in all Transcendental Arguments for the Existence

of a Necessary Being.

Both of the above arguments are transcendental; in other words, they do not proceed upon empirical principles. For, although the cosmological argument professed to lay a basis of experience for its edifice of reasoning, it did not ground its procedure upon the peculiar constitution of experience, but upon pure principles of reason — in relation to an existence given by empirical consciousness; utterly abandoning its guidance, however, for the purpose of supporting its assertions entirely upon pure conceptions. Now what is the cause, in these transcendental arguments, of the dialectical, but natural, illusion, which connects the conceptions of necessity and supreme reality, and hypostatizes that which cannot be anything but an idea? What is the cause of this unavoidable step on the part of reason, of admitting that some one among all existing things must be necessary, while it falls back from the assertion of the existence of such a being as from an abyss? And how does reason proceed to explain this anomaly to itself, and from the wavering condition of a timid and reluctant approbation — always again withdrawn — arrive at a calm and settled insight into its cause?

It is something very remarkable that, on the supposition that something exists, I cannot avoid the inference that something exists necessarily. Upon this perfectly natural — but not on that account reliable — inference does the cosmological argument rest. But, let me form any conception whatever of a thing, I find that I cannot cogitate the existence of the thing as absolutely necessary, and that nothing prevents me — be the thing or being what it may — from cogitating its non-existence. I may thus be obliged to admit that all existing things have a necessary basis, while I cannot cogitate any single or individual thing as necessary. In other words, I can never complete the regress through the conditions of existence, without admitting the existence of a necessary being; but, on the other hand, I cannot make a commencement from this being.

If I must cogitate something as existing necessarily as the basis of existing things, and yet am not permitted to cogitate any individual thing as in itself necessary, the inevitable inference is that necessity and contingency are not properties of things themselves — otherwise an internal contradiction would result; that consequently neither of these principles are objective, but merely subjective principles of reason — the one requiring us to seek for a necessary ground for everything that exists, that is, to be satisfied with no other explanation than that which is complete a priori, the other forbidding us ever to hope for the attainment of this completeness, that is, to regard no member of the empirical world as unconditioned. In this mode of viewing them, both principles, in their purely heuristic and regulative character, and as concerning merely the formal interest of reason, are quite consistent with each other. The one says: “You must philosophize upon nature,” as if there existed a necessary primal basis of all existing things, solely for the purpose of introducing systematic unity into your knowledge, by pursuing an idea of this character — a foundation which is arbitrarily admitted to be ultimate; while the other warns you to consider no individual determination, concerning the existence of things, as such an ultimate foundation, that is, as absolutely necessary, but to keep the way always open for further progress in the deduction, and to treat every determination as determined by some other. But if all that we perceive must be regarded as conditionally necessary, it is impossible that anything which is empirically given should be absolutely necessary.

It follows from this that you must accept the absolutely necessary as out of and beyond the world, inasmuch as it is useful only as a principle of the highest possible unity in experience, and you cannot discover any such necessary existence in the would, the second rule requiring you to regard all empirical causes of unity as themselves deduced.

The philosophers of antiquity regarded all the forms of nature as contingent; while matter was considered by them, in accordance with the judgement of the common reason of mankind, as primal and necessary. But if they had regarded matter, not relatively — as the substratum of phenomena, but absolutely and in itself — as an independent existence, this idea of absolute necessity would have

immediately disappeared. For there is nothing absolutely connecting reason with such an existence; on the contrary, it can annihilate it in thought, always and without self-contradiction. But in thought alone lay the idea of absolute necessity. A regulative principle must, therefore, have been at the foundation of this opinion. In fact, extension and impenetrability — which together constitute our conception of matter — form the supreme empirical principle of the unity of phenomena, and this principle, in so far as it is empirically unconditioned, possesses the property of a regulative principle. But, as every determination of matter which constitutes what is real in it — and consequently impenetrability — is an effect, which must have a cause, and is for this reason always derived, the notion of matter cannot harmonize with the idea of a necessary being, in its character of the principle of all derived unity. For every one of its real properties, being derived, must be only conditionally necessary, and can therefore be annihilated in thought; and thus the whole existence of matter can be so annihilated or suppressed. If this were not the case, we should have found in the world of phenomena the highest ground or condition of unity — which is impossible, according to the second regulative principle. It follows that matter, and, in general, all that forms part of the world of sense, cannot be a necessary primal being, nor even a principle of empirical unity, but that this being or principle must have its place assigned without the world. And, in this way, we can proceed in perfect confidence to deduce the phenomena of the world and their existence from other phenomena, just as if there existed no necessary being; and we can at the same time, strive without ceasing towards the attainment of completeness for our deduction, just as if such a being — the supreme condition of all existences — were presupposed by the mind.

These remarks will have made it evident to the reader that the ideal of the Supreme Being, far from being an enouncement of the existence of a being in itself necessary, is nothing more than a regulative principle of reason, requiring us to regard all connection existing between phenomena as if it had its origin from an all-sufficient necessary cause, and basing upon this the rule of a systematic and necessary unity in the explanation of phenomena. We cannot, at the same time, avoid regarding, by a transcendental subreptio, this formal principle as constitutive, and hypostatizing this unity. Precisely similar is the case with our notion of space. Space is the primal condition of all forms, which are properly just so many different limitations of it; and thus, although it is merely a principle of sensibility, we cannot help regarding it as an absolutely necessary and self-subsistent thing — as an object given a priori in itself. In the same way, it is quite natural that, as the systematic unity of nature cannot be established as a principle for the empirical employment of reason, unless it is based upon the idea of an ens realissimum, as the supreme cause, we should regard this idea as a real object, and this object, in its character of supreme condition, as absolutely necessary, and that in this way a regulative should be transformed into a constitutive principle. This interchange becomes evident when I regard this supreme being, which, relatively to the world, was absolutely (unconditionally) necessary, as a thing per se. In this case, I find it impossible to represent this necessity in or by any conception, and it exists merely in my own mind, as the formal condition of thought, but not as a material and hypostatic condition of existence.

SECTION VI. Of the Impossibility of a Physico-Theological Proof.

If, then, neither a pure conception nor the general experience of an existing being can provide a sufficient basis for the proof of the existence of the Deity, we can make the attempt by the only other mode — that of grounding our argument upon a determinate experience of the phenomena of the present world, their constitution and disposition, and discover whether we can thus attain to a sound conviction of the existence of a Supreme Being. This argument we shall term the physico-theological argument. If it is shown to be insufficient, speculative reason cannot present us with any satisfactory proof of the existence of a being corresponding to our transcendental idea.

It is evident from the remarks that have been made in the preceding sections, that an answer to this question will be far from being difficult or unconvincing. For how can any experience be adequate with an idea? The very essence of an idea consists in the fact that no experience can ever be discovered

congruent or adequate with it. The transcendental idea of a necessary and all-sufficient being is so immeasurably great, so high above all that is empirical, which is always conditioned, that we hope in vain to find materials in the sphere of experience sufficiently ample for our conception, and in vain seek the unconditioned among things that are conditioned, while examples, nay, even guidance is denied us by the laws of empirical synthesis.

If the Supreme Being forms a link in the chain of empirical conditions, it must be a member of the empirical series, and, like the lower members which it precedes, have its origin in some higher member of the series. If, on the other hand, we disengage it from the chain, and cogitate it as an intelligible being, apart from the series of natural causes — how shall reason bridge the abyss that separates the latter from the former? All laws respecting the regress from effects to causes, all synthetical additions to our knowledge relate solely to possible experience and the objects of the sensuous world, and, apart from them, are without significance.

The world around us opens before our view so magnificent a spectacle of order, variety, beauty, and conformity to ends, that whether we pursue our observations into the infinity of space in the one direction, or into its illimitable divisions in the other, whether we regard the world in its greatest or its least manifestations — even after we have attained to the highest summit of knowledge which our weak minds can reach, we find that language in the presence of wonders so inconceivable has lost its force, and number its power to reckon, nay, even thought fails to conceive adequately, and our conception of the whole dissolves into an astonishment without power of expression — all the more eloquent that it is dumb. Everywhere around us we observe a chain of causes and effects, of means and ends, of death and birth; and, as nothing has entered of itself into the condition in which we find it, we are constantly referred to some other thing, which itself suggests the same inquiry regarding its cause, and thus the universe must sink into the abyss of nothingness, unless we admit that, besides this infinite chain of contingencies, there exists something that is primal and self-subsistent — something which, as the cause of this phenomenal world, secures its continuance and preservation.

This highest cause — what magnitude shall we attribute to it? Of the content of the world we are ignorant; still less can we estimate its magnitude by comparison with the sphere of the possible. But this supreme cause being a necessity of the human mind, what is there to prevent us from attributing to it such a degree of perfection as to place it above the sphere of all that is possible? This we can easily do, although only by the aid of the faint outline of an abstract conception, by representing this being to ourselves as containing in itself, as an individual substance, all possible perfection — a conception which satisfies that requirement of reason which demands parsimony in principles, which is free from self-contradiction, which even contributes to the extension of the employment of reason in experience, by means of the guidance afforded by this idea to order and system, and which in no respect conflicts with any law of experience.

This argument always deserves to be mentioned with respect. It is the oldest, the clearest, and that most in conformity with the common reason of humanity. It animates the study of nature, as it itself derives its existence and draws ever new strength from that source. It introduces aims and ends into a sphere in which our observation could not of itself have discovered them, and extends our knowledge of nature, by directing our attention to a unity, the principle of which lies beyond nature. This knowledge of nature again reacts upon this idea — its cause; and thus our belief in a divine author of the universe rises to the power of an irresistible conviction.

For these reasons it would be utterly hopeless to attempt to rob this argument of the authority it has always enjoyed. The mind, unceasingly elevated by these considerations, which, although empirical, are so remarkably powerful, and continually adding to their force, will not suffer itself to be depressed by the doubts suggested by subtle speculation; it tears itself out of this state of uncertainty, the moment it casts a look upon the wondrous forms of nature and the majesty of the universe, and rises from height to height,

from condition to condition, till it has elevated itself to the supreme and unconditioned author of all.

But although we have nothing to object to the reasonableness and utility of this procedure, but have rather to commend and encourage it, we cannot approve of the claims which this argument advances to demonstrative certainty and to a reception upon its own merits, apart from favour or support by other arguments. Nor can it injure the cause of morality to endeavour to lower the tone of the arrogant sophist, and to teach him that modesty and moderation which are the properties of a belief that brings calm and content into the mind, without prescribing to it an unworthy subjection. I maintain, then, that the physico-theological argument is insufficient of itself to prove the existence of a Supreme Being, that it must entrust this to the ontological argument — to which it serves merely as an introduction, and that, consequently, this argument contains the only possible ground of proof (possessed by speculative reason) for the existence of this being.

The chief momenta in the physico-theological argument are as follow: 1. We observe in the world manifest signs of an arrangement full of purpose, executed with great wisdom, and argument in whole of a content indescribably various, and of an extent without limits. 2. This arrangement of means and ends is entirely foreign to the things existing in the world — it belongs to them merely as a contingent attribute; in other words, the nature of different things could not of itself, whatever means were employed, harmoniously tend towards certain purposes, were they not chosen and directed for these purposes by a rational and disposing principle, in accordance with certain fundamental ideas. 3. There exists, therefore, a sublime and wise cause (or several), which is not merely a blind, all-powerful nature, producing the beings and events which fill the world in unconscious fecundity, but a free and intelligent cause of the world. 4. The unity of this cause may be inferred from the unity of the reciprocal relation existing between the parts of the world, as portions of an artistic edifice — an inference which all our observation favours, and all principles of analogy support.

In the above argument, it is inferred from the analogy of certain products of nature with those of human art, when it compels Nature to bend herself to its purposes, as in the case of a house, a ship, or a watch, that the same kind of causality — namely, understanding and will — resides in nature. It is also declared that the internal possibility of this freely-acting nature (which is the source of all art, and perhaps also of human reason) is derivable from another and superhuman art — a conclusion which would perhaps be found incapable of standing the test of subtle transcendental criticism. But to neither of these opinions shall we at present object. We shall only remark that it must be confessed that, if we are to discuss the subject of cause at all, we cannot proceed more securely than with the guidance of the analogy subsisting between nature and such products of design — these being the only products whose causes and modes of organization are completely known to us. Reason would be unable to satisfy her own requirements, if she passed from a causality which she does know, to obscure and indemonstrable principles of explanation which she does not know.

According to the physico-theological argument, the connection and harmony existing in the world evidence the contingency of the form merely, but not of the matter, that is, of the substance of the world. To establish the truth of the latter opinion, it would be necessary to prove that all things would be in themselves incapable of this harmony and order, unless they were, even as regards their substance, the product of a supreme wisdom. But this would require very different grounds of proof from those presented by the analogy with human art. This proof can at most, therefore, demonstrate the existence of an architect of the world, whose efforts are limited by the capabilities of the material with which he works, but not of a creator of the world, to whom all things are subject. Thus this argument is utterly insufficient for the task before us — a demonstration of the existence of an all-sufficient being. If we wish to prove the contingency of matter, we must have recourse to a transcendental argument, which the physico-theological was constructed expressly to avoid.

We infer, from the order and design visible in the universe, as a disposition of a thoroughly contingent

character, the existence of a cause proportionate thereto. The conception of this cause must contain certain determinate qualities, and it must therefore be regarded as the conception of a being which possesses all power, wisdom, and so on, in one word, all perfection — the conception, that is, of an all-sufficient being. For the predicates of very great, astonishing, or immeasurable power and excellence, give us no determinate conception of the thing, nor do they inform us what the thing may be in itself. They merely indicate the relation existing between the magnitude of the object and the observer, who compares it with himself and with his own power of comprehension, and are mere expressions of praise and reverence, by which the object is either magnified, or the observing subject depreciated in relation to the object. Where we have to do with the magnitude (of the perfection) of a thing, we can discover no determinate conception, except that which comprehends all possible perfection or completeness, and it is only the total (omnitudo) of reality which is completely determined in and through its conception alone.

Now it cannot be expected that any one will be bold enough to declare that he has a perfect insight into the relation which the magnitude of the world he contemplates bears (in its extent as well as in its content) to omnipotence, into that of the order and design in the world to the highest wisdom, and that of the unity of the world to the absolute unity of a Supreme Being. Physico-theology is therefore incapable of presenting a determinate conception of a supreme cause of the world, and is therefore insufficient as a principle of theology — a theology which is itself to be the basis of religion.

The attainment of absolute totality is completely impossible on the path of empiricism. And yet this is the path pursued in the physico-theological argument. What means shall we employ to bridge the abyss?

After elevating ourselves to admiration of the magnitude of the power, wisdom, and other attributes of the author of the world, and finding we can advance no further, we leave the argument on empirical grounds, and proceed to infer the contingency of the world from the order and conformity to aims that are observable in it. From this contingency we infer, by the help of transcendental conceptions alone, the existence of something absolutely necessary; and, still advancing, proceed from the conception of the absolute necessity of the first cause to the completely determined or determining conception thereof — the conception of an all-embracing reality. Thus the physico-theological, failing in its undertaking, recurs in its embarrassment to the cosmological argument; and, as this is merely the ontological argument in disguise, it executes its design solely by the aid of pure reason, although it at first professed to have no connection with this faculty and to base its entire procedure upon experience alone.

The physico-theologians have therefore no reason to regard with such contempt the transcendental mode of argument, and to look down upon it, with the conceit of clear-sighted observers of nature, as the brain-cobweb of obscure speculatists. For, if they reflect upon and examine their own arguments, they will find that, after following for some time the path of nature and experience, and discovering themselves no nearer their object, they suddenly leave this path and pass into the region of pure possibility, where they hope to reach upon the wings of ideas what had eluded all their empirical investigations. Gaining, as they think, a firm footing after this immense leap, they extend their determinate conception — into the possession of which they have come, they know not how — over the whole sphere of creation, and explain their ideal, which is entirely a product of pure reason, by illustrations drawn from experience — though in a degree miserably unworthy of the grandeur of the object, while they refuse to acknowledge that they have arrived at this cognition or hypothesis by a very different road from that of experience.

Thus the physico-theological is based upon the cosmological, and this upon the ontological proof of the existence of a Supreme Being; and as besides these three there is no other path open to speculative reason, the ontological proof, on the ground of pure conceptions of reason, is the only possible one, if any proof of a proposition so far transcending the empirical exercise of the understanding is possible at all.

SECTION VII. Critique of all Theology based upon Speculative Principles of Reason.

If by the term theology I understand the cognition of a primal being, that cognition is based either upon reason alone (theologia rationalis) or upon revelation (theologia revelata). The former cogitates its object

either by means of pure transcendental conceptions, as an ens originarium, realissimum, ens entium, and is termed transcendental theology; or, by means of a conception derived from the nature of our own mind, as a supreme intelligence, and must then be entitled natural theology. The person who believes in a transcendental theology alone, is termed a deist; he who acknowledges the possibility of a natural theology also, a theist. The former admits that we can cognize by pure reason alone the existence of a Supreme Being, but at the same time maintains that our conception of this being is purely transcendental, and that all we can say of it is that it possesses all reality, without being able to define it more closely. The second asserts that reason is capable of presenting us, from the analogy with nature, with a more definite conception of this being, and that its operations, as the cause of all things, are the results of intelligence and free will. The former regards the Supreme Being as the cause of the world — whether by the necessity of his nature, or as a free agent, is left undetermined; the latter considers this being as the author of the world.

Transcendental theology aims either at inferring the existence of a Supreme Being from a general experience, without any closer reference to the world to which this experience belongs, and in this case it is called cosmotheology; or it endeavours to cognize the existence of such a being, through mere conceptions, without the aid of experience, and is then termed ontotheology.

Natural theology infers the attributes and the existence of an author of the world, from the constitution of, the order and unity observable in, the world, in which two modes of causality must be admitted to exist — those of nature and freedom. Thus it rises from this world to a supreme intelligence, either as the principle of all natural, or of all moral order and perfection. In the former case it is termed physico-theology, in the latter, ethical or moral-theology.*

[Footnote: Not theological ethics; for this science contains ethical laws, which presuppose the existence of a Supreme Governor of the world; while moral-theology, on the contrary, is the expression of a conviction of the existence of a Supreme Being, founded upon ethical laws.]

As we are wont to understand by the term God not merely an eternal nature, the operations of which are insensate and blind, but a Supreme Being, who is the free and intelligent author of all things, and as it is this latter view alone that can be of interest to humanity, we might, in strict rigour, deny to the deist any belief in God at all, and regard him merely as a maintainer of the existence of a primal being or thing — the supreme cause of all other things. But, as no one ought to be blamed, merely because he does not feel himself justified in maintaining a certain opinion, as if he altogether denied its truth and asserted the opposite, it is more correct — as it is less harsh — to say, the deist believes in a God, the theist in a living God (summa intelligentia). We shall now proceed to investigate the sources of all these attempts of reason to establish the existence of a Supreme Being.

It may be sufficient in this place to define theoretical knowledge or cognition as knowledge of that which is, and practical knowledge as knowledge of that which ought to be. In this view, the theoretical employment of reason is that by which I cognize a priori (as necessary) that something is, while the practical is that by which I cognize a priori what ought to happen. Now, if it is an indubitably certain, though at the same time an entirely conditioned truth, that something is, or ought to happen, either a certain determinate condition of this truth is absolutely necessary, or such a condition may be arbitrarily presupposed. In the former case the condition is postulated (per thesin), in the latter supposed (per hypothesin). There are certain practical laws — those of morality — which are absolutely necessary. Now, if these laws necessarily presuppose the existence of some being, as the condition of the possibility of their obligatory power, this being must be postulated, because the conditioned, from which we reason to this determinate condition, is itself cognized a priori as absolutely necessary. We shall at some future time show that the moral laws not merely presuppose the existence of a Supreme Being, but also, as themselves absolutely necessary in a different relation, demand or postulate it — although only from a

practical point of view. The discussion of this argument we postpone for the present.

When the question relates merely to that which is, not to that which ought to be, the conditioned which is presented in experience is always cogitated as contingent. For this reason its condition cannot be regarded as absolutely necessary, but merely as relatively necessary, or rather as needful; the condition is in itself and a priori a mere arbitrary presupposition in aid of the cognition, by reason, of the conditioned. If, then, we are to possess a theoretical cognition of the absolute necessity of a thing, we cannot attain to this cognition otherwise than a priori by means of conceptions; while it is impossible in this way to cognize the existence of a cause which bears any relation to an existence given in experience.

Theoretical cognition is speculative when it relates to an object or certain conceptions of an object which is not given and cannot be discovered by means of experience. It is opposed to the cognition of nature, which concerns only those objects or predicates which can be presented in a possible experience.

The principle that everything which happens (the empirically contingent) must have a cause, is a principle of the cognition of nature, but not of speculative cognition. For, if we change it into an abstract principle, and deprive it of its reference to experience and the empirical, we shall find that it cannot with justice be regarded any longer as a synthetical proposition, and that it is impossible to discover any mode of transition from that which exists to something entirely different — termed cause. Nay, more, the conception of a cause likewise that of the contingent — loses, in this speculative mode of employing it, all significance, for its objective reality and meaning are comprehensible from experience alone.

When from the existence of the universe and the things in it the existence of a cause of the universe is inferred, reason is proceeding not in the natural, but in the speculative method. For the principle of the former enounces, not that things themselves or substances, but only that which happens or their states — as empirically contingent, have a cause: the assertion that the existence of substance itself is contingent is not justified by experience, it is the assertion of a reason employing its principles in a speculative manner. If, again, I infer from the form of the universe, from the way in which all things are connected and act and react upon each other, the existence of a cause entirely distinct from the universe — this would again be a judgement of purely speculative reason; because the object in this case — the cause — can never be an object of possible experience. In both these cases the principle of causality, which is valid only in the field of experience — useless and even meaningless beyond this region, would be diverted from its proper destination.

Now I maintain that all attempts of reason to establish a theology by the aid of speculation alone are fruitless, that the principles of reason as applied to nature do not conduct us to any theological truths, and, consequently, that a rational theology can have no existence, unless it is founded upon the laws of morality. For all synthetical principles of the understanding are valid only as immanent in experience; while the cognition of a Supreme Being necessitates their being employed transcendentally, and of this the understanding is quite incapable. If the empirical law of causality is to conduct us to a Supreme Being, this being must belong to the chain of empirical objects — in which case it would be, like all phenomena, itself conditioned. If the possibility of passing the limits of experience be admitted, by means of the dynamical law of the relation of an effect to its cause, what kind of conception shall we obtain by this procedure? Certainly not the conception of a Supreme Being, because experience never presents us with the greatest of all possible effects, and it is only an effect of this character that could witness to the existence of a corresponding cause. If, for the purpose of fully satisfying the requirements of Reason, we recognize her right to assert the existence of a perfect and absolutely necessary being, this can be admitted only from favour, and cannot be regarded as the result or irresistible demonstration. The physico-theological proof may add weight to others — if other proofs there are — by connecting speculation with experience; but in itself it rather prepares the mind for theological cognition, and gives it a right and natural direction, than establishes a sure foundation for theology.

It is now perfectly evident that transcendental questions admit only of transcendental answers — those

presented a priori by pure conceptions without the least empirical admixture. But the question in the present case is evidently synthetical — it aims at the extension of our cognition beyond the bounds of experience — it requires an assurance respecting the existence of a being corresponding with the idea in our minds, to which no experience can ever be adequate. Now it has been abundantly proved that all a priori synthetical cognition is possible only as the expression of the formal conditions of a possible experience; and that the validity of all principles depends upon their immanence in the field of experience, that is, their relation to objects of empirical cognition or phenomena. Thus all transcendental procedure in reference to speculative theology is without result.

If any one prefers doubting the conclusiveness of the proofs of our analytic to losing the persuasion of the validity of these old and time honoured arguments, he at least cannot decline answering the question — how he can pass the limits of all possible experience by the help of mere ideas. If he talks of new arguments, or of improvements upon old arguments, I request him to spare me. There is certainly no great choice in this sphere of discussion, as all speculative arguments must at last look for support to the ontological, and I have, therefore, very little to fear from the argumentative fecundity of the dogmatical defenders of a non-sensuous reason. Without looking upon myself as a remarkably combative person, I shall not decline the challenge to detect the fallacy and destroy the pretensions of every attempt of speculative theology. And yet the hope of better fortune never deserts those who are accustomed to the dogmatical mode of procedure. I shall, therefore, restrict myself to the simple and equitable demand that such reasoners will demonstrate, from the nature of the human mind as well as from that of the other sources of knowledge, how we are to proceed to extend our cognition completely a priori, and to carry it to that point where experience abandons us, and no means exist of guaranteeing the objective reality of our conceptions. In whatever way the understanding may have attained to a conception, the existence of the object of the conception cannot be discovered in it by analysis, because the cognition of the existence of the object depends upon the object's being posited and given in itself apart from the conception. But it is utterly impossible to go beyond our conception, without the aid of experience — which presents to the mind nothing but phenomena, or to attain by the help of mere conceptions to a conviction of the existence of new kinds of objects or supernatural beings.

But although pure speculative reason is far from sufficient to demonstrate the existence of a Supreme Being, it is of the highest utility in correcting our conception of this being — on the supposition that we can attain to the cognition of it by some other means — in making it consistent with itself and with all other conceptions of intelligible objects, clearing it from all that is incompatible with the conception of an ens summun, and eliminating from it all limitations or admixtures of empirical elements.

Transcendental theology is still therefore, notwithstanding its objective insufficiency, of importance in a negative respect; it is useful as a test of the procedure of reason when engaged with pure ideas, no other than a transcendental standard being in this case admissible. For if, from a practical point of view, the hypothesis of a Supreme and All-sufficient Being is to maintain its validity without opposition, it must be of the highest importance to define this conception in a correct and rigorous manner — as the transcendental conception of a necessary being, to eliminate all phenomenal elements (anthropomorphism in its most extended signification), and at the same time to overflow all contradictory assertions — be they atheistic, deistic, or anthropomorphic. This is of course very easy; as the same arguments which demonstrated the inability of human reason to affirm the existence of a Supreme Being must be alike sufficient to prove the invalidity of its denial. For it is impossible to gain from the pure speculation of reason demonstration that there exists no Supreme Being, as the ground of all that exists, or that this being possesses none of those properties which we regard as analogical with the dynamical qualities of a thinking being, or that, as the anthropomorphists would have us believe, it is subject to all the limitations which sensibility imposes upon those intelligences which exist in the world of experience.

A Supreme Being is, therefore, for the speculative reason, a mere ideal, though a faultless one — a

conception which perfects and crowns the system of human cognition, but the objective reality of which can neither be proved nor disproved by pure reason. If this defect is ever supplied by a moral theology, the problematic transcendental theology which has preceded, will have been at least serviceable as demonstrating the mental necessity existing for the conception, by the complete determination of it which it has furnished, and the ceaseless testing of the conclusions of a reason often deceived by sense, and not always in harmony with its own ideas. The attributes of necessity, infinitude, unity, existence apart from the world (and not as a world soul), eternity (free from conditions of time), omnipresence (free from conditions of space), omnipotence, and others, are pure transcendental predicates; and thus the accurate conception of a Supreme Being, which every theology requires, is furnished by transcendental theology alone.

APPENDIX.

Of the Regulative Employment of the Ideas of Pure Reason.

The result of all the dialectical attempts of pure reason not only confirms the truth of what we have already proved in our Transcendental Analytic, namely, that all inferences which would lead us beyond the limits of experience are fallacious and groundless, but it at the same time teaches us this important lesson, that human reason has a natural inclination to overstep these limits, and that transcendental ideas are as much the natural property of the reason as categories are of the understanding. There exists this difference, however, that while the categories never mislead us, outward objects being always in perfect harmony therewith, ideas are the parents of irresistible illusions, the severest and most subtle criticism being required to save us from the fallacies which they induce.

Whatever is grounded in the nature of our powers will be found to be in harmony with the final purpose and proper employment of these powers, when once we have discovered their true direction and aim. We are entitled to suppose, therefore, that there exists a mode of employing transcendental ideas which is proper and immanent; although, when we mistake their meaning, and regard them as conceptions of actual things, their mode of application is transcendent and delusive. For it is not the idea itself, but only the employment of the idea in relation to possible experience, that is transcendent or immanent. An idea is employed transcendently, when it is applied to an object falsely believed to be adequate with and to correspond to it; imminently, when it is applied solely to the employment of the understanding in the sphere of experience. Thus all errors of subreptio — of misapplication, are to be ascribed to defects of judgement, and not to understanding or reason.

Reason never has an immediate relation to an object; it relates immediately to the understanding alone. It is only through the understanding that it can be employed in the field of experience. It does not form conceptions of objects, it merely arranges them and gives to them that unity which they are capable of possessing when the sphere of their application has been extended as widely as possible. Reason avails itself of the conception of the understanding for the sole purpose of producing totality in the different series. This totality the understanding does not concern itself with; its only occupation is the connection of experiences, by which series of conditions in accordance with conceptions are established. The object of reason is, therefore, the understanding and its proper destination. As the latter brings unity into the diversity of objects by means of its conceptions, so the former brings unity into the diversity of conceptions by means of ideas; as it sets the final aim of a collective unity to the operations of the understanding, which without this occupies itself with a distributive unity alone.

I accordingly maintain that transcendental ideas can never be employed as constitutive ideas, that they cannot be conceptions of objects, and that, when thus considered, they assume a fallacious and dialectical character. But, on the other hand, they are capable of an admirable and indispensably necessary application to objects — as regulative ideas, directing the understanding to a certain aim, the guiding lines towards which all its laws follow, and in which they all meet in one point. This point — though a mere idea (focus imaginarius), that is, not a point from which the conceptions of the understanding do really proceed, for it lies beyond the sphere of possible experience — serves, notwithstanding, to give to these conceptions the greatest possible unity combined with the greatest possible extension. Hence arises the natural illusion which induces us to believe that these lines proceed from an object which lies out of the sphere of empirical cognition, just as objects reflected in a mirror appear to be behind it. But this illusion — which we may hinder from imposing upon us — is necessary and unavoidable, if we desire to see, not only those objects which lie before us, but those which are at a great distance behind us; that is to

say, when, in the present case, we direct the aims of the understanding, beyond every given experience, towards an extension as great as can possibly be attained.

If we review our cognitions in their entire extent, we shall find that the peculiar business of reason is to arrange them into a system, that is to say, to give them connection according to a principle. This unity presupposes an idea — the idea of the form of a whole (of cognition), preceding the determinate cognition of the parts, and containing the conditions which determine a priori to every part its place and relation to the other parts of the whole system. This idea, accordingly, demands complete unity in the cognition of the understanding — not the unity of a contingent aggregate, but that of a system connected according to necessary laws. It cannot be affirmed with propriety that this idea is a conception of an object; it is merely a conception of the complete unity of the conceptions of objects, in so far as this unity is available to the understanding as a rule. Such conceptions of reason are not derived from nature; on the contrary, we employ them for the interrogation and investigation of nature, and regard our cognition as defective so long as it is not adequate to them. We admit that such a thing as pure earth, pure water, or pure air, is not to be discovered. And yet we require these conceptions (which have their origin in the reason, so far as regards their absolute purity and completeness) for the purpose of determining the share which each of these natural causes has in every phenomenon. Thus the different kinds of matter are all referred to earths, as mere weight; to salts and inflammable bodies, as pure force; and finally, to water and air, as the vehicula of the former, or the machines employed by them in their operations — for the purpose of explaining the chemical action and reaction of bodies in accordance with the idea of a mechanism. For, although not actually so expressed, the influence of such ideas of reason is very observable in the procedure of natural philosophers.

If reason is the faculty of deducing the particular from the general, and if the general be certain in se and given, it is only necessary that the judgement should subsume the particular under the general, the particular being thus necessarily determined. I shall term this the demonstrative or apodeictic employment of reason. If, however, the general is admitted as problematical only, and is a mere idea, the particular case is certain, but the universality of the rule which applies to this particular case remains a problem. Several particular cases, the certainty of which is beyond doubt, are then taken and examined, for the purpose of discovering whether the rule is applicable to them; and if it appears that all the particular cases which can be collected follow from the rule, its universality is inferred, and at the same time, all the causes which have not, or cannot be presented to our observation, are concluded to be of the same character with those which we have observed. This I shall term the hypothetical employment of the reason.

The hypothetical exercise of reason by the aid of ideas employed as problematical conceptions is properly not constitutive. That is to say, if we consider the subject strictly, the truth of the rule, which has been employed as an hypothesis, does not follow from the use that is made of it by reason. For how can we know all the possible cases that may arise? some of which may, however, prove exceptions to the universality of the rule. This employment of reason is merely regulative, and its sole aim is the introduction of unity into the aggregate of our particular cognitions, and thereby the approximating of the rule to universality.

The object of the hypothetical employment of reason is therefore the systematic unity of cognitions; and this unity is the criterion of the truth of a rule. On the other hand, this systematic unity — as a mere idea — is in fact merely a unity projected, not to be regarded as given, but only in the light of a problem — a problem which serves, however, as a principle for the various and particular exercise of the understanding in experience, directs it with regard to those cases which are not presented to our observation, and introduces harmony and consistency into all its operations.

All that we can be certain of from the above considerations is that this systematic unity is a logical principle, whose aim is to assist the understanding, where it cannot of itself attain to rules, by means of

ideas, to bring all these various rules under one principle, and thus to ensure the most complete consistency and connection that can be attained. But the assertion that objects and the understanding by which they are cognized are so constituted as to be determined to systematic unity, that this may be postulated a priori, without any reference to the interest of reason, and that we are justified in declaring all possible cognitions — empirical and others — to possess systematic unity, and to be subject to general principles from which, notwithstanding their various character, they are all derivable such an assertion can be founded only upon a transcendental principle of reason, which would render this systematic unity not subjectively and logically — in its character of a method, but objectively necessary.

We shall illustrate this by an example. The conceptions of the understanding make us acquainted, among many other kinds of unity, with that of the causality of a substance, which is termed power. The different phenomenal manifestations of the same substance appear at first view to be so very dissimilar that we are inclined to assume the existence of just as many different powers as there are different effects — as, in the case of the human mind, we have feeling, consciousness, imagination, memory, wit, analysis, pleasure, desire and so on. Now we are required by a logical maxim to reduce these differences to as small a number as possible, by comparing them and discovering the hidden identity which exists. We must inquire, for example, whether or not imagination (connected with consciousness), memory, wit, and analysis are not merely different forms of understanding and reason. The idea of a fundamental power, the existence of which no effort of logic can assure us of, is the problem to be solved, for the systematic representation of the existing variety of powers. The logical principle of reason requires us to produce as great a unity as is possible in the system of our cognitions; and the more the phenomena of this and the other power are found to be identical, the more probable does it become, that they are nothing but different manifestations of one and the same power, which may be called, relatively speaking, a fundamental power. And so with other cases.

These relatively fundamental powers must again be compared with each other, to discover, if possible, the one radical and absolutely fundamental power of which they are but the manifestations. But this unity is purely hypothetical. It is not maintained, that this unity does really exist, but that we must, in the interest of reason, that is, for the establishment of principles for the various rules presented by experience, try to discover and introduce it, so far as is practicable, into the sphere of our cognitions.

But the transcendental employment of the understanding would lead us to believe that this idea of a fundamental power is not problematical, but that it possesses objective reality, and thus the systematic unity of the various powers or forces in a substance is demanded by the understanding and erected into an apodeictic or necessary principle. For, without having attempted to discover the unity of the various powers existing in nature, nay, even after all our attempts have failed, we notwithstanding presuppose that it does exist, and may be, sooner or later, discovered. And this reason does, not only, as in the case above adduced, with regard to the unity of substance, but where many substances, although all to a certain extent homogeneous, are discoverable, as in the case of matter in general. Here also does reason presuppose the existence of the systematic unity of various powers — inasmuch as particular laws of nature are subordinate to general laws; and parsimony in principles is not merely an economical principle of reason, but an essential law of nature.

We cannot understand, in fact, how a logical principle of unity can of right exist, unless we presuppose a transcendental principle, by which such a systematic unit — as a property of objects themselves — is regarded as necessary a priori. For with what right can reason, in its logical exercise, require us to regard the variety of forces which nature displays, as in effect a disguised unity, and to deduce them from one fundamental force or power, when she is free to admit that it is just as possible that all forces should be different in kind, and that a systematic unity is not conformable to the design of nature? In this view of the case, reason would be proceeding in direct opposition to her own destination, by setting as an aim an idea which entirely conflicts with the procedure and arrangement of nature. Neither can we assert that reason

has previously inferred this unity from the contingent nature of phenomena. For the law of reason which requires us to seek for this unity is a necessary law, inasmuch as without it we should not possess a faculty of reason, nor without reason a consistent and self-accordant mode of employing the understanding, nor, in the absence of this, any proper and sufficient criterion of empirical truth. In relation to this criterion, therefore, we must suppose the idea of the systematic unity of nature to possess objective validity and necessity.

We find this transcendental presupposition lurking in different forms in the principles of philosophers, although they have neither recognized it nor confessed to themselves its presence. That the diversities of individual things do not exclude identity of species, that the various species must be considered as merely different determinations of a few genera, and these again as divisions of still higher races, and so on — that, accordingly, a certain systematic unity of all possible empirical conceptions, in so far as they can be deduced from higher and more general conceptions, must be sought for, is a scholastic maxim or logical principle, without which reason could not be employed by us. For we can infer the particular from the general, only in so far as general properties of things constitute the foundation upon which the particular rest.

That the same unity exists in nature is presupposed by philosophers in the well-known scholastic maxim, which forbids us unnecessarily to augment the number of entities or principles (entia praeter necessitatem non esse multiplicanda). This maxim asserts that nature herself assists in the establishment of this unity of reason, and that the seemingly infinite diversity of phenomena should not deter us from the expectation of discovering beneath this diversity a unity of fundamental properties, of which the aforesaid variety is but a more or less determined form. This unity, although a mere idea, thinkers have found it necessary rather to moderate the desire than to encourage it. It was considered a great step when chemists were able to reduce all salts to two main genera — acids and alkalis; and they regard this difference as itself a mere variety, or different manifestation of one and the same fundamental material. The different kinds of earths (stones and even metals) chemists have endeavoured to reduce to three, and afterwards to two; but still, not content with this advance, they cannot but think that behind these diversities there lurks but one genus — nay, that even salts and earths have a common principle. It might be conjectured that this is merely an economical plan of reason, for the purpose of sparing itself trouble, and an attempt of a purely hypothetical character, which, when successful, gives an appearance of probability to the principle of explanation employed by the reason. But a selfish purpose of this kind is easily to be distinguished from the idea, according to which every one presupposes that this unity is in accordance with the laws of nature, and that reason does not in this case request, but requires, although we are quite unable to determine the proper limits of this unity.

If the diversity existing in phenomena — a diversity not of form (for in this they may be similar) but of content — were so great that the subtlest human reason could never by comparison discover in them the least similarity (which is not impossible), in this case the logical law of genera would be without foundation, the conception of a genus, nay, all general conceptions would be impossible, and the faculty of the understanding, the exercise of which is restricted to the world of conceptions, could not exist. The logical principle of genera, accordingly, if it is to be applied to nature (by which I mean objects presented to our senses), presupposes a transcendental principle. In accordance with this principle, homogeneity is necessarily presupposed in the variety of phenomena (although we are unable to determine a priori the degree of this homogeneity), because without it no empirical conceptions, and consequently no experience, would be possible.

The logical principle of genera, which demands identity in phenomena, is balanced by another principle — that of species, which requires variety and diversity in things, notwithstanding their accordance in the same genus, and directs the understanding to attend to the one no less than to the other. This principle (of the faculty of distinction) acts as a check upon the reason and reason exhibits in this

respect a double and conflicting interest — on the one hand, the interest in the extent (the interest of generality) in relation to genera; on the other, that of the content (the interest of individuality) in relation to the variety of species. In the former case, the understanding cogitates more under its conceptions, in the latter it cogitates more in them. This distinction manifests itself likewise in the habits of thought peculiar to natural philosophers, some of whom — the remarkably speculative heads — may be said to be hostile to heterogeneity in phenomena, and have their eyes always fixed on the unity of genera, while others — with a strong empirical tendency — aim unceasingly at the analysis of phenomena, and almost destroy in us the hope of ever being able to estimate the character of these according to general principles.

The latter mode of thought is evidently based upon a logical principle, the aim of which is the systematic completeness of all cognitions. This principle authorizes me, beginning at the genus, to descend to the various and diverse contained under it; and in this way extension, as in the former case unity, is assured to the system. For if we merely examine the sphere of the conception which indicates a genus, we cannot discover how far it is possible to proceed in the division of that sphere; just as it is impossible, from the consideration of the space occupied by matter, to determine how far we can proceed in the division of it. Hence every genus must contain different species, and these again different subspecies; and as each of the latter must itself contain a sphere (must be of a certain extent, as a conceptus communis), reason demands that no species or sub-species is to be considered as the lowest possible. For a species or sub-species, being always a conception, which contains only what is common to a number of different things, does not completely determine any individual thing, or relate immediately to it, and must consequently contain other conceptions, that is, other sub-species under it. This law of specification may be thus expressed: entium varietates non temere sunt minuendae.

But it is easy to see that this logical law would likewise be without sense or application, were it not based upon a transcendental law of specification, which certainly does not require that the differences existing phenomena should be infinite in number, for the logical principle, which merely maintains the indeterminateness of the logical sphere of a conception, in relation to its possible division, does not authorize this statement; while it does impose upon the understanding the duty of searching for subspecies to every species, and minor differences in every difference. For, were there no lower conceptions, neither could there be any higher. Now the understanding cognizes only by means of conceptions; consequently, how far soever it may proceed in division, never by mere intuition, but always by lower and lower conceptions. The cognition of phenomena in their complete determination (which is possible only by means of the understanding) requires an unceasingly continued specification of conceptions, and a progression to ever smaller differences, of which abstraction bad been made in the conception of the species, and still more in that of the genus.

This law of specification cannot be deduced from experience; it can never present us with a principle of so universal an application. Empirical specification very soon stops in its distinction of diversities, and requires the guidance of the transcendental law, as a principle of the reason — a law which imposes on us the necessity of never ceasing in our search for differences, even although these may not present themselves to the senses. That absorbent earths are of different kinds could only be discovered by obeying the anticipatory law of reason, which imposes upon the understanding the task of discovering the differences existing between these earths, and supposes that nature is richer in substances than our senses would indicate. The faculty of the understanding belongs to us just as much under the presupposition of differences in the objects of nature, as under the condition that these objects are homogeneous, because we could not possess conceptions, nor make any use of our understanding, were not the phenomena included under these conceptions in some respects dissimilar, as well as similar, in their character.

Reason thus prepares the sphere of the understanding for the operations of this faculty: 1. By the principle of the homogeneity of the diverse in higher genera; 2. By the principle of the variety of the homogeneous in lower species; and, to complete the systematic unity, it adds, 3. A law of the affinity of

all conceptions which prescribes a continuous transition from one species to every other by the gradual increase of diversity. We may term these the principles of the homogeneity, the specification, and the continuity of forms. The latter results from the union of the two former, inasmuch as we regard the systematic connection as complete in thought, in the ascent to higher genera, as well as in the descent to lower species. For all diversities must be related to each other, as they all spring from one highest genus, descending through the different gradations of a more and more extended determination.

We may illustrate the systematic unity produced by the three logical principles in the following manner. Every conception may be regarded as a point, which, as the standpoint of a spectator, has a certain horizon, which may be said to enclose a number of things that may be viewed, so to speak, from that centre. Within this horizon there must be an infinite number of other points, each of which has its own horizon, smaller and more circumscribed; in other words, every species contains sub-species, according to the principle of specification, and the logical horizon consists of smaller horizons (subspecies), but not of points (individuals), which possess no extent. But different horizons or genera, which include under them so many conceptions, may have one common horizon, from which, as from a mid-point, they may be surveyed; and we may proceed thus, till we arrive at the highest genus, or universal and true horizon, which is determined by the highest conception, and which contains under itself all differences and varieties, as genera, species, and subspecies.

To this highest standpoint I am conducted by the law of homogeneity, as to all lower and more variously-determined conceptions by the law of specification. Now as in this way there exists no void in the whole extent of all possible conceptions, and as out of the sphere of these the mind can discover nothing, there arises from the presupposition of the universal horizon above mentioned, and its complete division, the principle: Non datur vacuum formarum. This principle asserts that there are not different primitive and highest genera, which stand isolated, so to speak, from each other, but all the various genera are mere divisions and limitations of one highest and universal genus; and hence follows immediately the principle: Datur continuum formarum. This principle indicates that all differences of species limit each other, and do not admit of transition from one to another by a saltus, but only through smaller degrees of the difference between the one species and the other. In one word, there are no species or sub-species which (in the view of reason) are the nearest possible to each other; intermediate species or sub-species being always possible, the difference of which from each of the former is always smaller than the difference existing between these.

The first law, therefore, directs us to avoid the notion that there exist different primal genera, and enounces the fact of perfect homogeneity; the second imposes a check upon this tendency to unity and prescribes the distinction of sub-species, before proceeding to apply our general conceptions to individuals. The third unites both the former, by enouncing the fact of homogeneity as existing even in the most various diversity, by means of the gradual transition from one species to another. Thus it indicates a relationship between the different branches or species, in so far as they all spring from the same stem.

But this logical law of the continuum specierum (formarum logicarum) presupposes a transcendental principle (lex continui in natura), without which the understanding might be led into error, by following the guidance of the former, and thus perhaps pursuing a path contrary to that prescribed by nature. This law must, consequently, be based upon pure transcendental, and not upon empirical, considerations. For, in the latter case, it would come later than the system; whereas it is really itself the parent of all that is systematic in our cognition of nature. These principles are not mere hypotheses employed for the purpose of experimenting upon nature; although when any such connection is discovered, it forms a solid ground for regarding the hypothetical unity as valid in the sphere of nature — and thus they are in this respect not without their use. But we go farther, and maintain that it is manifest that these principles of parsimony in fundamental causes, variety in effects, and affinity in phenomena, are in accordance both with reason and nature, and that they are not mere methods or plans devised for the purpose of assisting us in our

observation of the external world.

But it is plain that this continuity of forms is a mere idea, to which no adequate object can be discovered in experience. And this for two reasons. First, because the species in nature are really divided, and hence form quanta discreta; and, if the gradual progression through their affinity were continuous, the intermediate members lying between two given species must be infinite in number, which is impossible. Secondly, because we cannot make any determinate empirical use of this law, inasmuch as it does not present us with any criterion of affinity which could aid us in determining how far we ought to pursue the graduation of differences: it merely contains a general indication that it is our duty to seek for and, if possible, to discover them.

When we arrange these principles of systematic unity in the order conformable to their employment in experience, they will stand thus: Variety, Affinity, Unity, each of them, as ideas, being taken in the highest degree of their completeness. Reason presupposes the existence of cognitions of the understanding, which have a direct relation to experience, and aims at the ideal unity of these cognitions — a unity which far transcends all experience or empirical notions. The affinity of the diverse, notwithstanding the differences existing between its parts, has a relation to things, but a still closer one to the mere properties and powers of things. For example, imperfect experience may represent the orbits of the planets as circular. But we discover variations from this course, and we proceed to suppose that the planets revolve in a path which, if not a circle, is of a character very similar to it. That is to say, the movements of those planets which do not form a circle will approximate more or less to the properties of a circle, and probably form an ellipse. The paths of comets exhibit still greater variations, for, so far as our observation extends, they do not return upon their own course in a circle or ellipse. But we proceed to the conjecture that comets describe a parabola, a figure which is closely allied to the ellipse. In fact, a parabola is merely an ellipse, with its longer axis produced to an indefinite extent. Thus these principles conduct us to a unity in the genera of the forms of these orbits, and, proceeding farther, to a unity as regards the cause of the motions of the heavenly bodies — that is, gravitation. But we go on extending our conquests over nature, and endeavour to explain all seeming deviations from these rules, and even make additions to our system which no experience can ever substantiate — for example, the theory, in affinity with that of ellipses, of hyperbolic paths of comets, pursuing which, these bodies leave our solar system and, passing from sun to sun, unite the most distant parts of the infinite universe, which is held together by the same moving power.

The most remarkable circumstance connected with these principles is that they seem to be transcendental, and, although only containing ideas for the guidance of the empirical exercise of reason, and although this empirical employment stands to these ideas in an asymptotic relation alone (to use a mathematical term), that is, continually approximate, without ever being able to attain to them, they possess, notwithstanding, as a priori synthetical propositions, objective though undetermined validity, and are available as rules for possible experience. In the elaboration of our experience, they may also be employed with great advantage, as heuristic [Footnote: From the Greek, eurhioko.] principles. A transcendental deduction of them cannot be made; such a deduction being always impossible in the case of ideas, as has been already shown.

We distinguished, in the Transcendental Analytic, the dynamical principles of the understanding, which are regulative principles of intuition, from the mathematical, which are constitutive principles of intuition. These dynamical laws are, however, constitutive in relation to experience, inasmuch as they render the conceptions without which experience could not exist possible a priori. But the principles of pure reason cannot be constitutive even in regard to empirical conceptions, because no sensuous schema corresponding to them can be discovered, and they cannot therefore have an object in concreto. Now, if I grant that they cannot be employed in the sphere of experience, as constitutive principles, how shall I secure for them employment and objective validity as regulative principles, and in what way can they be

so employed?

The understanding is the object of reason, as sensibility is the object of the understanding. The production of systematic unity in all the empirical operations of the understanding is the proper occupation of reason; just as it is the business of the understanding to connect the various content of phenomena by means of conceptions, and subject them to empirical laws. But the operations of the understanding are, without the schemata of sensibility, undetermined; and, in the same manner, the unity of reason is perfectly undetermined as regards the conditions under which, and the extent to which, the understanding ought to carry the systematic connection of its conceptions. But, although it is impossible to discover in intuition a schema for the complete systematic unity of all the conceptions of the understanding, there must be some analogon of this schema. This analogon is the idea of the maximum of the division and the connection of our cognition in one principle. For we may have a determinate notion of a maximum and an absolutely perfect, all the restrictive conditions which are connected with an indeterminate and various content having been abstracted. Thus the idea of reason is analogous with a sensuous schema, with this difference, that the application of the categories to the schema of reason does not present a cognition of any object (as is the case with the application of the categories to sensuous schemata), but merely provides us with a rule or principle for the systematic unity of the exercise of the understanding. Now, as every principle which imposes upon the exercise of the understanding a priori compliance with the rule of systematic unity also relates, although only in an indirect manner, to an object of experience, the principles of pure reason will also possess objective reality and validity in relation to experience. But they will not aim at determining our knowledge in regard to any empirical object; they will merely indicate the procedure, following which the empirical and determinate exercise of the understanding may be in complete harmony and connection with itself — a result which is produced by its being brought into harmony with the principle of systematic unity, so far as that is possible, and deduced from it.

I term all subjective principles, which are not derived from observation of the constitution of an object, but from the interest which Reason has in producing a certain completeness in her cognition of that object, maxims of reason. Thus there are maxims of speculative reason, which are based solely upon its speculative interest, although they appear to be objective principles.

When principles which are really regulative are regarded as constitutive, and employed as objective principles, contradictions must arise; but if they are considered as mere maxims, there is no room for contradictions of any kind, as they then merely indicate the different interests of reason, which occasion differences in the mode of thought. In effect, Reason has only one single interest, and the seeming contradiction existing between her maxims merely indicates a difference in, and a reciprocal limitation of, the methods by which this interest is satisfied.

This reasoner has at heart the interest of diversity — in accordance with the principle of specification; another, the interest of unity — in accordance with the principle of aggregation. Each believes that his judgement rests upon a thorough insight into the subject he is examining, and yet it has been influenced solely by a greater or less degree of adherence to some one of the two principles, neither of which are objective, but originate solely from the interest of reason, and on this account to be termed maxims rather than principles. When I observe intelligent men disputing about the distinctive characteristics of men, animals, or plants, and even of minerals, those on the one side assuming the existence of certain national characteristics, certain well-defined and hereditary distinctions of family, race, and so on, while the other side maintain that nature has endowed all races of men with the same faculties and dispositions, and that all differences are but the result of external and accidental circumstances — I have only to consider for a moment the real nature of the subject of discussion, to arrive at the conclusion that it is a subject far too deep for us to judge of, and that there is little probability of either party being able to speak from a perfect insight into and understanding of the nature of the subject itself. Both have, in reality, been struggling for

the twofold interest of reason; the one maintaining the one interest, the other the other. But this difference between the maxims of diversity and unity may easily be reconciled and adjusted; although, so long as they are regarded as objective principles, they must occasion not only contradictions and polemic, but place hinderances in the way of the advancement of truth, until some means is discovered of reconciling these conflicting interests, and bringing reason into union and harmony with itself.

The same is the case with the so-called law discovered by Leibnitz, and supported with remarkable ability by Bonnet — the law of the continuous gradation of created beings, which is nothing more than an inference from the principle of affinity; for observation and study of the order of nature could never present it to the mind as an objective truth. The steps of this ladder, as they appear in experience, are too far apart from each other, and the so-called petty differences between different kinds of animals are in nature commonly so wide separations that no confidence can be placed in such views (particularly when we reflect on the great variety of things, and the ease with which we can discover resemblances), and no faith in the laws which are said to express the aims and purposes of nature. On the other hand, the method of investigating the order of nature in the light of this principle, and the maxim which requires us to regard this order — it being still undetermined how far it extends — as really existing in nature, is beyond doubt a legitimate and excellent principle of reason — a principle which extends farther than any experience or observation of ours and which, without giving us any positive knowledge of anything in the region of experience, guides us to the goal of systematic unity.

Of the Ultimate End of the Natural Dialectic of Human Reason.

The ideas of pure reason cannot be, of themselves and in their own nature, dialectical; it is from their misemployment alone that fallacies and illusions arise. For they originate in the nature of reason itself, and it is impossible that this supreme tribunal for all the rights and claims of speculation should be itself undeserving of confidence and promotive of error. It is to be expected, therefore, that these ideas have a genuine and legitimate aim. It is true, the mob of sophists raise against reason the cry of inconsistency and contradiction, and affect to despise the government of that faculty, because they cannot understand its constitution, while it is to its beneficial influences alone that they owe the position and the intelligence which enable them to criticize and to blame its procedure.

We cannot employ an a priori conception with certainty, until we have made a transcendental deduction therefore. The ideas of pure reason do not admit of the same kind of deduction as the categories. But if they are to possess the least objective validity, and to represent anything but mere creations of thought (entia rationis ratiocinantis), a deduction of them must be possible. This deduction will complete the critical task imposed upon pure reason; and it is to this part Of our labours that we now proceed.

There is a great difference between a thing's being presented to the mind as an object in an absolute sense, or merely as an ideal object. In the former case I employ my conceptions to determine the object; in the latter case nothing is present to the mind but a mere schema, which does not relate directly to an object, not even in a hypothetical sense, but which is useful only for the purpose of representing other objects to the mind, in a mediate and indirect manner, by means of their relation to the idea in the intellect. Thus I say the conception of a supreme intelligence is a mere idea; that is to say, its objective reality does not consist in the fact that it has an immediate relation to an object (for in this sense we have no means of establishing its objective validity), it is merely a schema constructed according to the necessary conditions of the unity of reason — the schema of a thing in general, which is useful towards the production of the highest degree of systematic unity in the empirical exercise of reason, in which we deduce this or that object of experience from the imaginary object of this idea, as the ground or cause of the said object of experience. In this way, the idea is properly a heuristic, and not an ostensive, conception; it does not give us any information respecting the constitution of an object, it merely indicates how, under the guidance of the idea, we ought to investigate the constitution and the relations of objects in the world of experience. Now, if it can be shown that the three kinds of transcendental ideas

(psychological, cosmological, and theological), although not relating directly to any object nor determining it, do nevertheless, on the supposition of the existence of an ideal object, produce systematic unity in the laws of the empirical employment of the reason, and extend our empirical cognition, without ever being inconsistent or in opposition with it — it must be a necessary maxim of reason to regulate its procedure according to these ideas. And this forms the transcendental deduction of all speculative ideas, not as constitutive principles of the extension of our cognition beyond the limits of our experience, but as regulative principles of the systematic unity of empirical cognition, which is by the aid of these ideas arranged and emended within its own proper limits, to an extent unattainable by the operation of the principles of the understanding alone.

I shall make this plainer. Guided by the principles involved in these ideas, we must, in the first place, so connect all the phenomena, actions, and feelings of the mind, as if it were a simple substance, which, endowed with personal identity, possesses a permanent existence (in this life at least), while its states, among which those of the body are to be included as external conditions, are in continual change. Secondly, in cosmology, we must investigate the conditions of all natural phenomena, internal as well as external, as if they belonged to a chain infinite and without any prime or supreme member, while we do not, on this account, deny the existence of intelligible grounds of these phenomena, although we never employ them to explain phenomena, for the simple reason that they are not objects of our cognition. Thirdly, in the sphere of theology, we must regard the whole system of possible experience as forming an absolute, but dependent and sensuously-conditioned unity, and at the same time as based upon a sole, supreme, and all-sufficient ground existing apart from the world itself — a ground which is a self-subsistent, primeval and creative reason, in relation to which we so employ our reason in the field of experience, as if all objects drew their origin from that archetype of all reason. In other words, we ought not to deduce the internal phenomena of the mind from a simple thinking substance, but deduce them from each other under the guidance of the regulative idea of a simple being; we ought not to deduce the phenomena, order, and unity of the universe from a supreme intelligence, but merely draw from this idea of a supremely wise cause the rules which must guide reason in its connection of causes and effects.

Now there is nothing to hinder us from admitting these ideas to possess an objective and hyperbolic existence, except the cosmological ideas, which lead reason into an antinomy: the psychological and theological ideas are not antinomial. They contain no contradiction; and how, then, can any one dispute their objective reality, since he who denies it knows as little about their possibility as we who affirm? And yet, when we wish to admit the existence of a thing, it is not sufficient to convince ourselves that there is no positive obstacle in the way; for it cannot be allowable to regard mere creations of thought, which transcend, though they do not contradict, all our conceptions, as real and determinate objects, solely upon the authority of a speculative reason striving to compass its own aims. They cannot, therefore, be admitted to be real in themselves; they can only possess a comparative reality — that of a schema of the regulative principle of the systematic unity of all cognition. They are to be regarded not as actual things, but as in some measure analogous to them. We abstract from the object of the idea all the conditions which limit the exercise of our understanding, but which, on the other hand, are the sole conditions of our possessing a determinate conception of any given thing. And thus we cogitate a something, of the real nature of which we have not the least conception, but which we represent to ourselves as standing in a relation to the whole system of phenomena, analogous to that in which phenomena stand to each other.

By admitting these ideal beings, we do not really extend our cognitions beyond the objects of possible experience; we extend merely the empirical unity of our experience, by the aid of systematic unity, the schema of which is furnished by the idea, which is therefore valid — not as a constitutive, but as a regulative principle. For although we posit a thing corresponding to the idea — a something, an actual existence — we do not on that account aim at the extension of our cognition by means of transcendent

conceptions. This existence is purely ideal, and not objective; it is the mere expression of the systematic unity which is to be the guide of reason in the field of experience. There are no attempts made at deciding what the ground of this unity may be, or what the real nature of this imaginary being.

Thus the transcendental and only determinate conception of God, which is presented to us by speculative reason, is in the strictest sense deistic. In other words, reason does not assure us of the objective validity of the conception; it merely gives us the idea of something, on which the supreme and necessary unity of all experience is based. This something we cannot, following the analogy of a real substance, cogitate otherwise than as the cause of all things operating in accordance with rational laws, if we regard it as an individual object; although we should rest contented with the idea alone as a regulative principle of reason, and make no attempt at completing the sum of the conditions imposed by thought. This attempt is, indeed, inconsistent with the grand aim of complete systematic unity in the sphere of cognition — a unity to which no bounds are set by reason.

Hence it happens that, admitting a divine being, I can have no conception of the internal possibility of its perfection, or of the necessity of its existence. The only advantage of this admission is that it enables me to answer all other questions relating to the contingent, and to give reason the most complete satisfaction as regards the unity which it aims at attaining in the world of experience. But I cannot satisfy reason with regard to this hypothesis itself; and this proves that it is not its intelligence and insight into the subject, but its speculative interest alone which induces it to proceed from a point lying far beyond the sphere of our cognition, for the purpose of being able to consider all objects as parts of a systematic whole.

Here a distinction presents itself, in regard to the way in which we may cogitate a presupposition — a distinction which is somewhat subtle, but of great importance in transcendental philosophy. I may have sufficient grounds to admit something, or the existence of something, in a relative point of view (suppositio relativa), without being justified in admitting it in an absolute sense (suppositio absoluta). This distinction is undoubtedly requisite, in the case of a regulative principle, the necessity of which we recognize, though we are ignorant of the source and cause of that necessity, and which we assume to be based upon some ultimate ground, for the purpose of being able to cogitate the universality of the principle in a more determinate way. For example, I cogitate the existence of a being corresponding to a pure transcendental idea. But I cannot admit that this being exists absolutely and in itself, because all of the conceptions by which I can cogitate an object in a determinate manner fall short of assuring me of its existence; nay, the conditions of the objective validity of my conceptions are excluded by the idea — by the very fact of its being an idea. The conceptions of reality, substance, causality, nay, even that of necessity in existence, have no significance out of the sphere of empirical cognition, and cannot, beyond that sphere, determine any object. They may, accordingly, be employed to explain the possibility of things in the world of sense, but they are utterly inadequate to explain the possibility of the universe itself considered as a whole; because in this case the ground of explanation must lie out of and beyond the world, and cannot, therefore, be an object of possible experience. Now, I may admit the existence of an incomprehensible being of this nature — the object of a mere idea, relatively to the world of sense; although I have no ground to admit its existence absolutely and in itself. For if an idea (that of a systematic and complete unity, of which I shall presently speak more particularly) lies at the foundation of the most extended empirical employment of reason, and if this idea cannot be adequately represented in concreto, although it is indispensably necessary for the approximation of empirical unity to the highest possible degree — I am not only authorized, but compelled, to realize this idea, that is, to posit a real object corresponding thereto. But I cannot profess to know this object; it is to me merely a something, to which, as the ground of systematic unity in cognition, I attribute such properties as are analogous to the conceptions employed by the understanding in the sphere of experience. Following the analogy of the notions of reality, substance, causality, and necessity, I cogitate a being, which possesses all these

attributes in the highest degree; and, as this idea is the offspring of my reason alone, I cogitate this being as self-subsistent reason, and as the cause of the universe operating by means of ideas of the greatest possible harmony and unity. Thus I abstract all conditions that would limit my idea, solely for the purpose of rendering systematic unity possible in the world of empirical diversity, and thus securing the widest possible extension for the exercise of reason in that sphere. This I am enabled to do, by regarding all connections and relations in the world of sense, as if they were the dispositions of a supreme reason, of which our reason is but a faint image. I then proceed to cogitate this Supreme Being by conceptions which have, properly, no meaning or application, except in the world of sense. But as I am authorized to employ the transcendental hypothesis of such a being in a relative respect alone, that is, as the substratum of the greatest possible unity in experience — I may attribute to a being which I regard as distinct from the world, such properties as belong solely to the sphere of sense and experience. For I do not desire, and am not justified in desiring, to cognize this object of my idea, as it exists in itself; for I possess no conceptions sufficient for or task, those of reality, substance, causality, nay, even that of necessity in existence, losing all significance, and becoming merely the signs of conceptions, without content and without applicability, when I attempt to carry them beyond the limits of the world of sense. I cogitate merely the relation of a perfectly unknown being to the greatest possible systematic unity of experience, solely for the purpose of employing it as the schema of the regulative principle which directs reason in its empirical exercise.

It is evident, at the first view, that we cannot presuppose the reality of this transcendental object, by means of the conceptions of reality, substance, causality, and so on, because these conceptions cannot be applied to anything that is distinct from the world of sense. Thus the supposition of a Supreme Being or cause is purely relative; it is cogitated only in behalf of the systematic unity of experience; such a being is but a something, of whose existence in itself we have not the least conception. Thus, too, it becomes sufficiently manifest why we required the idea of a necessary being in relation to objects given by sense, although we can never have the least conception of this being, or of its absolute necessity.

And now we can clearly perceive the result of our transcendental dialectic, and the proper aim of the ideas of pure reason — which become dialectical solely from misunderstanding and inconsiderateness. Pure reason is, in fact, occupied with itself, and not with any object. Objects are not presented to it to be embraced in the unity of an empirical conception; it is only the cognitions of the understanding that are presented to it, for the purpose of receiving the unity of a rational conception, that is, of being connected according to a principle. The unity of reason is the unity of system; and this systematic unity is not an objective principle, extending its dominion over objects, but a subjective maxim, extending its authority over the empirical cognition of objects. The systematic connection which reason gives to the empirical employment of the understanding not only advances the extension of that employment, but ensures its correctness, and thus the principle of a systematic unity of this nature is also objective, although only in an indefinite respect (principium vagum). It is not, however, a constitutive principle, determining an object to which it directly relates; it is merely a regulative principle or maxim, advancing and strengthening the empirical exercise of reason, by the opening up of new paths of which the understanding is ignorant, while it never conflicts with the laws of its exercise in the sphere of experience.

But reason cannot cogitate this systematic unity, without at the same time cogitating an object of the idea — an object that cannot be presented in any experience, which contains no concrete example of a complete systematic unity. This being (ens rationis ratiocinatae) is therefore a mere idea and is not assumed to be a thing which is real absolutely and in itself. On the contrary, it forms merely the problematical foundation of the connection which the mind introduces among the phenomena of the sensuous world. We look upon this connection, in the light of the above-mentioned idea, as if it drew its origin from the supposed being which corresponds to the idea. And yet all we aim at is the possession of this idea as a secure foundation for the systematic unity of experience — a unity indispensable to reason,

advantageous to the understanding, and promotive of the interests of empirical cognition.

We mistake the true meaning of this idea when we regard it as an enouncement, or even as a hypothetical declaration of the existence of a real thing, which we are to regard as the origin or ground of a systematic constitution of the universe. On the contrary, it is left completely undetermined what the nature or properties of this so-called ground may be. The idea is merely to be adopted as a point of view, from which this unity, so essential to reason and so beneficial to the understanding, may be regarded as radiating. In one word, this transcendental thing is merely the schema of a regulative principle, by means of which Reason, so far as in her lies, extends the dominion of systematic unity over the whole sphere of experience.

The first object of an idea of this kind is the ego, considered merely as a thinking nature or soul. If I wish to investigate the properties of a thinking being, I must interrogate experience. But I find that I can apply none of the categories to this object, the schema of these categories, which is the condition of their application, being given only in sensuous intuition. But I cannot thus attain to the cognition of a systematic unity of all the phenomena of the internal sense. Instead, therefore, of an empirical conception of what the soul really is, reason takes the conception of the empirical unity of all thought, and, by cogitating this unity as unconditioned and primitive, constructs the rational conception or idea of a simple substance which is in itself unchangeable, possessing personal identity, and in connection with other real things external to it; in one word, it constructs the idea of a simple self-subsistent intelligence. But the real aim of reason in this procedure is the attainment of principles of systematic unity for the explanation of the phenomena of the soul. That is, reason desires to be able to represent all the determinations of the internal sense as existing in one subject, all powers as deduced from one fundamental power, all changes as mere varieties in the condition of a being which is permanent and always the same, and all phenomena in space as entirely different in their nature from the procedure of thought. Essential simplicity (with the other attributes predicated of the ego) is regarded as the mere schema of this regulative principle; it is not assumed that it is the actual ground of the properties of the soul. For these properties may rest upon quite different grounds, of which we are completely ignorant; just as the above predicates could not give us any knowledge of the soul as it is in itself, even if we regarded them as valid in respect of it, inasmuch as they constitute a mere idea, which cannot be represented in concreto. Nothing but good can result from a psychological idea of this kind, if we only take proper care not to consider it as more than an idea; that is, if we regard it as valid merely in relation to the employment of reason, in the sphere of the phenomena of the soul. Under the guidance of this idea, or principle, no empirical laws of corporeal phenomena are called in to explain that which is a phenomenon of the internal sense alone; no windy hypotheses of the generation, annihilation, and palingenesis of souls are admitted. Thus the consideration of this object of the internal sense is kept pure, and unmixed with heterogeneous elements; while the investigation of reason aims at reducing all the grounds of explanation employed in this sphere of knowledge to a single principle. All this is best effected, nay, cannot be effected otherwise than by means of such a schema, which requires us to regard this ideal thing as an actual existence. The psychological idea is, therefore, meaningless and inapplicable, except as the schema of a regulative conception. For, if I ask whether the soul is not really of a spiritual nature — it is a question which has no meaning. From such a conception has been abstracted, not merely all corporeal nature, but all nature, that is, all the predicates of a possible experience; and consequently, all the conditions which enable us to cogitate an object to this conception have disappeared. But, if these conditions are absent, it is evident that the conception is meaningless.

The second regulative idea of speculative reason is the conception of the universe. For nature is properly the only object presented to us, in regard to which reason requires regulative principles. Nature is twofold — thinking and corporeal nature. To cogitate the latter in regard to its internal possibility, that is, to determine the application of the categories to it, no idea is required — no representation which transcends experience. In this sphere, therefore, an idea is impossible, sensuous intuition being our only

guide; while, in the sphere of psychology, we require the fundamental idea (I), which contains a priori a certain form of thought namely, the unity of the ego. Pure reason has, therefore, nothing left but nature in general, and the completeness of conditions in nature in accordance with some principle. The absolute totality of the series of these conditions is an idea, which can never be fully realized in the empirical exercise of reason, while it is serviceable as a rule for the procedure of reason in relation to that totality. It requires us, in the explanation of given phenomena (in the regress or ascent in the series), to proceed as if the series were infinite in itself, that is, were prolonged in indefinitum; while on the other hand, where reason is regarded as itself the determining cause (in the region of freedom), we are required to proceed as if we had not before us an object of sense, but of the pure understanding. In this latter case, the conditions do not exist in the series of phenomena, but may be placed quite out of and beyond it, and the series of conditions may be regarded as if it had an absolute beginning from an intelligible cause. All this proves that the cosmological ideas are nothing but regulative principles, and not constitutive; and that their aim is not to realize an actual totality in such series. The full discussion of this subject will be found in its proper place in the chapter on the antinomy of pure reason.

The third idea of pure reason, containing the hypothesis of a being which is valid merely as a relative hypothesis, is that of the one and all-sufficient cause of all cosmological series, in other words, the idea of God. We have not the slightest ground absolutely to admit the existence of an object corresponding to this idea; for what can empower or authorize us to affirm the existence of a being of the highest perfection — a being whose existence is absolutely necessary — merely because we possess the conception of such a being? The answer is: It is the existence of the world which renders this hypothesis necessary. But this answer makes it perfectly evident that the idea of this being, like all other speculative ideas, is essentially nothing more than a demand upon reason that it shall regulate the connection which it and its subordinate faculties introduce into the phenomena of the world by principles of systematic unity and, consequently, that it shall regard all phenomena as originating from one all-embracing being, as the supreme and all-sufficient cause. From this it is plain that the only aim of reason in this procedure is the establishment of its own formal rule for the extension of its dominion in the world of experience; that it does not aim at an extension of its cognition beyond the limits of experience; and that, consequently, this idea does not contain any constitutive principle.

The highest formal unity, which is based upon ideas alone, is the unity of all things — a unity in accordance with an aim or purpose; and the speculative interest of reason renders it necessary to regard all order in the world as if it originated from the intention and design of a supreme reason. This principle unfolds to the view of reason in the sphere of experience new and enlarged prospects, and invites it to connect the phenomena of the world according to teleological laws, and in this way to attain to the highest possible degree of systematic unity. The hypothesis of a supreme intelligence, as the sole cause of the universe — an intelligence which has for us no more than an ideal existence — is accordingly always of the greatest service to reason. Thus, if we presuppose, in relation to the figure of the earth (which is round, but somewhat flattened at the poles),* or that of mountains or seas, wise designs on the part of an author of the universe, we cannot fail to make, by the light of this supposition, a great number of interesting discoveries. If we keep to this hypothesis, as a principle which is purely regulative, even error cannot be very detrimental. For, in this case, error can have no more serious consequences than that, where we expected to discover a teleological connection (nexus finalis), only a mechanical or physical connection appears. In such a case, we merely fail to find the additional form of unity we expected, but we do not lose the rational unity which the mind requires in its procedure in experience. But even a miscarriage of this sort cannot affect the law in its general and teleological relations. For although we may convict an anatomist of an error, when he connects the limb of some animal with a certain purpose, it is quite impossible to prove in a single case that any arrangement of nature, be it what it may, is entirely without aim or design. And thus medical physiology, by the aid of a principle presented to it by pure

reason, extends its very limited empirical knowledge of the purposes of the different parts of an organized body so far that it may be asserted with the utmost confidence, and with the approbation of all reflecting men, that every organ or bodily part of an animal has its use and answers a certain design. Now, this is a supposition which, if regarded as of a constitutive character, goes much farther than any experience or observation of ours can justify. Hence it is evident that it is nothing more than a regulative principle of reason, which aims at the highest degree of systematic unity, by the aid of the idea of a causality according to design in a supreme cause — a cause which it regards as the highest intelligence.

[Footnote: The advantages which a circular form, in the case of the earth, has over every other, are well known. But few are aware that the slight flattening at the poles, which gives it the figure of a spheroid, is the only cause which prevents the elevations of continents or even of mountains, perhaps thrown up by some internal convulsion, from continually altering the position of the axis of the earth — and that to some considerable degree in a short time. The great protuberance of the earth under the Equator serves to overbalance the impetus of all other masses of earth, and thus to preserve the axis of the earth, so far as we can observe, in its present position. And yet this wise arrangement has been unthinkingly explained from the equilibrium of the formerly fluid mass.]

If, however, we neglect this restriction of the idea to a purely regulative influence, reason is betrayed into numerous errors. For it has then left the ground of experience, in which alone are to be found the criteria of truth, and has ventured into the region of the incomprehensible and unsearchable, on the heights of which it loses its power and collectedness, because it has completely severed its connection with experience.

The first error which arises from our employing the idea of a Supreme Being as a constitutive (in repugnance to the very nature of an idea), and not as a regulative principle, is the error of inactive reason (ignava ratio).* We may so term every principle which requires us to regard our investigations of nature as absolutely complete, and allows reason to cease its inquiries, as if it had fully executed its task. Thus the psychological idea of the ego, when employed as a constitutive principle for the explanation of the phenomena of the soul, and for the extension of our knowledge regarding this subject beyond the limits of experience — even to the condition of the soul after death — is convenient enough for the purposes of pure reason, but detrimental and even ruinous to its interests in the sphere of nature and experience. The dogmatizing spiritualist explains the unchanging unity of our personality through all changes of condition from the unity of a thinking substance, the interest which we take in things and events that can happen only after our death, from a consciousness of the immaterial nature of our thinking subject, and so on. Thus he dispenses with all empirical investigations into the cause of these internal phenomena, and with all possible explanations of them upon purely natural grounds; while, at the dictation of a transcendent reason, he passes by the immanent sources of cognition in experience, greatly to his own ease and convenience, but to the sacrifice of all, genuine insight and intelligence. These prejudicial consequences become still more evident, in the case of the dogmatical treatment of our idea of a Supreme Intelligence, and the theological system of nature (physico-theology) which is falsely based upon it. For, in this case, the aims which we observe in nature, and often those which we merely fancy to exist, make the investigation of causes a very easy task, by directing us to refer such and such phenomena immediately to the unsearchable will and counsel of the Supreme Wisdom, while we ought to investigate their causes in the general laws of the mechanism of matter. We are thus recommended to consider the labour of reason as ended, when we have merely dispensed with its employment, which is guided surely and safely only by the order of nature and the series of changes in the world — which are arranged according to immanent and general laws. This error may be avoided, if we do not merely consider from the view-point of final aims certain parts of nature, such as the division and structure of a continent, the constitution and direction of certain mountain-chains, or even the organization existing in the vegetable and animal kingdoms, but look upon this systematic unity of nature in a perfectly general way, in relation to the idea of a Supreme Intelligence. If we pursue this advice, we lay as a foundation for all investigation the conformity to aims

of all phenomena of nature in accordance with universal laws, for which no particular arrangement of nature is exempt, but only cognized by us with more or less difficulty; and we possess a regulative principle of the systematic unity of a teleological connection, which we do not attempt to anticipate or predetermine. All that we do, and ought to do, is to follow out the physico-mechanical connection in nature according to general laws, with the hope of discovering, sooner or later, the teleological connection also. Thus, and thus only, can the principle of final unity aid in the extension of the employment of reason in the sphere of experience, without being in any case detrimental to its interests.

[Footnote: This was the term applied by the old dialecticians to a sophistical argument, which ran thus: If it is your fate to die of this disease, you will die, whether you employ a physician or not. Cicero says that this mode of reasoning has received this appellation, because, if followed, it puts an end to the employment of reason in the affairs of life. For a similar reason, I have applied this designation to the sophistical argument of pure reason.]

The second error which arises from the misconception of the principle of systematic unity is that of perverted reason (perversa ratio, usteron roteron rationis). The idea of systematic unity is available as a regulative principle in the connection of phenomena according to general natural laws; and, how far soever we have to travel upon the path of experience to discover some fact or event, this idea requires us to believe that we have approached all the more nearly to the completion of its use in the sphere of nature, although that completion can never be attained. But this error reverses the procedure of reason. We begin by hypostatizing the principle of systematic unity, and by giving an anthropomorphic determination to the conception of a Supreme Intelligence, and then proceed forcibly to impose aims upon nature. Thus not only does teleology, which ought to aid in the completion of unity in accordance with general laws, operate to the destruction of its influence, but it hinders reason from attaining its proper aim, that is, the proof, upon natural grounds, of the existence of a supreme intelligent cause. For, if we cannot presuppose supreme finality in nature a priori, that is, as essentially belonging to nature, how can we be directed to endeavour to discover this unity and, rising gradually through its different degrees, to approach the supreme perfection of an author of all — a perfection which is absolutely necessary, and therefore cognizable a priori? The regulative principle directs us to presuppose systematic unity absolutely and, consequently, as following from the essential nature of things — but only as a unity of nature, not merely cognized empirically, but presupposed a priori, although only in an indeterminate manner. But if I insist on basing nature upon the foundation of a supreme ordaining Being, the unity of nature is in effect lost. For, in this case, it is quite foreign and unessential to the nature of things, and cannot be cognized from the general laws of nature. And thus arises a vicious circular argument, what ought to have been proved having been presupposed.

To take the regulative principle of systematic unity in nature for a constitutive principle, and to hypostatize and make a cause out of that which is properly the ideal ground of the consistent and harmonious exercise of reason, involves reason in inextricable embarrassments. The investigation of nature pursues its own path under the guidance of the chain of natural causes, in accordance with the general laws of nature, and ever follows the light of the idea of an author of the universe — not for the purpose of deducing the finality, which it constantly pursues, from this Supreme Being, but to attain to the cognition of his existence from the finality which it seeks in the existence of the phenomena of nature, and, if possible, in that of all things to cognize this being, consequently, as absolutely necessary. Whether this latter purpose succeed or not, the idea is and must always be a true one, and its employment, when merely regulative, must always be accompanied by truthful and beneficial results.

Complete unity, in conformity with aims, constitutes absolute perfection. But if we do not find this unity in the nature of the things which go to constitute the world of experience, that is, of objective cognition, consequently in the universal and necessary laws of nature, how can we infer from this unity the idea of

the supreme and absolutely necessary perfection of a primal being, which is the origin of all causality? The greatest systematic unity, and consequently teleological unity, constitutes the very foundation of the possibility of the most extended employment of human reason. The idea of unity is therefore essentially and indissolubly connected with the nature of our reason. This idea is a legislative one; and hence it is very natural that we should assume the existence of a legislative reason corresponding to it, from which the systematic unity of nature — the object of the operations of reason — must be derived.

In the course of our discussion of the antinomies, we stated that it is always possible to answer all the questions which pure reason may raise; and that the plea of the limited nature of our cognition, which is unavoidable and proper in many questions regarding natural phenomena, cannot in this case be admitted, because the questions raised do not relate to the nature of things, but are necessarily originated by the nature of reason itself, and relate to its own internal constitution. We can now establish this assertion, which at first sight appeared so rash, in relation to the two questions in which reason takes the greatest interest, and thus complete our discussion of the dialectic of pure reason.

If, then, the question is asked, in relation to transcendental theology,* first, whether there is anything distinct from the world, which contains the ground of cosmical order and connection according to general laws? The answer is: Certainly. For the world is a sum of phenomena; there must, therefore, be some transcendental basis of these phenomena, that is, a basis cogitable by the pure understanding alone. If, secondly, the question is asked whether this being is substance, whether it is of the greatest reality, whether it is necessary, and so forth? I answer that this question is utterly without meaning. For all the categories which aid me in forming a conception of an object cannot be employed except in the world of sense, and are without meaning when not applied to objects of actual or possible experience. Out of this sphere, they are not properly conceptions, but the mere marks or indices of conceptions, which we may admit, although they cannot, without the help of experience, help us to understand any subject or thing. If, thirdly, the question is whether we may not cogitate this being, which is distinct from the world, in analogy with the objects of experience? The answer is: Undoubtedly, but only as an ideal, and not as a real object. That is, we must cogitate it only as an unknown substratum of the systematic unity, order, and finality of the world — a unity which reason must employ as the regulative principle of its investigation of nature. Nay, more, we may admit into the idea certain anthropomorphic elements, which are promotive of the interests of this regulative principle. For it is no more than an idea, which does not relate directly to a being distinct from the world, but to the regulative principle of the systematic unity of the world, by means, however, of a schema of this unity — the schema of a Supreme Intelligence, who is the wisely-designing author of the universe. What this basis of cosmical unity may be in itself, we know not — we cannot discover from the idea; we merely know how we ought to employ the idea of this unity, in relation to the systematic operation of reason in the sphere of experience.

[Footnote: After what has been said of the psychological idea of the ego and its proper employment as a regulative principle of the operations of reason, I need not enter into details regarding the transcendental illusion by which the systematic unity of all the various phenomena of the internal sense is hypostatized. The procedure is in this case very similar to that which has been discussed in our remarks on the theological ideal.]

But, it will be asked again, can we on these grounds, admit the existence of a wise and omnipotent author of the world? Without doubt; and not only so, but we must assume the existence of such a being. But do we thus extend the limits of our knowledge beyond the field of possible experience? By no means. For we have merely presupposed a something, of which we have no conception, which we do not know as it is in itself; but, in relation to the systematic disposition of the universe, which we must presuppose in all our observation of nature, we have cogitated this unknown being in analogy with an intelligent existence (an empirical conception), that is to say, we have endowed it with those attributes, which, judging from

the nature of our own reason, may contain the ground of such a systematic unity. This idea is therefore valid only relatively to the employment in experience of our reason. But if we attribute to it absolute and objective validity, we overlook the fact that it is merely an ideal being that we cogitate; and, by setting out from a basis which is not determinable by considerations drawn from experience, we place ourselves in a position which incapacitates us from applying this principle to the empirical employment of reason.

But, it will be asked further, can I make any use of this conception and hypothesis in my investigations into the world and nature? Yes, for this very purpose was the idea established by reason as a fundamental basis. But may I regard certain arrangements, which seemed to have been made in conformity with some fixed aim, as the arrangements of design, and look upon them as proceeding from the divine will, with the intervention, however, of certain other particular arrangements disposed to that end? Yes, you may do so; but at the same time you must regard it as indifferent, whether it is asserted that divine wisdom has disposed all things in conformity with his highest aims, or that the idea of supreme wisdom is a regulative principle in the investigation of nature, and at the same time a principle of the systematic unity of nature according to general laws, even in those cases where we are unable to discover that unity. In other words, it must be perfectly indifferent to you whether you say, when you have discovered this unity: God has wisely willed it so; or: Nature has wisely arranged this. For it was nothing but the systematic unity, which reason requires as a basis for the investigation of nature, that justified you in accepting the idea of a supreme intelligence as a schema for a regulative principle; and, the farther you advance in the discovery of design and finality, the more certain the validity of your idea. But, as the whole aim of this regulative principle was the discovery of a necessary and systematic unity in nature, we have, in so far as we attain this, to attribute our success to the idea of a Supreme Being; while, at the same time, we cannot, without involving ourselves in contradictions, overlook the general laws of nature, as it was in reference to them alone that this idea was employed. We cannot, I say, overlook the general laws of nature, and regard this conformity to aims observable in nature as contingent or hyperphysical in its origin; inasmuch as there is no ground which can justify us in the admission of a being with such properties distinct from and above nature. All that we are authorized to assert is that this idea may be employed as a principle, and that the properties of the being which is assumed to correspond to it may be regarded as systematically connected in analogy with the causal determination of phenomena.

For the same reasons we are justified in introducing into the idea of the supreme cause other anthropomorphic elements (for without these we could not predicate anything of it); we may regard it as allowable to cogitate this cause as a being with understanding, the feelings of pleasure and displeasure, and faculties of desire and will corresponding to these. At the same time, we may attribute to this being infinite perfection — a perfection which necessarily transcends that which our knowledge of the order and design in the world authorize us to predicate of it. For the regulative law of systematic unity requires us to study nature on the supposition that systematic and final unity in infinitum is everywhere discoverable, even in the highest diversity. For, although we may discover little of this cosmical perfection, it belongs to the legislative prerogative of reason to require us always to seek for and to expect it; while it must always be beneficial to institute all inquiries into nature in accordance with this principle. But it is evident that, by this idea of a supreme author of all, which I place as the foundation of all inquiries into nature, I do not mean to assert the existence of such a being, or that I have any knowledge of its existence; and, consequently, I do not really deduce anything from the existence of this being, but merely from its idea, that is to say, from the nature of things in this world, in accordance with this idea. A certain dim consciousness of the true use of this idea seems to have dictated to the philosophers of all times the moderate language used by them regarding the cause of the world. We find them employing the expressions wisdom and care of nature, and divine wisdom, as synonymous — nay, in purely speculative discussions, preferring the former, because it does not carry the appearance of greater pretensions than such as we are entitled to make, and at the same time directs reason to its proper field of action — nature

and her phenomena.

Thus, pure reason, which at first seemed to promise us nothing less than the extension of our cognition beyond the limits of experience, is found, when thoroughly examined, to contain nothing but regulative principles, the virtue and function of which is to introduce into our cognition a higher degree of unity than the understanding could of itself. These principles, by placing the goal of all our struggles at so great a distance, realize for us the most thorough connection between the different parts of our cognition, and the highest degree of systematic unity. But, on the other hand, if misunderstood and employed as constitutive principles of transcendent cognition, they become the parents of illusions and contradictions, while pretending to introduce us to new regions of knowledge.

Thus all human cognition begins with intuitions, proceeds from thence to conceptions, and ends with ideas. Although it possesses, in relation to all three elements, a priori sources of cognition, which seemed to transcend the limits of all experience, a thoroughgoing criticism demonstrates that speculative reason can never, by the aid of these elements, pass the bounds of possible experience, and that the proper destination of this highest faculty of cognition is to employ all methods, and all the principles of these methods, for the purpose of penetrating into the innermost secrets of nature, by the aid of the principles of unity (among all kinds of which teleological unity is the highest), while it ought not to attempt to soar above the sphere of experience, beyond which there lies nought for us but the void inane. The critical examination, in our Transcendental Analytic, of all the propositions which professed to extend cognition beyond the sphere of experience, completely demonstrated that they can only conduct us to a possible experience. If we were not distrustful even of the clearest abstract theorems, if we were not allured by specious and inviting prospects to escape from the constraining power of their evidence, we might spare ourselves the laborious examination of all the dialectical arguments which a transcendent reason adduces in support of its pretensions; for we should know with the most complete certainty that, however honest such professions might be, they are null and valueless, because they relate to a kind of knowledge to which no man can by any possibility attain. But, as there is no end to discussion, if we cannot discover the true cause of the illusions by which even the wisest are deceived, and as the analysis of all our transcendent cognition into its elements is of itself of no slight value as a psychological study, while it is a duty incumbent on every philosopher — it was found necessary to investigate the dialectical procedure of reason in its primary sources. And as the inferences of which this dialectic is the parent are not only deceitful, but naturally possess a profound interest for humanity, it was advisable at the same time, to give a full account of the momenta of this dialectical procedure, and to deposit it in the archives of human reason, as a warning to all future metaphysicians to avoid these causes of speculative error.

II. TRANSCENDENTAL DOCTRINE OF METHOD.

If we regard the sum of the cognition of pure speculative reason as an edifice, the idea of which, at least, exists in the human mind, it may be said that we have in the Transcendental Doctrine of Elements examined the materials and determined to what edifice these belong, and what its height and stability. We have found, indeed, that, although we had purposed to build for ourselves a tower which should reach to Heaven, the supply of materials sufficed merely for a habitation, which was spacious enough for all terrestrial purposes, and high enough to enable us to survey the level plain of experience, but that the bold undertaking designed necessarily failed for want of materials — not to mention the confusion of tongues, which gave rise to endless disputes among the labourers on the plan of the edifice, and at last scattered them over all the world, each to erect a separate building for himself, according to his own plans and his own inclinations. Our present task relates not to the materials, but to the plan of an edifice; and, as we have had sufficient warning not to venture blindly upon a design which may be found to transcend our natural powers, while, at the same time, we cannot give up the intention of erecting a secure abode for the mind, we must proportion our design to the material which is presented to us, and which is, at the same time, sufficient for all our wants.

I understand, then, by the transcendental doctrine of method, the determination of the formal conditions of a complete system of pure reason. We shall accordingly have to treat of the discipline, the canon, the architectonic, and, finally, the history of pure reason. This part of our Critique will accomplish, from the transcendental point of view, what has been usually attempted, but miserably executed, under the name of practical logic. It has been badly executed, I say, because general logic, not being limited to any particular kind of cognition (not even to the pure cognition of the understanding) nor to any particular objects, it cannot, without borrowing from other sciences, do more than present merely the titles or signs of possible methods and the technical expressions, which are employed in the systematic parts of all sciences; and thus the pupil is made acquainted with names, the meaning and application of which he is to learn only at some future time.

CHAPTER I. The Discipline of Pure Reason.

Negative judgements — those which are so not merely as regards their logical form, but in respect of their content — are not commonly held in especial respect. They are, on the contrary, regarded as jealous enemies of our insatiable desire for knowledge; and it almost requires an apology to induce us to tolerate, much less to prize and to respect them.

All propositions, indeed, may be logically expressed in a negative form; but, in relation to the content of our cognition, the peculiar province of negative judgements is solely to prevent error. For this reason, too, negative propositions, which are framed for the purpose of correcting false cognitions where error is absolutely impossible, are undoubtedly true, but inane and senseless; that is, they are in reality purposeless and, for this reason, often very ridiculous. Such is the proposition of the schoolman that Alexander could not have subdued any countries without an army.

But where the limits of our possible cognition are very much contracted, the attraction to new fields of knowledge great, the illusions to which the mind is subject of the most deceptive character, and the evil consequences of error of no inconsiderable magnitude — the negative element in knowledge, which is useful only to guard us against error, is of far more importance than much of that positive instruction which makes additions to the sum of our knowledge. The restraint which is employed to repress, and finally to extirpate the constant inclination to depart from certain rules, is termed discipline. It is distinguished from culture, which aims at the formation of a certain degree of skill, without attempting to repress or to destroy any other mental power, already existing. In the cultivation of a talent, which has given evidence of an impulse towards self-development, discipline takes a negative,* culture and doctrine a positive, part.

[Footnote: I am well aware that, in the language of the schools, the term discipline is usually employed as synonymous with instruction.

But there are so many cases in which it is necessary to distinguish the notion of the former, as a course of corrective training, from that of the latter, as the communication of knowledge, and the nature of things itself demands the appropriation of the most suitable expressions for this distinction, that it is my desire that the former terms should never be employed in any other than a negative signification.]

That natural dispositions and talents (such as imagination and wit), which ask a free and unlimited development, require in many respects the corrective influence of discipline, every one will readily grant. But it may well appear strange that reason, whose proper duty it is to prescribe rules of discipline to all the other powers of the mind, should itself require this corrective. It has, in fact, hitherto escaped this humiliation, only because, in presence of its magnificent pretensions and high position, no one could readily suspect it to be capable of substituting fancies for conceptions, and words for things.

Reason, when employed in the field of experience, does not stand in need of criticism, because its principles are subjected to the continual test of empirical observations. Nor is criticism requisite in the sphere of mathematics, where the conceptions of reason must always be presented in concreto in pure intuition, and baseless or arbitrary assertions are discovered without difficulty. But where reason is not held in a plain track by the influence of empirical or of pure intuition, that is, when it is employed in the transcendental sphere of pure conceptions, it stands in great need of discipline, to restrain its propensity to overstep the limits of possible experience and to keep it from wandering into error. In fact, the utility of the philosophy of pure reason is entirely of this negative character. Particular errors may be corrected by particular animadversions, and the causes of these errors may be eradicated by criticism. But where we find, as in the case of pure reason, a complete system of illusions and fallacies, closely connected with

each other and depending upon grand general principles, there seems to be required a peculiar and negative code of mental legislation, which, under the denomination of a discipline, and founded upon the nature of reason and the objects of its exercise, shall constitute a system of thorough examination and testing, which no fallacy will be able to withstand or escape from, under whatever disguise or concealment it may lurk.

But the reader must remark that, in this the second division of our transcendental Critique the discipline of pure reason is not directed to the content, but to the method of the cognition of pure reason. The former task has been completed in the doctrine of elements. But there is so much similarity in the mode of employing the faculty of reason, whatever be the object to which it is applied, while, at the same time, its employment in the transcendental sphere is so essentially different in kind from every other, that, without the warning negative influence of a discipline specially directed to that end, the errors are unavoidable which spring from the unskillful employment of the methods which are originated by reason but which are out of place in this sphere.

SECTION I. The Discipline of Pure Reason in the Sphere of Dogmatism.

The science of mathematics presents the most brilliant example of the extension of the sphere of pure reason without the aid of experience. Examples are always contagious; and they exert an especial influence on the same faculty, which naturally flatters itself that it will have the same good fortune in other case as fell to its lot in one fortunate instance. Hence pure reason hopes to be able to extend its empire in the transcendental sphere with equal success and security, especially when it applies the same method which was attended with such brilliant results in the science of mathematics. It is, therefore, of the highest importance for us to know whether the method of arriving at demonstrative certainty, which is termed mathematical, be identical with that by which we endeavour to attain the same degree of certainty in philosophy, and which is termed in that science dogmatical.

Philosophical cognition is the cognition of reason by means of conceptions; mathematical cognition is cognition by means of the construction of conceptions. The construction of a conception is the presentation a priori of the intuition which corresponds to the conception. For this purpose a non-empirical intuition is requisite, which, as an intuition, is an individual object; while, as the construction of a conception (a general representation), it must be seen to be universally valid for all the possible intuitions which rank under that conception. Thus I construct a triangle, by the presentation of the object which corresponds to this conception, either by mere imagination, in pure intuition, or upon paper, in empirical intuition, in both cases completely a priori, without borrowing the type of that figure from any experience. The individual figure drawn upon paper is empirical; but it serves, notwithstanding, to indicate the conception, even in its universality, because in this empirical intuition we keep our eye merely on the act of the construction of the conception, and pay no attention to the various modes of determining it, for example, its size, the length of its sides, the size of its angles, these not in the least affecting the essential character of the conception.

Philosophical cognition, accordingly, regards the particular only in the general; mathematical the general in the particular, nay, in the individual. This is done, however, entirely a priori and by means of pure reason, so that, as this individual figure is determined under certain universal conditions of construction, the object of the conception, to which this individual figure corresponds as its schema, must be cogitated as universally determined.

The essential difference of these two modes of cognition consists, therefore, in this formal quality; it does not regard the difference of the matter or objects of both. Those thinkers who aim at distinguishing philosophy from mathematics by asserting that the former has to do with quality merely, and the latter with quantity, have mistaken the effect for the cause. The reason why mathematical cognition can relate only to quantity is to be found in its form alone. For it is the conception of quantities only that is capable of being constructed, that is, presented a priori in intuition; while qualities cannot be given in any other than an

empirical intuition. Hence the cognition of qualities by reason is possible only through conceptions. No one can find an intuition which shall correspond to the conception of reality, except in experience; it cannot be presented to the mind a priori and antecedently to the empirical consciousness of a reality. We can form an intuition, by means of the mere conception of it, of a cone, without the aid of experience; but the colour of the cone we cannot know except from experience. I cannot present an intuition of a cause, except in an example which experience offers to me. Besides, philosophy, as well as mathematics, treats of quantities; as, for example, of totality, infinity, and so on. Mathematics, too, treats of the difference of lines and surfaces — as spaces of different quality, of the continuity of extension — as a quality thereof. But, although in such cases they have a common object, the mode in which reason considers that object is very different in philosophy from what it is in mathematics. The former confines itself to the general conceptions; the latter can do nothing with a mere conception, it hastens to intuition. In this intuition it regards the conception in concreto, not empirically, but in an a priori intuition, which it has constructed; and in which, all the results which follow from the general conditions of the construction of the conception are in all cases valid for the object of the constructed conception.

Suppose that the conception of a triangle is given to a philosopher and that he is required to discover, by the philosophical method, what relation the sum of its angles bears to a right angle. He has nothing before him but the conception of a figure enclosed within three right lines, and, consequently, with the same number of angles. He may analyse the conception of a right line, of an angle, or of the number three as long as he pleases, but he will not discover any properties not contained in these conceptions. But, if this question is proposed to a geometrician, he at once begins by constructing a triangle. He knows that two right angles are equal to the sum of all the contiguous angles which proceed from one point in a straight line; and he goes on to produce one side of his triangle, thus forming two adjacent angles which are together equal to two right angles. He then divides the exterior of these angles, by drawing a line parallel with the opposite side of the triangle, and immediately perceives that he has thus got an exterior adjacent angle which is equal to the interior. Proceeding in this way, through a chain of inferences, and always on the ground of intuition, he arrives at a clear and universally valid solution of the question.

But mathematics does not confine itself to the construction of quantities (quanta), as in the case of geometry; it occupies itself with pure quantity also (quantitas), as in the case of algebra, where complete abstraction is made of the properties of the object indicated by the conception of quantity. In algebra, a certain method of notation by signs is adopted, and these indicate the different possible constructions of quantities, the extraction of roots, and so on. After having thus denoted the general conception of quantities, according to their different relations, the different operations by which quantity or number is increased or diminished are presented in intuition in accordance with general rules. Thus, when one quantity is to be divided by another, the signs which denote both are placed in the form peculiar to the operation of division; and thus algebra, by means of a symbolical construction of quantity, just as geometry, with its ostensive or geometrical construction (a construction of the objects themselves), arrives at results which discursive cognition cannot hope to reach by the aid of mere conceptions.

Now, what is the cause of this difference in the fortune of the philosopher and the mathematician, the former of whom follows the path of conceptions, while the latter pursues that of intuitions, which he represents, a priori, in correspondence with his conceptions? The cause is evident from what has been already demonstrated in the introduction to this Critique. We do not, in the present case, want to discover analytical propositions, which may be produced merely by analysing our conceptions — for in this the philosopher would have the advantage over his rival; we aim at the discovery of synthetical propositions — such synthetical propositions, moreover, as can be cognized a priori. I must not confine myself to that which I actually cogitate in my conception of a triangle, for this is nothing more than the mere definition; I must try to go beyond that, and to arrive at properties which are not contained in, although they belong to, the conception. Now, this is impossible, unless I determine the object present to my mind according to the

conditions, either of empirical, or of pure, intuition. In the former case, I should have an empirical proposition (arrived at by actual measurement of the angles of the triangle), which would possess neither universality nor necessity; but that would be of no value. In the latter, I proceed by geometrical construction, by means of which I collect, in a pure intuition, just as I would in an empirical intuition, all the various properties which belong to the schema of a triangle in general, and consequently to its conception, and thus construct synthetical propositions which possess the attribute of universality.

It would be vain to philosophize upon the triangle, that is, to reflect on it discursively; I should get no further than the definition with which I had been obliged to set out. There are certainly transcendental synthetical propositions which are framed by means of pure conceptions, and which form the peculiar distinction of philosophy; but these do not relate to any particular thing, but to a thing in general, and enounce the conditions under which the perception of it may become a part of possible experience. But the science of mathematics has nothing to do with such questions, nor with the question of existence in any fashion; it is concerned merely with the properties of objects in themselves, only in so far as these are connected with the conception of the objects.

In the above example, we merely attempted to show the great difference which exists between the discursive employment of reason in the sphere of conceptions, and its intuitive exercise by means of the construction of conceptions. The question naturally arises: What is the cause which necessitates this twofold exercise of reason, and how are we to discover whether it is the philosophical or the mathematical method which reason is pursuing in an argument?

All our knowledge relates, finally, to possible intuitions, for it is these alone that present objects to the mind. An a priori or non-empirical conception contains either a pure intuition — and in this case it can be constructed; or it contains nothing but the synthesis of possible intuitions, which are not given a priori. In this latter case, it may help us to form synthetical a priori judgements, but only in the discursive method, by conceptions, not in the intuitive, by means of the construction of conceptions.

The only a priori intuition is that of the pure form of phenomena — space and time. A conception of space and time as quanta may be presented a priori in intuition, that is, constructed, either alone with their quality (figure), or as pure quantity (the mere synthesis of the homogeneous), by means of number. But the matter of phenomena, by which things are given in space and time, can be presented only in perception, a posteriori. The only conception which represents a priori this empirical content of phenomena is the conception of a thing in general; and the a priori synthetical cognition of this conception can give us nothing more than the rule for the synthesis of that which may be contained in the corresponding a posteriori perception; it is utterly inadequate to present an a priori intuition of the real object, which must necessarily be empirical.

Synthetical propositions, which relate to things in general, an a priori intuition of which is impossible, are transcendental. For this reason transcendental propositions cannot be framed by means of the construction of conceptions; they are a priori, and based entirely on conceptions themselves. They contain merely the rule, by which we are to seek in the world of perception or experience the synthetical unity of that which cannot be intuited a priori. But they are incompetent to present any of the conceptions which appear in them in an a priori intuition; these can be given only a posteriori, in experience, which, however, is itself possible only through these synthetical principles.

If we are to form a synthetical judgement regarding a conception, we must go beyond it, to the intuition in which it is given. If we keep to what is contained in the conception, the judgement is merely analytical — it is merely an explanation of what we have cogitated in the conception. But I can pass from the conception to the pure or empirical intuition which corresponds to it. I can proceed to examine my conception in concreto, and to cognize, either a priori or a posterio, what I find in the object of the conception. The former — a priori cognition — is rational-mathematical cognition by means of the construction of the conception; the latter — a posteriori cognition — is purely empirical cognition, which

does not possess the attributes of necessity and universality. Thus I may analyse the conception I have of gold; but I gain no new information from this analysis, I merely enumerate the different properties which I had connected with the notion indicated by the word. My knowledge has gained in logical clearness and arrangement, but no addition has been made to it. But if I take the matter which is indicated by this name, and submit it to the examination of my senses, I am enabled to form several synthetical — although still empirical — propositions. The mathematical conception of a triangle I should construct, that is, present a priori in intuition, and in this way attain to rational-synthetical cognition. But when the transcendental conception of reality, or substance, or power is presented to my mind, I find that it does not relate to or indicate either an empirical or pure intuition, but that it indicates merely the synthesis of empirical intuitions, which cannot of course be given a priori. The synthesis in such a conception cannot proceed a priori — without the aid of experience — to the intuition which corresponds to the conception; and, for this reason, none of these conceptions can produce a determinative synthetical proposition, they can never present more than a principle of the synthesis* of possible empirical intuitions. A transcendental proposition is, therefore, a synthetical cognition of reason by means of pure conceptions and the discursive method, and it renders possible all synthetical unity in empirical cognition, though it cannot present us with any intuition a priori.

[Footnote: In the case of the conception of cause, I do really go beyond the empirical conception of an event — but not to the intuition which presents this conception in concreto, but only to the time-conditions, which may be found in experience to correspond to the conception. My procedure is, therefore, strictly according to conceptions; I cannot in a case of this kind employ the construction of conceptions, because the conception is merely a rule for the synthesis of perceptions, which are not pure intuitions, and which, therefore, cannot be given a priori.]

There is thus a twofold exercise of reason. Both modes have the properties of universality and an a priori origin in common, but are, in their procedure, of widely different character. The reason of this is that in the world of phenomena, in which alone objects are presented to our minds, there are two main elements — the form of intuition (space and time), which can be cognized and determined completely a priori, and the matter or content — that which is presented in space and time, and which, consequently, contains a something — an existence corresponding to our powers of sensation. As regards the latter, which can never be given in a determinate mode except by experience, there are no a priori notions which relate to it, except the undetermined conceptions of the synthesis of possible sensations, in so far as these belong (in a possible experience) to the unity of consciousness. As regards the former, we can determine our conceptions a priori in intuition, inasmuch as we are ourselves the creators of the objects of the conceptions in space and time — these objects being regarded simply as quanta. In the one case, reason proceeds according to conceptions and can do nothing more than subject phenomena to these — which can only be determined empirically, that is, a posteriori — in conformity, however, with those conceptions as the rules of all empirical synthesis. In the other case, reason proceeds by the construction of conceptions; and, as these conceptions relate to an a priori intuition, they may be given and determined in pure intuition a priori, and without the aid of empirical data. The examination and consideration of everything that exists in space or time — whether it is a quantum or not, in how far the particular something (which fills space or time) is a primary substratum, or a mere determination of some other existence, whether it relates to anything else — either as cause or effect, whether its existence is isolated or in reciprocal connection with and dependence upon others, the possibility of this existence, its reality and necessity or opposites — all these form part of the cognition of reason on the ground of conceptions, and this cognition is termed philosophical. But to determine a priori an intuition in space (its figure), to divide time into periods, or merely to cognize the quantity of an intuition in space and time, and to determine it by number — all this is an operation of reason by means of the construction of conceptions, and is called mathematical.

The success which attends the efforts of reason in the sphere of mathematics naturally fosters the expectation that the same good fortune will be its lot, if it applies the mathematical method in other regions of mental endeavour besides that of quantities. Its success is thus great, because it can support all its conceptions by a priori intuitions and, in this way, make itself a master, as it were, over nature; while pure philosophy, with its a priori discursive conceptions, bungles about in the world of nature, and cannot accredit or show any a priori evidence of the reality of these conceptions. Masters in the science of mathematics are confident of the success of this method; indeed, it is a common persuasion that it is capable of being applied to any subject of human thought. They have hardly ever reflected or philosophized on their favourite science — a task of great difficulty; and the specific difference between the two modes of employing the faculty of reason has never entered their thoughts. Rules current in the field of common experience, and which common sense stamps everywhere with its approval, are regarded by them as axiomatic. From what source the conceptions of space and time, with which (as the only primitive quanta) they have to deal, enter their minds, is a question which they do not trouble themselves to answer; and they think it just as unnecessary to examine into the origin of the pure conceptions of the understanding and the extent of their validity. All they have to do with them is to employ them. In all this they are perfectly right, if they do not overstep the limits of the sphere of nature. But they pass, unconsciously, from the world of sense to the insecure ground of pure transcendental conceptions (instabilis tellus, innabilis unda), where they can neither stand nor swim, and where the tracks of their footsteps are obliterated by time; while the march of mathematics is pursued on a broad and magnificent highway, which the latest posterity shall frequent without fear of danger or impediment.

As we have taken upon us the task of determining, clearly and certainly, the limits of pure reason in the sphere of transcendentalism, and as the efforts of reason in this direction are persisted in, even after the plainest and most expressive warnings, hope still beckoning us past the limits of experience into the splendours of the intellectual world — it becomes necessary to cut away the last anchor of this fallacious and fantastic hope. We shall, accordingly, show that the mathematical method is unattended in the sphere of philosophy by the least advantage — except, perhaps, that it more plainly exhibits its own inadequacy — that geometry and philosophy are two quite different things, although they go band in hand in hand in the field of natural science, and, consequently, that the procedure of the one can never be imitated by the other.

The evidence of mathematics rests upon definitions, axioms, and demonstrations. I shall be satisfied with showing that none of these forms can be employed or imitated in philosophy in the sense in which they are understood by mathematicians; and that the geometrician, if he employs his method in philosophy, will succeed only in building card-castles, while the employment of the philosophical method in mathematics can result in nothing but mere verbiage. The essential business of philosophy, indeed, is to mark out the limits of the science; and even the mathematician, unless his talent is naturally circumscribed and limited to this particular department of knowledge, cannot turn a deaf ear to the warnings of philosophy, or set himself above its direction.

I. Of Definitions. A definition is, as the term itself indicates, the representation, upon primary grounds, of the complete conception of a thing within its own limits.* Accordingly, an empirical conception cannot be defined, it can only be explained. For, as there are in such a conception only a certain number of marks or signs, which denote a certain class of sensuous objects, we can never be sure that we do not cogitate under the word which indicates the same object, at one time a greater, at another a smaller number of signs. Thus, one person may cogitate in his conception of gold, in addition to its properties of weight, colour, malleability, that of resisting rust, while another person may be ignorant of this quality. We employ certain signs only so long as we require them for the sake of distinction; new observations abstract some and add new ones, so that an empirical conception never remains within permanent limits. It is, in fact, useless to define a conception of this kind. If, for example, we are speaking of water and its properties,

we do not stop at what we actually think by the word water, but proceed to observation and experiment; and the word, with the few signs attached to it, is more properly a designation than a conception of the thing. A definition in this case would evidently be nothing more than a determination of the word. In the second place, no a priori conception, such as those of substance, cause, right, fitness, and so on, can be defined. For I can never be sure, that the clear representation of a given conception (which is given in a confused state) has been fully developed, until I know that the representation is adequate with its object. But, inasmuch as the conception, as it is presented to the mind, may contain a number of obscure representations, which we do not observe in our analysis, although we employ them in our application of the conception, I can never be sure that my analysis is complete, while examples may make this probable, although they can never demonstrate the fact. Instead of the word definition, I should rather employ the term exposition — a more modest expression, which the critic may accept without surrendering his doubts as to the completeness of the analysis of any such conception. As, therefore, neither empirical nor a priori conceptions are capable of definition, we have to see whether the only other kind of conceptions — arbitrary conceptions — can be subjected to this mental operation. Such a conception can always be defined; for I must know thoroughly what I wished to cogitate in it, as it was I who created it, and it was not given to my mind either by the nature of my understanding or by experience. At the same time, I cannot say that, by such a definition, I have defined a real object. If the conception is based upon empirical conditions, if, for example, I have a conception of a clock for a ship, this arbitrary conception does not assure me of the existence or even of the possibility of the object. My definition of such a conception would with more propriety be termed a declaration of a project than a definition of an object. There are no other conceptions which can bear definition, except those which contain an arbitrary synthesis, which can be constructed a priori. Consequently, the science of mathematics alone possesses definitions. For the object here thought is presented a priori in intuition; and thus it can never contain more or less than the conception, because the conception of the object has been given by the definition — and primarily, that is, without deriving the definition from any other source. Philosophical definitions are, therefore, merely expositions of given conceptions, while mathematical definitions are constructions of conceptions originally formed by the mind itself; the former are produced by analysis, the completeness of which is never demonstratively certain, the latter by a synthesis. In a mathematical definition the conception is formed, in a philosophical definition it is only explained. From this it follows:

[Footnote: The definition must describe the conception completely that is, omit none of the marks or signs of which it composed; within its own limits, that is, it must be precise, and enumerate no more signs than belong to the conception; and on primary grounds, that is to say, the limitations of the bounds of the conception must not be deduced from other conceptions, as in this case a proof would be necessary, and the so-called definition would be incapable of taking its place at the bead of all the judgements we have to form regarding an object.]

(a) That we must not imitate, in philosophy, the mathematical usage of commencing with definitions — except by way of hypothesis or experiment. For, as all so-called philosophical definitions are merely analyses of given conceptions, these conceptions, although only in a confused form, must precede the analysis; and the incomplete exposition must precede the complete, so that we may be able to draw certain inferences from the characteristics which an incomplete analysis has enabled us to discover, before we attain to the complete exposition or definition of the conception. In one word, a full and clear definition ought, in philosophy, rather to form the conclusion than the commencement of our labours.* In mathematics, on the contrary, we cannot have a conception prior to the definition; it is the definition which gives us the conception, and it must for this reason form the commencement of every chain of mathematical reasoning.

[Footnote: Philosophy abounds in faulty definitions, especially such as contain some of the elements requisite to form a complete definition.

If a conception could not be employed in reasoning before it had been defined, it would fare ill with all philosophical thought. But, as incompletely defined conceptions may always be employed without detriment to truth, so far as our analysis of the elements contained in them proceeds, imperfect definitions, that is, propositions which are properly not definitions, but merely approximations thereto, may be used with great advantage. In mathematics, definition belongs ad esse, in philosophy ad melius esse. It is a difficult task to construct a proper definition. Jurists are still without a complete definition of the idea of right.]

(b) Mathematical definitions cannot be erroneous. For the conception is given only in and through the definition, and thus it contains only what has been cogitated in the definition. But although a definition cannot be incorrect, as regards its content, an error may sometimes, although seldom, creep into the form. This error consists in a want of precision. Thus the common definition of a circle — that it is a curved line, every point in which is equally distant from another point called the centre — is faulty, from the fact that the determination indicated by the word curved is superfluous. For there ought to be a particular theorem, which may be easily proved from the definition, to the effect that every line, which has all its points at equal distances from another point, must be a curved line — that is, that not even the smallest part of it can be straight. Analytical definitions, on the other hand, may be erroneous in many respects, either by the introduction of signs which do not actually exist in the conception, or by wanting in that completeness which forms the essential of a definition. In the latter case, the definition is necessarily defective, because we can never be fully certain of the completeness of our analysis. For these reasons, the method of definition employed in mathematics cannot be imitated in philosophy.

2. Of Axioms. These, in so far as they are immediately certain, are a priori synthetical principles. Now, one conception cannot be connected synthetically and yet immediately with another; because, if we wish to proceed out of and beyond a conception, a third mediating cognition is necessary. And, as philosophy is a cognition of reason by the aid of conceptions alone, there is to be found in it no principle which deserves to be called an axiom. Mathematics, on the other hand, may possess axioms, because it can always connect the predicates of an object a priori, and without any mediating term, by means of the construction of conceptions in intuition. Such is the case with the proposition: Three points can always lie in a plane. On the other hand, no synthetical principle which is based upon conceptions, can ever be immediately certain (for example, the proposition: Everything that happens has a cause), because I require a mediating term to connect the two conceptions of event and cause — namely, the condition of time-determination in an experience, and I cannot cognize any such principle immediately and from conceptions alone. Discursive principles are, accordingly, very different from intuitive principles or axioms. The former always require deduction, which in the case of the latter may be altogether dispensed with. Axioms are, for this reason, always self-evident, while philosophical principles, whatever may be the degree of certainty they possess, cannot lay any claim to such a distinction. No synthetical proposition of pure transcendental reason can be so evident, as is often rashly enough declared, as the statement, twice two are four. It is true that in the Analytic I introduced into the list of principles of the pure understanding, certain axioms of intuition; but the principle there discussed was not itself an axiom, but served merely to present the principle of the possibility of axioms in general, while it was really nothing more than a principle based upon conceptions. For it is one part of the duty of transcendental philosophy to establish the possibility of mathematics itself. Philosophy possesses, then, no axioms, and has no right to impose its a priori principles upon thought, until it has established their authority and validity by a thoroughgoing deduction.

3. Of Demonstrations. Only an apodeictic proof, based upon intuition, can be termed a demonstration. Experience teaches us what is, but it cannot convince us that it might not have been otherwise. Hence a proof upon empirical grounds cannot be apodeictic. A priori conceptions, in discursive cognition, can never produce intuitive certainty or evidence, however certain the judgement they present may be. Mathematics alone, therefore, contains demonstrations, because it does not deduce its cognition from

conceptions, but from the construction of conceptions, that is, from intuition, which can be given a priori in accordance with conceptions. The method of algebra, in equations, from which the correct answer is deduced by reduction, is a kind of construction — not geometrical, but by symbols — in which all conceptions, especially those of the relations of quantities, are represented in intuition by signs; and thus the conclusions in that science are secured from errors by the fact that every proof is submitted to ocular evidence. Philosophical cognition does not possess this advantage, it being required to consider the general always in abstracto (by means of conceptions), while mathematics can always consider it in concreto (in an individual intuition), and at the same time by means of a priori representation, whereby all errors are rendered manifest to the senses. The former — discursive proofs — ought to be termed acroamatic proofs, rather than demonstrations, as only words are employed in them, while demonstrations proper, as the term itself indicates, always require a reference to the intuition of the object.

It follows from all these considerations that it is not consonant with the nature of philosophy, especially in the sphere of pure reason, to employ the dogmatical method, and to adorn itself with the titles and insignia of mathematical science. It does not belong to that order, and can only hope for a fraternal union with that science. Its attempts at mathematical evidence are vain pretensions, which can only keep it back from its true aim, which is to detect the illusory procedure of reason when transgressing its proper limits, and by fully explaining and analysing our conceptions, to conduct us from the dim regions of speculation to the clear region of modest self-knowledge. Reason must not, therefore, in its transcendental endeavours, look forward with such confidence, as if the path it is pursuing led straight to its aim, nor reckon with such security upon its premisses, as to consider it unnecessary to take a step back, or to keep a strict watch for errors, which, overlooked in the principles, may be detected in the arguments themselves — in which case it may be requisite either to determine these principles with greater strictness, or to change them entirely.

I divide all apodeictic propositions, whether demonstrable or immediately certain, into dogmata and mathemata. A direct synthetical proposition, based on conceptions, is a dogma; a proposition of the same kind, based on the construction of conceptions, is a mathema. Analytical judgements do not teach us any more about an object than what was contained in the conception we had of it; because they do not extend our cognition beyond our conception of an object, they merely elucidate the conception. They cannot therefore be with propriety termed dogmas. Of the two kinds of a priori synthetical propositions above mentioned, only those which are employed in philosophy can, according to the general mode of speech, bear this name; those of arithmetic or geometry would not be rightly so denominated. Thus the customary mode of speaking confirms the explanation given above, and the conclusion arrived at, that only those judgements which are based upon conceptions, not on the construction of conceptions, can be termed dogmatical.

Thus, pure reason, in the sphere of speculation, does not contain a single direct synthetical judgement based upon conceptions. By means of ideas, it is, as we have shown, incapable of producing synthetical judgements, which are objectively valid; by means of the conceptions of the understanding, it establishes certain indubitable principles, not, however, directly on the basis of conceptions, but only indirectly by means of the relation of these conceptions to something of a purely contingent nature, namely, possible experience. When experience is presupposed, these principles are apodeictically certain, but in themselves, and directly, they cannot even be cognized a priori. Thus the given conceptions of cause and event will not be sufficient for the demonstration of the proposition: Every event has a cause. For this reason, it is not a dogma; although from another point of view, that of experience, it is capable of being proved to demonstration. The proper term for such a proposition is principle, and not theorem (although it does require to be proved), because it possesses the remarkable peculiarity of being the condition of the possibility of its own ground of proof, that is, experience, and of forming a necessary presupposition in all empirical observation.

If then, in the speculative sphere of pure reason, no dogmata are to be found; all dogmatical methods, whether borrowed from mathematics, or invented by philosophical thinkers, are alike inappropriate and inefficient. They only serve to conceal errors and fallacies, and to deceive philosophy, whose duty it is to see that reason pursues a safe and straight path. A philosophical method may, however, be systematical. For our reason is, subjectively considered, itself a system, and, in the sphere of mere conceptions, a system of investigation according to principles of unity, the material being supplied by experience alone. But this is not the proper place for discussing the peculiar method of transcendental philosophy, as our present task is simply to examine whether our faculties are capable of erecting an edifice on the basis of pure reason, and how far they may proceed with the materials at their command.

SECTION II. The Discipline of Pure Reason in Polemics.

Reason must be subject, in all its operations, to criticism, which must always be permitted to exercise its functions without restraint; otherwise its interests are imperilled and its influence obnoxious to suspicion. There is nothing, however useful, however sacred it may be, that can claim exemption from the searching examination of this supreme tribunal, which has no respect of persons. The very existence of reason depends upon this freedom; for the voice of reason is not that of a dictatorial and despotic power, it is rather like the vote of the citizens of a free state, every member of which must have the privilege of giving free expression to his doubts, and possess even the right of veto.

But while reason can never decline to submit itself to the tribunal of criticism, it has not always cause to dread the judgement of this court. Pure reason, however, when engaged in the sphere of dogmatism, is not so thoroughly conscious of a strict observance of its highest laws, as to appear before a higher judicial reason with perfect confidence. On the contrary, it must renounce its magnificent dogmatical pretensions in philosophy.

Very different is the case when it has to defend itself, not before a judge, but against an equal. If dogmatical assertions are advanced on the negative side, in opposition to those made by reason on the positive side, its justification kat authrhopon is complete, although the proof of its propositions is kat aletheian unsatisfactory.

By the polemic of pure reason I mean the defence of its propositions made by reason, in opposition to the dogmatical counter-propositions advanced by other parties. The question here is not whether its own statements may not also be false; it merely regards the fact that reason proves that the opposite cannot be established with demonstrative certainty, nor even asserted with a higher degree of probability. Reason does not hold her possessions upon sufferance; for, although she cannot show a perfectly satisfactory title to them, no one can prove that she is not the rightful possessor.

It is a melancholy reflection that reason, in its highest exercise, falls into an antithetic; and that the supreme tribunal for the settlement of differences should not be at union with itself. It is true that we had to discuss the question of an apparent antithetic, but we found that it was based upon a misconception. In conformity with the common prejudice, phenomena were regarded as things in themselves, and thus an absolute completeness in their synthesis was required in the one mode or in the other (it was shown to be impossible in both); a demand entirely out of place in regard to phenomena. There was, then, no real self-contradiction of reason in the propositions: The series of phenomena given in themselves has an absolutely first beginning; and: This series is absolutely and in itself without beginning. The two propositions are perfectly consistent with each other, because phenomena as phenomena are in themselves nothing, and consequently the hypothesis that they are things in themselves must lead to self-contradictory inferences.

But there are cases in which a similar misunderstanding cannot be provided against, and the dispute must remain unsettled. Take, for example, the theistic proposition: There is a Supreme Being; and on the other hand, the atheistic counter-statement: There exists no Supreme Being; or, in psychology: Everything that thinks possesses the attribute of absolute and permanent unity, which is utterly different from the

transitory unity of material phenomena; and the counter-proposition: The soul is not an immaterial unity, and its nature is transitory, like that of phenomena. The objects of these questions contain no heterogeneous or contradictory elements, for they relate to things in themselves, and not to phenomena. There would arise, indeed, a real contradiction, if reason came forward with a statement on the negative side of these questions alone. As regards the criticism to which the grounds of proof on the affirmative side must be subjected, it may be freely admitted, without necessitating the surrender of the affirmative propositions, which have, at least, the interest of reason in their favour — an advantage which the opposite party cannot lay claim to.

I cannot agree with the opinion of several admirable thinkers — Sulzer among the rest — that, in spite of the weakness of the arguments hitherto in use, we may hope, one day, to see sufficient demonstrations of the two cardinal propositions of pure reason — the existence of a Supreme Being, and the immortality of the soul. I am certain, on the contrary, that this will never be the case. For on what ground can reason base such synthetical propositions, which do not relate to the objects of experience and their internal possibility? But it is also demonstratively certain that no one will ever be able to maintain the contrary with the least show of probability. For, as he can attempt such a proof solely upon the basis of pure reason, he is bound to prove that a Supreme Being, and a thinking subject in the character of a pure intelligence, are impossible. But where will he find the knowledge which can enable him to enounce synthetical judgements in regard to things which transcend the region of experience? We may, therefore, rest assured that the opposite never will be demonstrated. We need not, then, have recourse to scholastic arguments; we may always admit the truth of those propositions which are consistent with the speculative interests of reason in the sphere of experience, and form, moreover, the only means of uniting the speculative with the practical interest. Our opponent, who must not be considered here as a critic solely, we can be ready to meet with a non liquet which cannot fail to disconcert him; while we cannot deny his right to a similar retort, as we have on our side the advantage of the support of the subjective maxim of reason, and can therefore look upon all his sophistical arguments with calm indifference.

From this point of view, there is properly no antithetic of pure reason. For the only arena for such a struggle would be upon the field of pure theology and psychology; but on this ground there can appear no combatant whom we need to fear. Ridicule and boasting can be his only weapons; and these may be laughed at, as mere child’s play. This consideration restores to Reason her courage; for what source of confidence could be found, if she, whose vocation it is to destroy error, were at variance with herself and without any reasonable hope of ever reaching a state of permanent repose?

Everything in nature is good for some purpose. Even poisons are serviceable; they destroy the evil effects of other poisons generated in our system, and must always find a place in every complete pharmacopoeia. The objections raised against the fallacies and sophistries of speculative reason, are objections given by the nature of this reason itself, and must therefore have a destination and purpose which can only be for the good of humanity. For what purpose has Providence raised many objects, in which we have the deepest interest, so far above us, that we vainly try to cognize them with certainty, and our powers of mental vision are rather excited than satisfied by the glimpses we may chance to seize? It is very doubtful whether it is for our benefit to advance bold affirmations regarding subjects involved in such obscurity; perhaps it would even be detrimental to our best interests. But it is undoubtedly always beneficial to leave the investigating, as well as the critical reason, in perfect freedom, and permit it to take charge of its own interests, which are advanced as much by its limitation, as by its extension of its views, and which always suffer by the interference of foreign powers forcing it, against its natural tendencies, to bend to certain preconceived designs.

Allow your opponent to say what he thinks reasonable, and combat him only with the weapons of reason. Have no anxiety for the practical interests of humanity — these are never imperilled in a purely speculative dispute. Such a dispute serves merely to disclose the antinomy of reason, which, as it has its

source in the nature of reason, ought to be thoroughly investigated. Reason is benefited by the examination of a subject on both sides, and its judgements are corrected by being limited. It is not the matter that may give occasion to dispute, but the manner. For it is perfectly permissible to employ, in the presence of reason, the language of a firmly rooted faith, even after we have been obliged to renounce all pretensions to knowledge.

If we were to ask the dispassionate David Hume — a philosopher endowed, in a degree that few are, with a well-balanced judgement: What motive induced you to spend so much labour and thought in undermining the consoling and beneficial persuasion that reason is capable of assuring us of the existence, and presenting us with a determinate conception of a Supreme Being? — his answer would be: Nothing but the desire of teaching reason to know its own powers better, and, at the same time, a dislike of the procedure by which that faculty was compelled to support foregone conclusions, and prevented from confessing the internal weaknesses which it cannot but feel when it enters upon a rigid self-examination. If, on the other hand, we were to ask Priestley — a philosopher who had no taste for transcendental speculation, but was entirely devoted to the principles of empiricism — what his motives were for overturning those two main pillars of religion — the doctrines of the freedom of the will and the immortality of the soul (in his view the hope of a future life is but the expectation of the miracle of resurrection) — this philosopher, himself a zealous and pious teacher of religion, could give no other answer than this: I acted in the interest of reason, which always suffers, when certain objects are explained and judged by a reference to other supposed laws than those of material nature — the only laws which we know in a determinate manner. It would be unfair to decry the latter philosopher, who endeavoured to harmonize his paradoxical opinions with the interests of religion, and to undervalue an honest and reflecting man, because he finds himself at a loss the moment he has left the field of natural science. The same grace must be accorded to Hume, a man not less well-disposed, and quite as blameless in his moral character, and who pushed his abstract speculations to an extreme length, because, as he rightly believed, the object of them lies entirely beyond the bounds of natural science, and within the sphere of pure ideas.

What is to be done to provide against the danger which seems in the present case to menace the best interests of humanity? The course to be pursued in reference to this subject is a perfectly plain and natural one. Let each thinker pursue his own path; if he shows talent, if he gives evidence of profound thought, in one word, if he shows that he possesses the power of reasoning — reason is always the gainer. If you have recourse to other means, if you attempt to coerce reason, if you raise the cry of treason to humanity, if you excite the feelings of the crowd, which can neither understand nor sympathize with such subtle speculations — you will only make yourselves ridiculous. For the question does not concern the advantage or disadvantage which we are expected to reap from such inquiries; the question is merely how far reason can advance in the field of speculation, apart from all kinds of interest, and whether we may depend upon the exertions of speculative reason, or must renounce all reliance on it. Instead of joining the combatants, it is your part to be a tranquil spectator of the struggle — a laborious struggle for the parties engaged, but attended, in its progress as well as in its result, with the most advantageous consequences for the interests of thought and knowledge. It is absurd to expect to be enlightened by Reason, and at the same time to prescribe to her what side of the question she must adopt. Moreover, reason is sufficiently held in check by its own power, the limits imposed on it by its own nature are sufficient; it is unnecessary for you to place over it additional guards, as if its power were dangerous to the constitution of the intellectual state. In the dialectic of reason there is no victory gained which need in the least disturb your tranquility.

The strife of dialectic is a necessity of reason, and we cannot but wish that it had been conducted long ere this with that perfect freedom which ought to be its essential condition. In this case, we should have had at an earlier period a matured and profound criticism, which must have put an end to all dialectical disputes, by exposing the illusions and prejudices in which they originated.

There is in human nature an unworthy propensity — a propensity which, like everything that springs from nature, must in its final purpose be conducive to the good of humanity — to conceal our real sentiments, and to give expression only to certain received opinions, which are regarded as at once safe and promotive of the common good. It is true, this tendency, not only to conceal our real sentiments, but to profess those which may gain us favour in the eyes of society, has not only civilized, but, in a certain measure, moralized us; as no one can break through the outward covering of respectability, honour, and morality, and thus the seemingly-good examples which we which we see around us form an excellent school for moral improvement, so long as our belief in their genuineness remains unshaken. But this disposition to represent ourselves as better than we are, and to utter opinions which are not our own, can be nothing more than a kind of provisionary arrangement of nature to lead us from the rudeness of an uncivilized state, and to teach us how to assume at least the appearance and manner of the good we see. But when true principles have been developed, and have obtained a sure foundation in our habit of thought, this conventionalism must be attacked with earnest vigour, otherwise it corrupts the heart, and checks the growth of good dispositions with the mischievous weed of air appearances.

I am sorry to remark the same tendency to misrepresentation and hypocrisy in the sphere of speculative discussion, where there is less temptation to restrain the free expression of thought. For what can be more prejudicial to the interests of intelligence than to falsify our real sentiments, to conceal the doubts which we feel in regard to our statements, or to maintain the validity of grounds of proof which we well know to be insufficient? So long as mere personal vanity is the source of these unworthy artifices — and this is generally the case in speculative discussions, which are mostly destitute of practical interest, and are incapable of complete demonstration — the vanity of the opposite party exaggerates as much on the other side; and thus the result is the same, although it is not brought about so soon as if the dispute had been conducted in a sincere and upright spirit. But where the mass entertains the notion that the aim of certain subtle speculators is nothing less than to shake the very foundations of public welfare and morality — it seems not only prudent, but even praise worthy, to maintain the good cause by illusory arguments, rather than to give to our supposed opponents the advantage of lowering our declarations to the moderate tone of a merely practical conviction, and of compelling us to confess our inability to attain to apodeictic certainty in speculative subjects. But we ought to reflect that there is nothing, in the world more fatal to the maintenance of a good cause than deceit, misrepresentation, and falsehood. That the strictest laws of honesty should be observed in the discussion of a purely speculative subject is the least requirement that can be made. If we could reckon with security even upon so little, the conflict of speculative reason regarding the important questions of God, immortality, and freedom, would have been either decided long ago, or would very soon be brought to a conclusion. But, in general, the uprightness of the defence stands in an inverse ratio to the goodness of the cause; and perhaps more honesty and fairness are shown by those who deny than by those who uphold these doctrines.

I shall persuade myself, then, that I have readers who do not wish to see a righteous cause defended by unfair arguments. Such will now recognize the fact that, according to the principles of this Critique, if we consider not what is, but what ought to be the case, there can be really no polemic of pure reason. For how can two persons dispute about a thing, the reality of which neither can present in actual or even in possible experience? Each adopts the plan of meditating on his idea for the purpose of drawing from the idea, if he can, what is more than the idea, that is, the reality of the object which it indicates. How shall they settle the dispute, since neither is able to make his assertions directly comprehensible and certain, but must restrict himself to attacking and confuting those of his opponent? All statements enounced by pure reason transcend the conditions of possible experience, beyond the sphere of which we can discover no criterion of truth, while they are at the same time framed in accordance with the laws of the understanding, which are applicable only to experience; and thus it is the fate of all such speculative discussions that while the one party attacks the weaker side of his opponent, he infallibly lays open his own weaknesses.

The critique of pure reason may be regarded as the highest tribunal for all speculative disputes; for it is not involved in these disputes, which have an immediate relation to certain objects and not to the laws of the mind, but is instituted for the purpose of determining the rights and limits of reason.

Without the control of criticism, reason is, as it were, in a state of nature, and can only establish its claims and assertions by war. Criticism, on the contrary, deciding all questions according to the fundamental laws of its own institution, secures to us the peace of law and order, and enables us to discuss all differences in the more tranquil manner of a legal process. In the former case, disputes are ended by victory, which both sides may claim and which is followed by a hollow armistice; in the latter, by a sentence, which, as it strikes at the root of all speculative differences, ensures to all concerned a lasting peace. The endless disputes of a dogmatizing reason compel us to look for some mode of arriving at a settled decision by a critical investigation of reason itself; just as Hobbes maintains that the state of nature is a state of injustice and violence, and that we must leave it and submit ourselves to the constraint of law, which indeed limits individual freedom, but only that it may consist with the freedom of others and with the common good of all.

This freedom will, among other things, permit of our openly stating the difficulties and doubts which we are ourselves unable to solve, without being decried on that account as turbulent and dangerous citizens. This privilege forms part of the native rights of human reason, which recognizes no other judge than the universal reason of humanity; and as this reason is the source of all progress and improvement, such a privilege is to be held sacred and inviolable. It is unwise, moreover, to denounce as dangerous any bold assertions against, or rash attacks upon, an opinion which is held by the largest and most moral class of the community; for that would be giving them an importance which they do not deserve. When I hear that the freedom of the will, the hope of a future life, and the existence of God have been overthrown by the arguments of some able writer, I feel a strong desire to read his book; for I expect that he will add to my knowledge and impart greater clearness and distinctness to my views by the argumentative power shown in his writings. But I am perfectly certain, even before I have opened the book, that he has not succeeded in a single point, not because I believe I am in possession of irrefutable demonstrations of these important propositions, but because this transcendental critique, which has disclosed to me the power and the limits of pure reason, has fully convinced me that, as it is insufficient to establish the affirmative, it is as powerless, and even more so, to assure us of the truth of the negative answer to these questions. From what source does this free-thinker derive his knowledge that there is, for example, no Supreme Being? This proposition lies out of the field of possible experience, and, therefore, beyond the limits of human cognition. But I would not read at, all the answer which the dogmatical maintainer of the good cause makes to his opponent, because I know well beforehand, that he will merely attack the fallacious grounds of his adversary, without being able to establish his own assertions. Besides, a new illusory argument, in the construction of which talent and acuteness are shown, is suggestive of new ideas and new trains of reasoning, and in this respect the old and everyday sophistries are quite useless. Again, the dogmatical opponent of religion gives employment to criticism, and enables us to test and correct its principles, while there is no occasion for anxiety in regard to the influence and results of his reasoning.

But, it will be said, must we not warn the youth entrusted to academical care against such writings, must we not preserve them from the knowledge of these dangerous assertions, until their judgement is ripened, or rather until the doctrines which we wish to inculcate are so firmly rooted in their minds as to withstand all attempts at instilling the contrary dogmas, from whatever quarter they may come?

If we are to confine ourselves to the dogmatical procedure in the sphere of pure reason, and find ourselves unable to settle such disputes otherwise than by becoming a party in them, and setting counter-assertions against the statements advanced by our opponents, there is certainly no plan more advisable for the moment, but, at the same time, none more absurd and inefficient for the future, than this retaining of the youthful mind under guardianship for a time, and thus preserving it — for so long at least — from

seduction into error. But when, at a later period, either curiosity, or the prevalent fashion of thought places such writings in their hands, will the so-called convictions of their youth stand firm? The young thinker, who has in his armoury none but dogmatical weapons with which to resist the attacks of his opponent, and who cannot detect the latent dialectic which lies in his own opinions as well as in those of the opposite party, sees the advance of illusory arguments and grounds of proof which have the advantage of novelty, against as illusory grounds of proof destitute of this advantage, and which, perhaps, excite the suspicion that the natural credulity of his youth has been abused by his instructors. He thinks he can find no better means of showing that he has out grown the discipline of his minority than by despising those well-meant warnings, and, knowing no system of thought but that of dogmatism, he drinks deep draughts of the poison that is to sap the principles in which his early years were trained.

Exactly the opposite of the system here recommended ought to be pursued in academical instruction. This can only be effected, however, by a thorough training in the critical investigation of pure reason. For, in order to bring the principles of this critique into exercise as soon as possible, and to demonstrate their perfect even in the presence of the highest degree of dialectical illusion, the student ought to examine the assertions made on both sides of speculative questions step by step, and to test them by these principles. It cannot be a difficult task for him to show the fallacies inherent in these propositions, and thus he begins early to feel his own power of securing himself against the influence of such sophistical arguments, which must finally lose, for him, all their illusory power. And, although the same blows which overturn the edifice of his opponent are as fatal to his own speculative structures, if such he has wished to rear; he need not feel any sorrow in regard to this seeming misfortune, as he has now before him a fair prospect into the practical region in which he may reasonably hope to find a more secure foundation for a rational system.

There is, accordingly, no proper polemic in the sphere of pure reason. Both parties beat the air and fight with their own shadows, as they pass beyond the limits of nature, and can find no tangible point of attack — no firm footing for their dogmatical conflict. Fight as vigorously as they may, the shadows which they hew down, immediately start up again, like the heroes in Walhalla, and renew the bloodless and unceasing contest.

But neither can we admit that there is any proper sceptical employment of pure reason, such as might be based upon the principle of neutrality in all speculative disputes. To excite reason against itself, to place weapons in the hands of the party on the one side as well as in those of the other, and to remain an undisturbed and sarcastic spectator of the fierce struggle that ensues, seems, from the dogmatical point of view, to be a part fitting only a malevolent disposition. But, when the sophist evidences an invincible obstinacy and blindness, and a pride which no criticism can moderate, there is no other practicable course than to oppose to this pride and obstinacy similar feelings and pretensions on the other side, equally well or ill founded, so that reason, staggered by the reflections thus forced upon it, finds it necessary to moderate its confidence in such pretensions and to listen to the advice of criticism. But we cannot stop at these doubts, much less regard the conviction of our ignorance, not only as a cure for the conceit natural to dogmatism, but as the settlement of the disputes in which reason is involved with itself. On the contrary, scepticism is merely a means of awakening reason from its dogmatic dreams and exciting it to a more careful investigation into its own powers and pretensions. But, as scepticism appears to be the shortest road to a permanent peace in the domain of philosophy, and as it is the track pursued by the many who aim at giving a philosophical colouring to their contemptuous dislike of all inquiries of this kind, I think it necessary to present to my readers this mode of thought in its true light.

Scepticism not a Permanent State for Human Reason.

The consciousness of ignorance — unless this ignorance is recognized to be absolutely necessary ought, instead of forming the conclusion of my inquiries, to be the strongest motive to the pursuit of them. All ignorance is either ignorance of things or of the limits of knowledge. If my ignorance is accidental and

not necessary, it must incite me, in the first case, to a dogmatical inquiry regarding the objects of which I am ignorant; in the second, to a critical investigation into the bounds of all possible knowledge. But that my ignorance is absolutely necessary and unavoidable, and that it consequently absolves from the duty of all further investigation, is a fact which cannot be made out upon empirical grounds — from observation — but upon critical grounds alone, that is, by a thoroughgoing investigation into the primary sources of cognition. It follows that the determination of the bounds of reason can be made only on a priori grounds; while the empirical limitation of reason, which is merely an indeterminate cognition of an ignorance that can never be completely removed, can take place only a posteriori. In other words, our empirical knowledge is limited by that which yet remains for us to know. The former cognition of our ignorance, which is possible only on a rational basis, is a science; the latter is merely a perception, and we cannot say how far the inferences drawn from it may extend. If I regard the earth, as it really appears to my senses, as a flat surface, I am ignorant how far this surface extends. But experience teaches me that, how far soever I go, I always see before me a space in which I can proceed farther; and thus I know the limits — merely visual — of my actual knowledge of the earth, although I am ignorant of the limits of the earth itself. But if I have got so far as to know that the earth is a sphere, and that its surface is spherical, I can cognize a priori and determine upon principles, from my knowledge of a small part of this surface — say to the extent of a degree — the diameter and circumference of the earth; and although I am ignorant of the objects which this surface contains, I have a perfect knowledge of its limits and extent.

The sum of all the possible objects of our cognition seems to us to be a level surface, with an apparent horizon — that which forms the limit of its extent, and which has been termed by us the idea of unconditioned totality. To reach this limit by empirical means is impossible, and all attempts to determine it a priori according to a principle, are alike in vain. But all the questions raised by pure reason relate to that which lies beyond this horizon, or, at least, in its boundary line.

The celebrated David Hume was one of those geographers of human reason who believe that they have given a sufficient answer to all such questions by declaring them to lie beyond the horizon of our knowledge — a horizon which, however, Hume was unable to determine. His attention especially was directed to the principle of causality; and he remarked with perfect justice that the truth of this principle, and even the objective validity of the conception of a cause, was not commonly based upon clear insight, that is, upon a priori cognition. Hence he concluded that this law does not derive its authority from its universality and necessity, but merely from its general applicability in the course of experience, and a kind of subjective necessity thence arising, which he termed habit. From the inability of reason to establish this principle as a necessary law for the acquisition of all experience, he inferred the nullity of all the attempts of reason to pass the region of the empirical.

This procedure of subjecting the facta of reason to examination, and, if necessary, to disapproval, may be termed the censura of reason. This censura must inevitably lead us to doubts regarding all transcendent employment of principles. But this is only the second step in our inquiry. The first step in regard to the subjects of pure reason, and which marks the infancy of that faculty, is that of dogmatism. The second, which we have just mentioned, is that of scepticism, and it gives evidence that our judgement has been improved by experience. But a third step is necessary — indicative of the maturity and manhood of the judgement, which now lays a firm foundation upon universal and necessary principles. This is the period of criticism, in which we do not examine the facta of reason, but reason itself, in the whole extent of its powers, and in regard to its capability of a priori cognition; and thus we determine not merely the empirical and ever-shifting bounds of our knowledge, but its necessary and eternal limits. We demonstrate from indubitable principles, not merely our ignorance in respect to this or that subject, but in regard to all possible questions of a certain class. Thus scepticism is a resting place for reason, in which it may reflect on its dogmatical wanderings and gain some knowledge of the region in which it happens to be, that it may pursue its way with greater certainty; but it cannot be its permanent dwelling-place. It must take up its

abode only in the region of complete certitude, whether this relates to the cognition of objects themselves, or to the limits which bound all our cognition.

Reason is not to be considered as an indefinitely extended plane, of the bounds of which we have only a general knowledge; it ought rather to be compared to a sphere, the radius of which may be found from the curvature of its surface — that is, the nature of a priori synthetical propositions — and, consequently, its circumference and extent. Beyond the sphere of experience there are no objects which it can cognize; nay, even questions regarding such supposititious objects relate only to the subjective principles of a complete determination of the relations which exist between the understanding-conceptions which lie within this sphere.

We are actually in possession of a priori synthetical cognitions, as is proved by the existence of the principles of the understanding, which anticipate experience. If any one cannot comprehend the possibility of these principles, he may have some reason to doubt whether they are really a priori; but he cannot on this account declare them to be impossible, and affirm the nullity of the steps which reason may have taken under their guidance. He can only say: If we perceived their origin and their authenticity, we should be able to determine the extent and limits of reason; but, till we can do this, all propositions regarding the latter are mere random assertions. In this view, the doubt respecting all dogmatical philosophy, which proceeds without the guidance of criticism, is well grounded; but we cannot therefore deny to reason the ability to construct a sound philosophy, when the way has been prepared by a thorough critical investigation. All the conceptions produced, and all the questions raised, by pure reason, do not lie in the sphere of experience, but in that of reason itself, and hence they must be solved, and shown to be either valid or inadmissible, by that faculty. We have no right to decline the solution of such problems, on the ground that the solution can be discovered only from the nature of things, and under pretence of the limitation of human faculties, for reason is the sole creator of all these ideas, and is therefore bound either to establish their validity or to expose their illusory nature.

The polemic of scepticism is properly directed against the dogmatist, who erects a system of philosophy without having examined the fundamental objective principles on which it is based, for the purpose of evidencing the futility of his designs, and thus bringing him to a knowledge of his own powers. But, in itself, scepticism does not give us any certain information in regard to the bounds of our knowledge. All unsuccessful dogmatical attempts of reason are facia, which it is always useful to submit to the censure of the sceptic. But this cannot help us to any decision regarding the expectations which reason cherishes of better success in future endeavours; the investigations of scepticism cannot, therefore, settle the dispute regarding the rights and powers of human reason.

Hume is perhaps the ablest and most ingenious of all sceptical philosophers, and his writings have, undoubtedly, exerted the most powerful influence in awakening reason to a thorough investigation into its own powers. It will, therefore, well repay our labours to consider for a little the course of reasoning which he followed and the errors into which he strayed, although setting out on the path of truth and certitude.

Hume was probably aware, although he never clearly developed the notion, that we proceed in judgements of a certain class beyond our conception if the object. I have termed this kind of judgement synthetical. As regard the manner in which I pass beyond my conception by the aid of experience, no doubts can be entertained. Experience is itself a synthesis of perceptions; and it employs perceptions to increment the conception, which I obtain by means of another perception. But we feel persuaded that we are able to proceed beyond a conception, and to extend our cognition a priori. We attempt this in two ways — either, through the pure understanding, in relation to that which may become an object of experience, or, through pure reason, in relation to such properties of things, or of the existence of things, as can never be presented in any experience. This sceptical philosopher did not distinguish these two kinds of judgements, as he ought to have done, but regarded this augmentation of conceptions, and, if we

may so express ourselves, the spontaneous generation of understanding and reason, independently of the impregnation of experience, as altogether impossible. The so-called a priori principles of these faculties he consequently held to be invalid and imaginary, and regarded them as nothing but subjective habits of thought originating in experience, and therefore purely empirical and contingent rules, to which we attribute a spurious necessity and universality. In support of this strange assertion, he referred us to the generally acknowledged principle of the relation between cause and effect. No faculty of the mind can conduct us from the conception of a thing to the existence of something else; and hence he believed he could infer that, without experience, we possess no source from which we can augment a conception, and no ground sufficient to justify us in framing a judgement that is to extend our cognition a priori. That the light of the sun, which shines upon a piece of wax, at the same time melts it, while it hardens clay, no power of the understanding could infer from the conceptions which we previously possessed of these substances; much less is there any a priori law that could conduct us to such a conclusion, which experience alone can certify. On the other hand, we have seen in our discussion of transcendental logic, that, although we can never proceed immediately beyond the content of the conception which is given us, we can always cognize completely a priori — in relation, however, to a third term, namely, possible experience — the law of its connection with other things. For example, if I observe that a piece of wax melts, I can cognize a priori that there must have been something (the sun's heat) preceding, which this law; although, without the aid of experience, I could not cognize a priori and in a determinate manner either the cause from the effect, or the effect from the cause. Hume was, therefore, wrong in inferring, from the contingency of the determination according to law, the contingency of the law itself; and the passing beyond the conception of a thing to possible experience (which is an a priori proceeding, constituting the objective reality of the conception), he confounded with our synthesis of objects in actual experience, which is always, of course, empirical. Thus, too, he regarded the principle of affinity, which has its seat in the understanding and indicates a necessary connection, as a mere rule of association, lying in the imitative faculty of imagination, which can present only contingent, and not objective connections.

The sceptical errors of this remarkably acute thinker arose principally from a defect, which was common to him with the dogmatists, namely, that he had never made a systematic review of all the different kinds of a priori synthesis performed by the understanding. Had he done so, he would have found, to take one example among many, that the principle of permanence was of this character, and that it, as well as the principle of causality, anticipates experience. In this way he might have been able to describe the determinate limits of the a priori operations of understanding and reason. But he merely declared the understanding to be limited, instead of showing what its limits were; he created a general mistrust in the power of our faculties, without giving us any determinate knowledge of the bounds of our necessary and unavoidable ignorance; he examined and condemned some of the principles of the understanding, without investigating all its powers with the completeness necessary to criticism. He denies, with truth, certain powers to the understanding, but he goes further, and declares it to be utterly inadequate to the a priori extension of knowledge, although he has not fully examined all the powers which reside in the faculty; and thus the fate which always overtakes scepticism meets him too. That is to say, his own declarations are doubted, for his objections were based upon facta, which are contingent, and not upon principles, which can alone demonstrate the necessary invalidity of all dogmatical assertions.

As Hume makes no distinction between the well-grounded claims of the understanding and the dialectical pretensions of reason, against which, however, his attacks are mainly directed, reason does not feel itself shut out from all attempts at the extension of a priori cognition, and hence it refuses, in spite of a few checks in this or that quarter, to relinquish such efforts. For one naturally arms oneself to resist an attack, and becomes more obstinate in the resolve to establish the claims he has advanced. But a complete review of the powers of reason, and the conviction thence arising that we are in possession of a limited

field of action, while we must admit the vanity of higher claims, puts an end to all doubt and dispute, and induces reason to rest satisfied with the undisturbed possession of its limited domain.

To the uncritical dogmatist, who has not surveyed the sphere of his understanding, nor determined, in accordance with principles, the limits of possible cognition, who, consequently, is ignorant of his own powers, and believes he will discover them by the attempts he makes in the field of cognition, these attacks of scepticism are not only dangerous, but destructive. For if there is one proposition in his chain of reasoning which be he cannot prove, or the fallacy in which he cannot evolve in accordance with a principle, suspicion falls on all his statements, however plausible they may appear.

And thus scepticism, the bane of dogmatical philosophy, conducts us to a sound investigation into the understanding and the reason. When we are thus far advanced, we need fear no further attacks; for the limits of our domain are clearly marked out, and we can make no claims nor become involved in any disputes regarding the region that lies beyond these limits. Thus the sceptical procedure in philosophy does not present any solution of the problems of reason, but it forms an excellent exercise for its powers, awakening its circumspection, and indicating the means whereby it may most fully establish its claims to its legitimate possessions.

SECTION III. The Discipline of Pure Reason in Hypothesis.

This critique of reason has now taught us that all its efforts to extend the bounds of knowledge, by means of pure speculation, are utterly fruitless. So much the wider field, it may appear, lies open to hypothesis; as, where we cannot know with certainty, we are at liberty to make guesses and to form suppositions.

Imagination may be allowed, under the strict surveillance of reason, to invent suppositions; but, these must be based on something that is perfectly certain — and that is the possibility of the object. If we are well assured upon this point, it is allowable to have recourse to supposition in regard to the reality of the object; but this supposition must, unless it is utterly groundless, be connected, as its ground of explanation, with that which is really given and absolutely certain. Such a supposition is termed a hypothesis.

It is beyond our power to form the least conception a priori of the possibility of dynamical connection in phenomena; and the category of the pure understanding will not enable us to excogitate any such connection, but merely helps us to understand it, when we meet with it in experience. For this reason we cannot, in accordance with the categories, imagine or invent any object or any property of an object not given, or that may not be given in experience, and employ it in a hypothesis; otherwise, we should be basing our chain of reasoning upon mere chimerical fancies, and not upon conceptions of things. Thus, we have no right to assume the existence of new powers, not existing in nature — for example, an understanding with a non-sensuous intuition, a force of attraction without contact, or some new kind of substances occupying space, and yet without the property of impenetrability — and, consequently, we cannot assume that there is any other kind of community among substances than that observable in experience, any kind of presence than that in space, or any kind of duration than that in time. In one word, the conditions of possible experience are for reason the only conditions of the possibility of things; reason cannot venture to form, independently of these conditions, any conceptions of things, because such conceptions, although not self-contradictory, are without object and without application.

The conceptions of reason are, as we have already shown, mere ideas, and do not relate to any object in any kind of experience. At the same time, they do not indicate imaginary or possible objects. They are purely problematical in their nature and, as aids to the heuristic exercise of the faculties, form the basis of the regulative principles for the systematic employment of the understanding in the field of experience. If we leave this ground of experience, they become mere fictions of thought, the possibility of which is quite indemonstrable; and they cannot, consequently, be employed as hypotheses in the explanation of real phenomena. It is quite admissible to cogitate the soul as simple, for the purpose of enabling ourselves to

employ the idea of a perfect and necessary unity of all the faculties of the mind as the principle of all our inquiries into its internal phenomena, although we cannot cognize this unity in concreto. But to assume that the soul is a simple substance (a transcendental conception) would be enouncing a proposition which is not only indemonstrable — as many physical hypotheses are — but a proposition which is purely arbitrary, and in the highest degree rash. The simple is never presented in experience; and, if by substance is here meant the permanent object of sensuous intuition, the possibility of a simple phenomenon is perfectly inconceivable. Reason affords no good grounds for admitting the existence of intelligible beings, or of intelligible properties of sensuous things, although — as we have no conception either of their possibility or of their impossibility — it will always be out of our power to affirm dogmatically that they do not exist. In the explanation of given phenomena, no other things and no other grounds of explanation can be employed than those which stand in connection with the given phenomena according to the known laws of experience. A transcendental hypothesis, in which a mere idea of reason is employed to explain the phenomena of nature, would not give us any better insight into a phenomenon, as we should be trying to explain what we do not sufficiently understand from known empirical principles, by what we do not understand at all. The principles of such a hypothesis might conduce to the satisfaction of reason, but it would not assist the understanding in its application to objects. Order and conformity to aims in the sphere of nature must be themselves explained upon natural grounds and according to natural laws; and the wildest hypotheses, if they are only physical, are here more admissible than a hyperphysical hypothesis, such as that of a divine author. For such a hypothesis would introduce the principle of ignava ratio, which requires us to give up the search for causes that might be discovered in the course of experience and to rest satisfied with a mere idea. As regards the absolute totality of the grounds of explanation in the series of these causes, this can be no hindrance to the understanding in the case of phenomena; because, as they are to us nothing more than phenomena, we have no right to look for anything like completeness in the synthesis of the series of their conditions.

Transcendental hypotheses are therefore inadmissible; and we cannot use the liberty of employing, in the absence of physical, hyperphysical grounds of explanation. And this for two reasons; first, because such hypothesis do not advance reason, but rather stop it in its progress; secondly, because this licence would render fruitless all its exertions in its own proper sphere, which is that of experience. For, when the explanation of natural phenomena happens to be difficult, we have constantly at hand a transcendental ground of explanation, which lifts us above the necessity of investigating nature; and our inquiries are brought to a close, not because we have obtained all the requisite knowledge, but because we abut upon a principle which is incomprehensible and which, indeed, is so far back in the track of thought as to contain the conception of the absolutely primal being.

The next requisite for the admissibility of a hypothesis is its sufficiency. That is, it must determine a priori the consequences which are given in experience and which are supposed to follow from the hypothesis itself. If we require to employ auxiliary hypotheses, the suspicion naturally arises that they are mere fictions; because the necessity for each of them requires the same justification as in the case of the original hypothesis, and thus their testimony is invalid. If we suppose the existence of an infinitely perfect cause, we possess sufficient grounds for the explanation of the conformity to aims, the order and the greatness which we observe in the universe; but we find ourselves obliged, when we observe the evil in the world and the exceptions to these laws, to employ new hypothesis in support of the original one. We employ the idea of the simple nature of the human soul as the foundation of all the theories we may form of its phenomena; but when we meet with difficulties in our way, when we observe in the soul phenomena similar to the changes which take place in matter, we require to call in new auxiliary hypotheses. These may, indeed, not be false, but we do not know them to be true, because the only witness to their certitude is the hypothesis which they themselves have been called in to explain.

We are not discussing the above-mentioned assertions regarding the immaterial unity of the soul and the

existence of a Supreme Being as dogmata, which certain philosophers profess to demonstrate a priori, but purely as hypotheses. In the former case, the dogmatist must take care that his arguments possess the apodeictic certainty of a demonstration. For the assertion that the reality of such ideas is probable is as absurd as a proof of the probability of a proposition in geometry. Pure abstract reason, apart from all experience, can either cognize nothing at all; and hence the judgements it enounces are never mere opinions, they are either apodeictic certainties, or declarations that nothing can be known on the subject. Opinions and probable judgements on the nature of things can only be employed to explain given phenomena, or they may relate to the effect, in accordance with empirical laws, of an actually existing cause. In other words, we must restrict the sphere of opinion to the world of experience and nature. Beyond this region opinion is mere invention; unless we are groping about for the truth on a path not yet fully known, and have some hopes of stumbling upon it by chance.

But, although hypotheses are inadmissible in answers to the questions of pure speculative reason, they may be employed in the defence of these answers. That is to say, hypotheses are admissible in polemic, but not in the sphere of dogmatism. By the defence of statements of this character, I do not mean an attempt at discovering new grounds for their support, but merely the refutation of the arguments of opponents. All a priori synthetical propositions possess the peculiarity that, although the philosopher who maintains the reality of the ideas contained in the proposition is not in possession of sufficient knowledge to establish the certainty of his statements, his opponent is as little able to prove the truth of the opposite. This equality of fortune does not allow the one party to be superior to the other in the sphere of speculative cognition; and it is this sphere, accordingly, that is the proper arena of these endless speculative conflicts. But we shall afterwards show that, in relation to its practical exercise, Reason has the right of admitting what, in the field of pure speculation, she would not be justified in supposing, except upon perfectly sufficient grounds; because all such suppositions destroy the necessary completeness of speculation — a condition which the practical reason, however, does not consider to be requisite. In this sphere, therefore, Reason is mistress of a possession, her title to which she does not require to prove — which, in fact, she could not do. The burden of proof accordingly rests upon the opponent. But as he has just as little knowledge regarding the subject discussed, and is as little able to prove the non-existence of the object of an idea, as the philosopher on the other side is to demonstrate its reality, it is evident that there is an advantage on the side of the philosopher who maintains his proposition as a practically necessary supposition (melior est conditio possidentis). For he is at liberty to employ, in self-defence, the same weapons as his opponent makes use of in attacking him; that is, he has a right to use hypotheses not for the purpose of supporting the arguments in favour of his own propositions, but to show that his opponent knows no more than himself regarding the subject under ‘discussion and cannot boast of any speculative advantage.

Hypotheses are, therefore, admissible in the sphere of pure reason only as weapons for self-defence, and not as supports to dogmatical assertions. But the opposing party we must always seek for in ourselves. For speculative reason is, in the sphere of transcendentalism, dialectical in its own nature. The difficulties and objections we have to fear lie in ourselves. They are like old but never superannuated claims; and we must seek them out, and settle them once and for ever, if we are to expect a permanent peace. External tranquility is hollow and unreal. The root of these contradictions, which lies in the nature of human reason, must be destroyed; and this can only be done by giving it, in the first instance, freedom to grow, nay, by nourishing it, that it may send out shoots, and thus betray its own existence. It is our duty, therefore, to try to discover new objections, to put weapons in the bands of our opponent, and to grant him the most favourable position in the arena that he can wish. We have nothing to fear from these concessions; on the contrary, we may rather hope that we shall thus make ourselves master of a possession which no one will ever venture to dispute.

The thinker requires, to be fully equipped, the hypotheses of pure reason, which, although but leaden

weapons (for they have not been steeled in the armoury of experience), are as useful as any that can be employed by his opponents. If, accordingly, we have assumed, from a non-speculative point of view, the immaterial nature of the soul, and are met by the objection that experience seems to prove that the growth and decay of our mental faculties are mere modifications of the sensuous organism — we can weaken the force of this objection by the assumption that the body is nothing but the fundamental phenomenon, to which, as a necessary condition, all sensibility, and consequently all thought, relates in the present state of our existence; and that the separation of soul and body forms the conclusion of the sensuous exercise of our power of cognition and the beginning of the intellectual. The body would, in this view of the question, be regarded, not as the cause of thought, but merely as its restrictive condition, as promotive of the sensuous and animal, but as a hindrance to the pure and spiritual life; and the dependence of the animal life on the constitution of the body, would not prove that the whole life of man was also dependent on the state of the organism. We might go still farther, and discover new objections, or carry out to their extreme consequences those which have already been adduced.

Generation, in the human race as well as among the irrational animals, depends on so many accidents — of occasion, of proper sustenance, of the laws enacted by the government of a country of vice even, that it is difficult to believe in the eternal existence of a being whose life has begun under circumstances so mean and trivial, and so entirely dependent upon our own control. As regards the continuance of the existence of the whole race, we need have no difficulties, for accident in single cases is subject to general laws; but, in the case of each individual, it would seem as if we could hardly expect so wonderful an effect from causes so insignificant. But, in answer to these objections, we may adduce the transcendental hypothesis that all life is properly intelligible, and not subject to changes of time, and that it neither began in birth, nor will end in death. We may assume that this life is nothing more than a sensuous representation of pure spiritual life; that the whole world of sense is but an image, hovering before the faculty of cognition which we exercise in this sphere, and with no more objective reality than a dream; and that if we could intuite ourselves and other things as they really are, we should see ourselves in a world of spiritual natures, our connection with which did not begin at our birth and will not cease with the destruction of the body. And so on.

We cannot be said to know what has been above asserted, nor do we seriously maintain the truth of these assertions; and the notions therein indicated are not even ideas of reason, they are purely fictitious conceptions. But this hypothetical procedure is in perfect conformity with the laws of reason. Our opponent mistakes the absence of empirical conditions for a proof of the complete impossibility of all that we have asserted; and we have to show him that he has not exhausted the whole sphere of possibility and that he can as little compass that sphere by the laws of experience and nature, as we can lay a secure foundation for the operations of reason beyond the region of experience. Such hypothetical defences against the pretensions of an opponent must not be regarded as declarations of opinion. The philosopher abandons them, so soon as the opposite party renounces its dogmatical conceit. To maintain a simply negative position in relation to propositions which rest on an insecure foundation, well befits the moderation of a true philosopher; but to uphold the objections urged against an opponent as proofs of the opposite statement is a proceeding just as unwarrantable and arrogant as it is to attack the position of a philosopher who advances affirmative propositions regarding such a subject.

It is evident, therefore, that hypotheses, in the speculative sphere, are valid, not as independent propositions, but only relatively to opposite transcendent assumptions. For, to make the principles of possible experience conditions of the possibility of things in general is just as transcendent a procedure as to maintain the objective reality of ideas which can be applied to no objects except such as lie without the limits of possible experience. The judgements enounced by pure reason must be necessary, or they must not be enounced at all. Reason cannot trouble herself with opinions. But the hypotheses we have been discussing are merely problematical judgements, which can neither be confuted nor proved; while,

therefore, they are not personal opinions, they are indispensable as answers to objections which are liable to be raised. But we must take care to confine them to this function, and guard against any assumption on their part of absolute validity, a proceeding which would involve reason in inextricable difficulties and contradictions.

SECTION IV. The Discipline of Pure Reason in Relation to Proofs.

It is a peculiarity, which distinguishes the proofs of transcendental synthetical propositions from those of all other a priori synthetical cognitions, that reason, in the case of the former, does not apply its conceptions directly to an object, but is first obliged to prove, a priori, the objective validity of these conceptions and the possibility of their syntheses. This is not merely a prudential rule, it is essential to the very possibility of the proof of a transcendental proposition. If I am required to pass, a priori, beyond the conception of an object, I find that it is utterly impossible without the guidance of something which is not contained in the conception. In mathematics, it is a priori intuition that guides my synthesis; and, in this case, all our conclusions may be drawn immediately from pure intuition. In transcendental cognition, so long as we are dealing only with conceptions of the understanding, we are guided by possible experience. That is to say, a proof in the sphere of transcendental cognition does not show that the given conception (that of an event, for example) leads directly to another conception (that of a cause) — for this would be a saltus which nothing can justify; but it shows that experience itself, and consequently the object of experience, is impossible without the connection indicated by these conceptions. It follows that such a proof must demonstrate the possibility of arriving, synthetically and a priori, at a certain knowledge of things, which was not contained in our conceptions of these things. Unless we pay particular attention to this requirement, our proofs, instead of pursuing the straight path indicated by reason, follow the tortuous road of mere subjective association. The illusory conviction, which rests upon subjective causes of association, and which is considered as resulting from the perception of a real and objective natural affinity, is always open to doubt and suspicion. For this reason, all the attempts which have been made to prove the principle of sufficient reason, have, according to the universal admission of philosophers, been quite unsuccessful; and, before the appearance of transcendental criticism, it was considered better, as this principle could not be abandoned, to appeal boldly to the common sense of mankind (a proceeding which always proves that the problem, which reason ought to solve, is one in which philosophers find great difficulties), rather than attempt to discover new dogmatical proofs.

But, if the proposition to be proved is a proposition of pure reason, and if I aim at passing beyond my empirical conceptions by the aid of mere ideas, it is necessary that the proof should first show that such a step in synthesis is possible (which it is not), before it proceeds to prove the truth of the proposition itself. The so-called proof of the simple nature of the soul from the unity of apperception, is a very plausible one. But it contains no answer to the objection, that, as the notion of absolute simplicity is not a conception which is directly applicable to a perception, but is an idea which must be inferred — if at all — from observation, it is by no means evident how the mere fact of consciousness, which is contained in all thought, although in so far a simple representation, can conduct me to the consciousness and cognition of a thing which is purely a thinking substance. When I represent to my mind the power of my body as in motion, my body in this thought is so far absolute unity, and my representation of it is a simple one; and hence I can indicate this representation by the motion of a point, because I have made abstraction of the size or volume of the body. But I cannot hence infer that, given merely the moving power of a body, the body may be cogitated as simple substance, merely because the representation in my mind takes no account of its content in space, and is consequently simple. The simple, in abstraction, is very different from the objectively simple; and hence the Ego, which is simple in the first sense, may, in the second sense, as indicating the soul itself, be a very complex conception, with a very various content. Thus it is evident that in all such arguments there lurks a paralogism. We guess (for without some such surmise our suspicion would not be excited in reference to a proof of this character) at the presence of the paralogism,

by keeping ever before us a criterion of the possibility of those synthetical propositions which aim at proving more than experience can teach us. This criterion is obtained from the observation that such proofs do not lead us directly from the subject of the proposition to be proved to the required predicate, but find it necessary to presuppose the possibility of extending our cognition a priori by means of ideas. We must, accordingly, always use the greatest caution; we require, before attempting any proof, to consider how it is possible to extend the sphere of cognition by the operations of pure reason, and from what source we are to derive knowledge, which is not obtained from the analysis of conceptions, nor relates, by anticipation, to possible experience. We shall thus spare ourselves much severe and fruitless labour, by not expecting from reason what is beyond its power, or rather by subjecting it to discipline, and teaching it to moderate its vehement desires for the extension of the sphere of cognition.

The first rule for our guidance is, therefore, not to attempt a transcendental proof, before we have considered from what source we are to derive the principles upon which the proof is to be based, and what right we have to expect that our conclusions from these principles will be veracious. If they are principles of the understanding, it is vain to expect that we should attain by their means to ideas of pure reason; for these principles are valid only in regard to objects of possible experience. If they are principles of pure reason, our labour is alike in vain. For the principles of reason, if employed as objective, are without exception dialectical and possess no validity or truth, except as regulative principles of the systematic employment of reason in experience. But when such delusive proof are presented to us, it is our duty to meet them with the non liquet of a matured judgement; and, although we are unable to expose the particular sophism upon which the proof is based, we have a right to demand a deduction of the principles employed in it; and, if these principles have their origin in pure reason alone, such a deduction is absolutely impossible. And thus it is unnecessary that we should trouble ourselves with the exposure and confutation of every sophistical illusion; we may, at once, bring all dialectic, which is inexhaustible in the production of fallacies, before the bar of critical reason, which tests the principles upon which all dialectical procedure is based. The second peculiarity of transcendental proof is that a transcendental proposition cannot rest upon more than a single proof. If I am drawing conclusions, not from conceptions, but from intuition corresponding to a conception, be it pure intuition, as in mathematics, or empirical, as in natural science, the intuition which forms the basis of my inferences presents me with materials for many synthetical propositions, which I can connect in various modes, while, as it is allowable to proceed from different points in the intention, I can arrive by different paths at the same proposition.

But every transcendental proposition sets out from a conception, and posits the synthetical condition of the possibility of an object according to this conception. There must, therefore, be but one ground of proof, because it is the conception alone which determines the object; and thus the proof cannot contain anything more than the determination of the object according to the conception. In our Transcendental Analytic, for example, we inferred the principle: Every event has a cause, from the only condition of the objective possibility of our conception of an event. This is that an event cannot be determined in time, and consequently cannot form a part of experience, unless it stands under this dynamical law. This is the only possible ground of proof; for our conception of an event possesses objective validity, that is, is a true conception, only because the law of causality determines an object to which it can refer. Other arguments in support of this principle have been attempted — such as that from the contingent nature of a phenomenon; but when this argument is considered, we can discover no criterion of contingency, except the fact of an event — of something happening, that is to say, the existence which is preceded by the non-existence of an object, and thus we fall back on the very thing to be proved. If the proposition: “Every thinking being is simple,” is to be proved, we keep to the conception of the ego, which is simple, and to which all thought has a relation. The same is the case with the transcendental proof of the existence of a Deity, which is based solely upon the harmony and reciprocal fitness of the conceptions of an ens

realissimum and a necessary being, and cannot be attempted in any other manner.

This caution serves to simplify very much the criticism of all propositions of reason. When reason employs conceptions alone, only one proof of its thesis is possible, if any. When, therefore, the dogmatist advances with ten arguments in favour of a proposition, we may be sure that not one of them is conclusive. For if he possessed one which proved the proposition he brings forward to demonstration — as must always be the case with the propositions of pure reason — what need is there for any more? His intention can only be similar to that of the advocate who had different arguments for different judges; this availing himself of the weakness of those who examine his arguments, who, without going into any profound investigation, adopt the view of the case which seems most probable at first sight and decide according to it.

The third rule for the guidance of pure reason in the conduct of a proof is that all transcendental proofs must never be apagogic or indirect, but always ostensive or direct. The direct or ostensive proof not only establishes the truth of the proposition to be proved, but exposes the grounds of its truth; the apagogic, on the other hand, may assure us of the truth of the proposition, but it cannot enable us to comprehend the grounds of its possibility. The latter is, accordingly, rather an auxiliary to an argument, than a strictly philosophical and rational mode of procedure. In one respect, however, they have an advantage over direct proofs, from the fact that the mode of arguing by contradiction, which they employ, renders our understanding of the question more clear, and approximates the proof to the certainty of an intuitional demonstration.

The true reason why indirect proofs are employed in different sciences is this. When the grounds upon which we seek to base a cognition are too various or too profound, we try whether or not we may not discover the truth of our cognition from its consequences. The modus ponens of reasoning from the truth of its inferences to the truth of a proposition would be admissible if all the inferences that can be drawn from it are known to be true; for in this case there can be only one possible ground for these inferences, and that is the true one. But this is a quite impracticable procedure, as it surpasses all our powers to discover all the possible inferences that can be drawn from a proposition. But this mode of reasoning is employed, under favour, when we wish to prove the truth of an hypothesis; in which case we admit the truth of the conclusion — which is supported by analogy — that, if all the inferences we have drawn and examined agree with the proposition assumed, all other possible inferences will also agree with it. But, in this way, an hypothesis can never be established as a demonstrated truth. The modus tollens of reasoning from known inferences to the unknown proposition, is not only a rigorous, but a very easy mode of proof. For, if it can be shown that but one inference from a proposition is false, then the proposition must itself be false. Instead, then, of examining, in an ostensive argument, the whole series of the grounds on which the truth of a proposition rests, we need only take the opposite of this proposition, and if one inference from it be false, then must the opposite be itself false; and, consequently, the proposition which we wished to prove must be true.

The apagogic method of proof is admissible only in those sciences where it is impossible to mistake a subjective representation for an objective cognition. Where this is possible, it is plain that the opposite of a given proposition may contradict merely the subjective conditions of thought, and not the objective cognition; or it may happen that both propositions contradict each other only under a subjective condition, which is incorrectly considered to be objective, and, as the condition is itself false, both propositions may be false, and it will, consequently, be impossible to conclude the truth of the one from the falseness of the other.

In mathematics such subreptions are impossible; and it is in this science, accordingly, that the indirect mode of proof has its true place. In the science of nature, where all assertion is based upon empirical intuition, such subreptions may be guarded against by the repeated comparison of observations; but this mode of proof is of little value in this sphere of knowledge. But the transcendental efforts of pure reason

are all made in the sphere of the subjective, which is the real medium of all dialectical illusion; and thus reason endeavours, in its premisses, to impose upon us subjective representations for objective cognitions. In the transcendental sphere of pure reason, then, and in the case of synthetical propositions, it is inadmissible to support a statement by disproving the counter-statement. For only two cases are possible; either, the counter-statement is nothing but the enouncement of the inconsistency of the opposite opinion with the subjective conditions of reason, which does not affect the real case (for example, we cannot comprehend the unconditioned necessity of the existence of a being, and hence every speculative proof of the existence of such a being must be opposed on subjective grounds, while the possibility of this being in itself cannot with justice be denied); or, both propositions, being dialectical in their nature, are based upon an impossible conception. In this latter case the rule applies: non entis nulla sunt predicata; that is to say, what we affirm and what we deny, respecting such an object, are equally untrue, and the apagogic mode of arriving at the truth is in this case impossible. If, for example, we presuppose that the world of sense is given in itself in its totality, it is false, either that it is infinite, or that it is finite and limited in space. Both are false, because the hypothesis is false. For the notion of phenomena (as mere representations) which are given in themselves (as objects) is self-contradictory; and the infinitude of this imaginary whole would, indeed, be unconditioned, but would be inconsistent (as everything in the phenomenal world is conditioned) with the unconditioned determination and finitude of quantities which is presupposed in our conception.

The apagogic mode of proof is the true source of those illusions which have always had so strong an attraction for the admirers of dogmatical philosophy. It may be compared to a champion who maintains the honour and claims of the party he has adopted by offering battle to all who doubt the validity of these claims and the purity of that honour; while nothing can be proved in this way, except the respective strength of the combatants, and the advantage, in this respect, is always on the side of the attacking party. Spectators, observing that each party is alternately conqueror and conquered, are led to regard the subject of dispute as beyond the power of man to decide upon. But such an opinion cannot be justified; and it is sufficient to apply to these reasoners the remark:

Non defensoribus istis
Tempus eget.

Each must try to establish his assertions by a transcendental deduction of the grounds of proof employed in his argument, and thus enable us to see in what way the claims of reason may be supported. If an opponent bases his assertions upon subjective grounds, he may be refuted with ease; not, however to the advantage of the dogmatist, who likewise depends upon subjective sources of cognition and is in like manner driven into a corner by his opponent. But, if parties employ the direct method of procedure, they will soon discover the difficulty, nay, the impossibility of proving their assertions, and will be forced to appeal to prescription and precedence; or they will, by the help of criticism, discover with ease the dogmatical illusions by which they had been mocked, and compel reason to renounce its exaggerated pretensions to speculative insight and to confine itself within the limits of its proper sphere — that of practical principles.

CHAPTER II. The Canon of Pure Reason.

It is a humiliating consideration for human reason that it is incompetent to discover truth by means of pure speculation, but, on the contrary, stands in need of discipline to check its deviations from the straight path and to expose the illusions which it originates. But, on the other hand, this consideration ought to elevate and to give it confidence, for this discipline is exercised by itself alone, and it is subject to the censure of no other power. The bounds, moreover, which it is forced to set to its speculative exercise, form likewise a check upon the fallacious pretensions of opponents; and thus what remains of its possessions, after these exaggerated claims have been disallowed, is secure from attack or usurpation. The greatest, and perhaps the only, use of all philosophy of pure reason is, accordingly, of a purely negative character. It is not an organon for the extension, but a discipline for the determination, of the limits of its exercise; and without laying claim to the discovery of new truth, it has the modest merit of guarding against error.

At the same time, there must be some source of positive cognitions which belong to the domain of pure reason and which become the causes of error only from our mistaking their true character, while they form the goal towards which reason continually strives. How else can we account for the inextinguishable desire in the human mind to find a firm footing in some region beyond the limits of the world of experience? It hopes to attain to the possession of a knowledge in which it has the deepest interest. It enters upon the path of pure speculation; but in vain. We have some reason, however, to expect that, in the only other way that lies open to it — the path of practical reason — it may meet with better success.

I understand by a canon a list of the a priori principles of the proper employment of certain faculties of cognition. Thus general logic, in its analytical department, is a formal canon for the faculties of understanding and reason. In the same way, Transcendental Analytic was seen to be a canon of the pure understanding; for it alone is competent to enounce true a priori synthetical cognitions. But, when no proper employment of a faculty of cognition is possible, no canon can exist. But the synthetical cognition of pure speculative reason is, as has been shown, completely impossible. There cannot, therefore, exist any canon for the speculative exercise of this faculty — for its speculative exercise is entirely dialectical; and, consequently, transcendental logic, in this respect, is merely a discipline, and not a canon. If, then, there is any proper mode of employing the faculty of pure reason — in which case there must be a canon for this faculty — this canon will relate, not to the speculative, but to the practical use of reason. This canon we now proceed to investigate.

SECTION I. Of the Ultimate End of the Pure Use of Reason.

There exists in the faculty of reason a natural desire to venture beyond the field of experience, to attempt to reach the utmost bounds of all cognition by the help of ideas alone, and not to rest satisfied until it has fulfilled its course and raised the sum of its cognitions into a self-subsistent systematic whole. Is the motive for this endeavour to be found in its speculative, or in its practical interests alone?

Setting aside, at present, the results of the labours of pure reason in its speculative exercise, I shall merely inquire regarding the problems the solution of which forms its ultimate aim, whether reached or not, and in relation to which all other aims are but partial and intermediate. These highest aims must, from the nature of reason, possess complete unity; otherwise the highest interest of humanity could not be successfully promoted.

The transcendental speculation of reason relates to three things: the freedom of the will, the immortality of the soul, and the existence of God. The speculative interest which reason has in those questions is very small; and, for its sake alone, we should not undertake the labour of transcendental investigation — a labour full of toil and ceaseless struggle. We should be loth to undertake this labour, because the discoveries we might make would not be of the smallest use in the sphere of concrete or physical

investigation. We may find out that the will is free, but this knowledge only relates to the intelligible cause of our volition. As regards the phenomena or expressions of this will, that is, our actions, we are bound, in obedience to an inviolable maxim, without which reason cannot be employed in the sphere of experience, to explain these in the same way as we explain all the other phenomena of nature, that is to say, according to its unchangeable laws. We may have discovered the spirituality and immortality of the soul, but we cannot employ this knowledge to explain the phenomena of this life, nor the peculiar nature of the future, because our conception of an incorporeal nature is purely negative and does not add anything to our knowledge, and the only inferences to be drawn from it are purely fictitious. If, again, we prove the existence of a supreme intelligence, we should be able from it to make the conformity to aims existing in the arrangement of the world comprehensible; but we should not be justified in deducing from it any particular arrangement or disposition, or inferring any where it is not perceived. For it is a necessary rule of the speculative use of reason that we must not overlook natural causes, or refuse to listen to the teaching of experience, for the sake of deducing what we know and perceive from something that transcends all our knowledge. In one word, these three propositions are, for the speculative reason, always transcendent, and cannot be employed as immanent principles in relation to the objects of experience; they are, consequently, of no use to us in this sphere, being but the valueless results of the severe but unprofitable efforts of reason.

If, then, the actual cognition of these three cardinal propositions is perfectly useless, while Reason uses her utmost endeavours to induce us to admit them, it is plain that their real value and importance relate to our practical, and not to our speculative interest.

I term all that is possible through free will, practical. But if the conditions of the exercise of free volition are empirical, reason can have only a regulative, and not a constitutive, influence upon it, and is serviceable merely for the introduction of unity into its empirical laws. In the moral philosophy of prudence, for example, the sole business of reason is to bring about a union of all the ends, which are aimed at by our inclinations, into one ultimate end — that of happiness — and to show the agreement which should exist among the means of attaining that end. In this sphere, accordingly, reason cannot present to us any other than pragmatical laws of free action, for our guidance towards the aims set up by the senses, and is incompetent to give us laws which are pure and determined completely a priori. On the other hand, pure practical laws, the ends of which have been given by reason entirely a priori, and which are not empirically conditioned, but are, on the contrary, absolutely imperative in their nature, would be products of pure reason. Such are the moral laws; and these alone belong to the sphere of the practical exercise of reason, and admit of a canon.

All the powers of reason, in the sphere of what may be termed pure philosophy, are, in fact, directed to the three above-mentioned problems alone. These again have a still higher end — the answer to the question, what we ought to do, if the will is free, if there is a God and a future world. Now, as this problem relates to our in reference to the highest aim of humanity, it is evident that the ultimate intention of nature, in the constitution of our reason, has been directed to the moral alone.

We must take care, however, in turning our attention to an object which is foreign* to the sphere of transcendental philosophy, not to injure the unity of our system by digressions, nor, on the other hand, to fail in clearness, by saying too little on the new subject of discussion. I hope to avoid both extremes, by keeping as close as possible to the transcendental, and excluding all psychological, that is, empirical, elements.

[Footnote: All practical conceptions relate to objects of pleasure and pain, and consequently — in an indirect manner, at least — to objects of feeling. But as feeling is not a faculty of representation, but lies out of the sphere of our powers of cognition, the elements of our judgements, in so far as they relate to pleasure or pain, that is, the elements of our practical judgements, do not belong to transcendental philosophy, which has to do with pure a priori cognitions alone.]

I have to remark, in the first place, that at present I treat of the conception of freedom in the practical sense only, and set aside the corresponding transcendental conception, which cannot be employed as a ground of explanation in the phenomenal world, but is itself a problem for pure reason. A will is purely animal (arbitrium brutum) when it is determined by sensuous impulses or instincts only, that is, when it is determined in a pathological manner. A will, which can be determined independently of sensuous impulses, consequently by motives presented by reason alone, is called a free will (arbitrium liberum); and everything which is connected with this free will, either as principle or consequence, is termed practical. The existence of practical freedom can be proved from experience alone. For the human will is not determined by that alone which immediately affects the senses; on the contrary, we have the power, by calling up the notion of what is useful or hurtful in a more distant relation, of overcoming the immediate impressions on our sensuous faculty of desire. But these considerations of what is desirable in relation to our whole state, that is, is in the end good and useful, are based entirely upon reason. This faculty, accordingly, enounces laws, which are imperative or objective laws of freedom and which tell us what ought to take place, thus distinguishing themselves from the laws of nature, which relate to that which does take place. The laws of freedom or of free will are hence termed practical laws.

Whether reason is not itself, in the actual delivery of these laws, determined in its turn by other influences, and whether the action which, in relation to sensuous impulses, we call free, may not, in relation to higher and more remote operative causes, really form a part of nature — these are questions which do not here concern us. They are purely speculative questions; and all we have to do, in the practical sphere, is to inquire into the rule of conduct which reason has to present. Experience demonstrates to us the existence of practical freedom as one of the causes which exist in nature, that is, it shows the causal power of reason in the determination of the will. The idea of transcendental freedom, on the contrary, requires that reason — in relation to its causal power of commencing a series of phenomena — should be independent of all sensuous determining causes; and thus it seems to be in opposition to the law of nature and to all possible experience. It therefore remains a problem for the human mind. But this problem does not concern reason in its practical use; and we have, therefore, in a canon of pure reason, to do with only two questions, which relate to the practical interest of pure reason: Is there a God? and, Is there a future life? The question of transcendental freedom is purely speculative, and we may therefore set it entirely aside when we come to treat of practical reason. Besides, we have already discussed this subject in the antinomy of pure reason.

SECTION II. Of the Ideal of the Summum Bonum as a Determining Ground of the Ultimate End of Pure Reason.

Reason conducted us, in its speculative use, through the field of experience and, as it can never find complete satisfaction in that sphere, from thence to speculative ideas — which, however, in the end brought us back again to experience, and thus fulfilled the purpose of reason, in a manner which, though useful, was not at all in accordance with our expectations. It now remains for us to consider whether pure reason can be employed in a practical sphere, and whether it will here conduct us to those ideas which attain the highest ends of pure reason, as we have just stated them. We shall thus ascertain whether, from the point of view of its practical interest, reason may not be able to supply us with that which, on the speculative side, it wholly denies us.

The whole interest of reason, speculative as well as practical, is centred in the three following questions:

1. WHAT CAN I KNOW?
2. WHAT OUGHT I TO DO?
3. WHAT MAY I HOPE?

The first question is purely speculative. We have, as I flatter myself, exhausted all the replies of which

it is susceptible, and have at last found the reply with which reason must content itself, and with which it ought to be content, so long as it pays no regard to the practical. But from the two great ends to the attainment of which all these efforts of pure reason were in fact directed, we remain just as far removed as if we had consulted our ease and declined the task at the outset. So far, then, as knowledge is concerned, thus much, at least, is established, that, in regard to those two problems, it lies beyond our reach.

The second question is purely practical. As such it may indeed fall within the province of pure reason, but still it is not transcendental, but moral, and consequently cannot in itself form the subject of our criticism.

The third question: If I act as I ought to do, what may I then hope? — is at once practical and theoretical. The practical forms a clue to the answer of the theoretical, and — in its highest form — speculative question. For all hoping has happiness for its object and stands in precisely the same relation to the practical and the law of morality as knowing to the theoretical cognition of things and the law of nature. The former arrives finally at the conclusion that something is (which determines the ultimate end), because something ought to take place; the latter, that something is (which operates as the highest cause), because something does take place.

Happiness is the satisfaction of all our desires; extensive, in regard to their multiplicity; intensive, in regard to their degree; and protensive, in regard to their duration. The practical law based on the motive of happiness I term a pragmatical law (or prudential rule); but that law, assuming such to exist, which has no other motive than the worthiness of being happy, I term a moral or ethical law. The first tells us what we have to do, if we wish to become possessed of happiness; the second dictates how we ought to act, in order to deserve happiness. The first is based upon empirical principles; for it is only by experience that I can learn either what inclinations exist which desire satisfaction, or what are the natural means of satisfying them. The second takes no account of our desires or the means of satisfying them, and regards only the freedom of a rational being, and the necessary conditions under which alone this freedom can harmonize with the distribution of happiness according to principles. This second law may therefore rest upon mere ideas of pure reason, and may be cognized a priori.

I assume that there are pure moral laws which determine, entirely a priori (without regard to empirical motives, that is, to happiness), the conduct of a rational being, or in other words, to use which it makes of its freedom, and that these laws are absolutely imperative (not merely hypothetically, on the supposition of other empirical ends), and therefore in all respects necessary. I am warranted in assuming this, not only by the arguments of the most enlightened moralists, but by the moral judgement of every man who will make the attempt to form a distinct conception of such a law.

Pure reason, then, contains, not indeed in its speculative, but in its practical, or, more strictly, its moral use, principles of the possibility of experience, of such actions, namely, as, in accordance with ethical precepts, might be met with in the history of man. For since reason commands that such actions should take place, it must be possible for them to take place; and hence a particular kind of systematic unity — the moral — must be possible. We have found, it is true, that the systematic unity of nature could not be established according to speculative principles of reason, because, while reason possesses a causal power in relation to freedom, it has none in relation to the whole sphere of nature; and, while moral principles of reason can produce free actions, they cannot produce natural laws. It is, then, in its practical, but especially in its moral use, that the principles of pure reason possess objective reality.

I call the world a moral world, in so far as it may be in accordance with all the ethical laws — which, by virtue of the freedom of reasonable beings, it can be, and according to the necessary laws of morality it ought to be. But this world must be conceived only as an intelligible world, inasmuch as abstraction is therein made of all conditions (ends), and even of all impediments to morality (the weakness or pravity of human nature). So far, then, it is a mere idea — though still a practical idea — which may have, and ought

to have, an influence on the world of sense, so as to bring it as far as possible into conformity with itself. The idea of a moral world has, therefore, objective reality, not as referring to an object of intelligible intuition — for of such an object we can form no conception whatever — but to the world of sense — conceived, however, as an object of pure reason in its practical use — and to a corpus mysticum of rational beings in it, in so far as the liberum arbitrium of the individual is placed, under and by virtue of moral laws, in complete systematic unity both with itself and with the freedom of all others.

That is the answer to the first of the two questions of pure reason which relate to its practical interest: Do that which will render thee worthy of happiness. The second question is this: If I conduct myself so as not to be unworthy of happiness, may I hope thereby to obtain happiness? In order to arrive at the solution of this question, we must inquire whether the principles of pure reason, which prescribe a priori the law, necessarily also connect this hope with it.

I say, then, that just as the moral principles are necessary according to reason in its practical use, so it is equally necessary according to reason in its theoretical use to assume that every one has ground to hope for happiness in the measure in which he has made himself worthy of it in his conduct, and that therefore the system of morality is inseparably (though only in the idea of pure reason) connected with that of happiness.

Now in an intelligible, that is, in the moral world, in the conception of which we make abstraction of all the impediments to morality (sensuous desires), such a system of happiness, connected with and proportioned to morality, may be conceived as necessary, because freedom of volition — partly incited, and partly restrained by moral laws — would be itself the cause of general happiness; and thus rational beings, under the guidance of such principles, would be themselves the authors both of their own enduring welfare and that of others. But such a system of self-rewarding morality is only an idea, the carrying out of which depends upon the condition that every one acts as he ought; in other words, that all actions of reasonable beings be such as they would be if they sprung from a Supreme Will, comprehending in, or under, itself all particular wills. But since the moral law is binding on each individual in the use of his freedom of volition, even if others should not act in conformity with this law, neither the nature of things, nor the causality of actions and their relation to morality, determine how the consequences of these actions will be related to happiness; and the necessary connection of the hope of happiness with the unceasing endeavour to become worthy of happiness, cannot be cognized by reason, if we take nature alone for our guide. This connection can be hoped for only on the assumption that the cause of nature is a supreme reason, which governs according to moral laws.

I term the idea of an intelligence in which the morally most perfect will, united with supreme blessedness, is the cause of all happiness in the world, so far as happiness stands in strict relation to morality (as the worthiness of being happy), the ideal of the supreme Good. It is only, then, in the ideal of the supreme original good, that pure reason can find the ground of the practically necessary connection of both elements of the highest derivative good, and accordingly of an intelligible, that is, moral world. Now since we are necessitated by reason to conceive ourselves as belonging to such a world, while the senses present to us nothing but a world of phenomena, we must assume the former as a consequence of our conduct in the world of sense (since the world of sense gives us no hint of it), and therefore as future in relation to us. Thus God and a future life are two hypotheses which, according to the principles of pure reason, are inseparable from the obligation which this reason imposes upon us.

Morality per se constitutes a system. But we can form no system of happiness, except in so far as it is dispensed in strict proportion to morality. But this is only possible in the intelligible world, under a wise author and ruler. Such a ruler, together with life in such a world, which we must look upon as future, reason finds itself compelled to assume; or it must regard the moral laws as idle dreams, since the necessary consequence which this same reason connects with them must, without this hypothesis, fall to the ground. Hence also the moral laws are universally regarded as commands, which they could not be

did they not connect a priori adequate consequences with their dictates, and thus carry with them promises and threats. But this, again, they could not do, did they not reside in a necessary being, as the Supreme Good, which alone can render such a teleological unity possible.

Leibnitz termed the world, when viewed in relation to the rational beings which it contains, and the moral relations in which they stand to each other, under the government of the Supreme Good, the kingdom of Grace, and distinguished it from the kingdom of Nature, in which these rational beings live, under moral laws, indeed, but expect no other consequences from their actions than such as follow according to the course of nature in the world of sense. To view ourselves, therefore, as in the kingdom of grace, in which all happiness awaits us, except in so far as we ourselves limit our participation in it by actions which render us unworthy of happiness, is a practically necessary idea of reason.

Practical laws, in so far as they are subjective grounds of actions, that is, subjective principles, are termed maxims. The judgements of moral according to in its purity and ultimate results are framed according ideas; the observance of its laws, according to according to maxims.

The whole course of our life must be subject to moral maxims; but this is impossible, unless with the moral law, which is a mere idea, reason connects an efficient cause which ordains to all conduct which is in conformity with the moral law an issue either in this or in another life, which is in exact conformity with our highest aims. Thus, without a God and without a world, invisible to us now, but hoped for, the glorious ideas of morality are, indeed, objects of approbation and of admiration, but cannot be the springs of purpose and action. For they do not satisfy all the aims which are natural to every rational being, and which are determined a priori by pure reason itself, and necessary.

Happiness alone is, in the view of reason, far from being the complete good. Reason does not approve of it (however much inclination may desire it), except as united with desert. On the other hand, morality alone, and with it, mere desert, is likewise far from being the complete good. To make it complete, he who conducts himself in a manner not unworthy of happiness, must be able to hope for the possession of happiness. Even reason, unbiased by private ends, or interested considerations, cannot judge otherwise, if it puts itself in the place of a being whose business it is to dispense all happiness to others. For in the practical idea both points are essentially combined, though in such a way that participation in happiness is rendered possible by the moral disposition, as its condition, and not conversely, the moral disposition by the prospect of happiness. For a disposition which should require the prospect of happiness as its necessary condition would not be moral, and hence also would not be worthy of complete happiness — a happiness which, in the view of reason, recognizes no limitation but such as arises from our own immoral conduct.

Happiness, therefore, in exact proportion with the morality of rational beings (whereby they are made worthy of happiness), constitutes alone the supreme good of a world into which we absolutely must transport ourselves according to the commands of pure but practical reason. This world is, it is true, only an intelligible world; for of such a systematic unity of ends as it requires, the world of sense gives us no hint. Its reality can be based on nothing else but the hypothesis of a supreme original good. In it independent reason, equipped with all the sufficiency of a supreme cause, founds, maintains, and fulfils the universal order of things, with the most perfect teleological harmony, however much this order may be hidden from us in the world of sense.

This moral theology has the peculiar advantage, in contrast with speculative theology, of leading inevitably to the conception of a sole, perfect, and rational First Cause, whereof speculative theology does not give us any indication on objective grounds, far less any convincing evidence. For we find neither in transcendental nor in natural theology, however far reason may lead us in these, any ground to warrant us in assuming the existence of one only Being, which stands at the head of all natural causes, and on which these are entirely dependent. On the other band, if we take our stand on moral unity as a necessary law of the universe, and from this point of view consider what is necessary to give this law

adequate efficiency and, for us, obligatory force, we must come to the conclusion that there is one only supreme will, which comprehends all these laws in itself. For how, under different wills, should we find complete unity of ends? This will must be omnipotent, that all nature and its relation to morality in the world may be subject to it; omniscient, that it may have knowledge of the most secret feelings and their moral worth; omnipresent, that it may be at hand to supply every necessity to which the highest weal of the world may give rise; eternal, that this harmony of nature and liberty may never fail; and so on.

But this systematic unity of ends in this world of intelligences — which, as mere nature, is only a world of sense, but, as a system of freedom of volition, may be termed an intelligible, that is, moral world (regnum gratiae) — leads inevitably also to the teleological unity of all things which constitute this great whole, according to universal natural laws — just as the unity of the former is according to universal and necessary moral laws — and unites the practical with the speculative reason. The world must be represented as having originated from an idea, if it is to harmonize with that use of reason without which we cannot even consider ourselves as worthy of reason — namely, the moral use, which rests entirely on the idea of the supreme good. Hence the investigation of nature receives a teleological direction, and becomes, in its widest extension, physico-theology. But this, taking its rise in moral order as a unity founded on the essence of freedom, and not accidentally instituted by external commands, establishes the teleological view of nature on grounds which must be inseparably connected with the internal possibility of things. This gives rise to a transcendental theology, which takes the ideal of the highest ontological perfection as a principle of systematic unity; and this principle connects all things according to universal and necessary natural laws, because all things have their origin in the absolute necessity of the one only Primal Being.

What use can we make of our understanding, even in respect of experience, if we do not propose ends to ourselves? But the highest ends are those of morality, and it is only pure reason that can give us the knowledge of these. Though supplied with these, and putting ourselves under their guidance, we can make no teleological use of the knowledge of nature, as regards cognition, unless nature itself has established teleological unity. For without this unity we should not even possess reason, because we should have no school for reason, and no cultivation through objects which afford the materials for its conceptions. But teleological unity is a necessary unity, and founded on the essence of the individual will itself. Hence this will, which is the condition of the application of this unity in concreto, must be so likewise. In this way the transcendental enlargement of our rational cognition would be, not the cause, but merely the effect of the practical teleology which pure reason imposes upon us.

Hence, also, we find in the history of human reason that, before the moral conceptions were sufficiently purified and determined, and before men had attained to a perception of the systematic unity of ends according to these conceptions and from necessary principles, the knowledge of nature, and even a considerable amount of intellectual culture in many other sciences, could produce only rude and vague conceptions of the Deity, sometimes even admitting of an astonishing indifference with regard to this question altogether. But the more enlarged treatment of moral ideas, which was rendered necessary by the extreme pure moral law of our religion, awakened the interest, and thereby quickened the perceptions of reason in relation to this object. In this way, and without the help either of an extended acquaintance with nature, or of a reliable transcendental insight (for these have been wanting in all ages), a conception of the Divine Being was arrived at, which we now bold to be the correct one, not because speculative reason convinces us of its correctness, but because it accords with the moral principles of reason. Thus it is to pure reason, but only in its practical use, that we must ascribe the merit of having connected with our highest interest a cognition, of which mere speculation was able only to form a conjecture, but the validity of which it was unable to establish — and of having thereby rendered it, not indeed a demonstrated dogma, but a hypothesis absolutely necessary to the essential ends of reason.

But if practical reason has reached this elevation, and has attained to the conception of a sole Primal

Being as the supreme good, it must not, therefore, imagine that it has transcended the empirical conditions of its application, and risen to the immediate cognition of new objects; it must not presume to start from the conception which it has gained, and to deduce from it the moral laws themselves. For it was these very laws, the internal practical necessity of which led us to the hypothesis of an independent cause, or of a wise ruler of the universe, who should give them effect. Hence we are not entitled to regard them as accidental and derived from the mere will of the ruler, especially as we have no conception of such a will, except as formed in accordance with these laws. So far, then, as practical reason has the right to conduct us, we shall not look upon actions as binding on us, because they are the commands of God, but we shall regard them as divine commands, because we are internally bound by them. We shall study freedom under the teleological unity which accords with principles of reason; we shall look upon ourselves as acting in conformity with the divine will only in so far as we hold sacred the moral law which reason teaches us from the nature of actions themselves, and we shall believe that we can obey that will only by promoting the weal of the universe in ourselves and in others. Moral theology is, therefore, only of immanent use. It teaches us to fulfil our destiny here in the world, by placing ourselves in harmony with the general system of ends, and warns us against the fanaticism, nay, the crime of depriving reason of its legislative authority in the moral conduct of life, for the purpose of directly connecting this authority with the idea of the Supreme Being. For this would be, not an immanent, but a transcendent use of moral theology, and, like the transcendent use of mere speculation, would inevitably pervert and frustrate the ultimate ends of reason.

SECTION III. Of Opinion, Knowledge, and Belief.

The holding of a thing to be true is a phenomenon in our understanding which may rest on objective grounds, but requires, also, subjective causes in the mind of the person judging. If a judgement is valid for every rational being, then its ground is objectively sufficient, and it is termed a conviction. If, on the other hand, it has its ground in the particular character of the subject, it is termed a persuasion.

Persuasion is a mere illusion, the ground of the judgement, which lies solely in the subject, being regarded as objective. Hence a judgement of this kind has only private validity — is only valid for the individual who judges, and the holding of a thing to be true in this way cannot be communicated. But truth depends upon agreement with the object, and consequently the judgements of all understandings, if true, must be in agreement with each other (consentientia uni tertio consentiunt inter se). Conviction may, therefore, be distinguished, from an external point of view, from persuasion, by the possibility of communicating it and by showing its validity for the reason of every man; for in this case the presumption, at least, arises that the agreement of all judgements with each other, in spite of the different characters of individuals, rests upon the common ground of the agreement of each with the object, and thus the correctness of the judgement is established.

Persuasion, accordingly, cannot be subjectively distinguished from conviction, that is, so long as the subject views its judgement simply as a phenomenon of its own mind. But if we inquire whether the grounds of our judgement, which are valid for us, produce the same effect on the reason of others as on our own, we have then the means, though only subjective means, not, indeed, of producing conviction, but of detecting the merely private validity of the judgement; in other words, of discovering that there is in it the element of mere persuasion.

If we can, in addition to this, develop the subjective causes of the judgement, which we have taken for its objective grounds, and thus explain the deceptive judgement as a phenomenon in our mind, apart altogether from the objective character of the object, we can then expose the illusion and need be no longer deceived by it, although, if its subjective cause lies in our nature, we cannot hope altogether to escape its influence.

I can only maintain, that is, affirm as necessarily valid for every one, that which produces conviction. Persuasion I may keep for myself, if it is agreeable to me; but I cannot, and ought not, to attempt to impose

it as binding upon others.

Holding for true, or the subjective validity of a judgement in relation to conviction (which is, at the same time, objectively valid), has the three following degrees: opinion, belief, and knowledge. Opinion is a consciously insufficient judgement, subjectively as well as objectively. Belief is subjectively sufficient, but is recognized as being objectively insufficient. Knowledge is both subjectively and objectively sufficient. Subjective sufficiency is termed conviction (for myself); objective sufficiency is termed certainty (for all). I need not dwell longer on the explanation of such simple conceptions.

I must never venture to be of opinion, without knowing something, at least, by which my judgement, in itself merely problematical, is brought into connection with the truth — which connection, although not perfect, is still something more than an arbitrary fiction. Moreover, the law of such a connection must be certain. For if, in relation to this law, I have nothing more than opinion, my judgement is but a play of the imagination, without the least relation to truth. In the judgements of pure reason, opinion has no place. For, as they do not rest on empirical grounds and as the sphere of pure reason is that of necessary truth and a priori cognition, the principle of connection in it requires universality and necessity, and consequently perfect certainty — otherwise we should have no guide to the truth at all. Hence it is absurd to have an opinion in pure mathematics; we must know, or abstain from forming a judgement altogether. The case is the same with the maxims of morality. For we must not hazard an action on the mere opinion that it is allowed, but we must know it to be so. In the transcendental sphere of reason, on the other hand, the term opinion is too weak, while the word knowledge is too strong. From the merely speculative point of view, therefore, we cannot form a judgement at all. For the subjective grounds of a judgement, such as produce belief, cannot be admitted in speculative inquiries, inasmuch as they cannot stand without empirical support and are incapable of being communicated to others in equal measure.

But it is only from the practical point of view that a theoretically insufficient judgement can be termed belief. Now the practical reference is either to skill or to morality; to the former, when the end proposed is arbitrary and accidental, to the latter, when it is absolutely necessary.

If we propose to ourselves any end whatever, the conditions of its attainment are hypothetically necessary. The necessity is subjectively, but still only comparatively, sufficient, if I am acquainted with no other conditions under which the end can be attained. On the other hand, it is sufficient, absolutely and for every one, if I know for certain that no one can be acquainted with any other conditions under which the attainment of the proposed end would be possible. In the former case my supposition — my judgement with regard to certain conditions — is a merely accidental belief; in the latter it is a necessary belief. The physician must pursue some course in the case of a patient who is in danger, but is ignorant of the nature of the disease. He observes the symptoms, and concludes, according to the best of his judgement, that it is a case of phthisis. His belief is, even in his own judgement, only contingent: another man might, perhaps come nearer the truth. Such a belief, contingent indeed, but still forming the ground of the actual use of means for the attainment of certain ends, I term Pragmatical belief.

The usual test, whether that which any one maintains is merely his persuasion, or his subjective conviction at least, that is, his firm belief, is a bet. It frequently happens that a man delivers his opinions with so much boldness and assurance, that he appears to be under no apprehension as to the possibility of his being in error. The offer of a bet startles him, and makes him pause. Sometimes it turns out that his persuasion may be valued at a ducat, but not at ten. For he does not hesitate, perhaps, to venture a ducat, but if it is proposed to stake ten, he immediately becomes aware of the possibility of his being mistaken — a possibility which has hitherto escaped his observation. If we imagine to ourselves that we have to stake the happiness of our whole life on the truth of any proposition, our judgement drops its air of triumph, we take the alarm, and discover the actual strength of our belief. Thus pragmatical belief has degrees, varying in proportion to the interests at stake.

Now, in cases where we cannot enter upon any course of action in reference to some object, and where,

accordingly, our judgement is purely theoretical, we can still represent to ourselves, in thought, the possibility of a course of action, for which we suppose that we have sufficient grounds, if any means existed of ascertaining the truth of the matter. Thus we find in purely theoretical judgements an analogon of practical judgements, to which the word belief may properly be applied, and which we may term doctrinal belief. I should not hesitate to stake my all on the truth of the proposition — if there were any possibility of bringing it to the test of experience — that, at least, some one of the planets, which we see, is inhabited. Hence I say that I have not merely the opinion, but the strong belief, on the correctness of which I would stake even many of the advantages of life, that there are inhabitants in other worlds.

Now we must admit that the doctrine of the existence of God belongs to doctrinal belief. For, although in respect to the theoretical cognition of the universe I do not require to form any theory which necessarily involves this idea, as the condition of my explanation of the phenomena which the universe presents, but, on the contrary, am rather bound so to use my reason as if everything were mere nature, still teleological unity is so important a condition of the application of my reason to nature, that it is impossible for me to ignore it — especially since, in addition to these considerations, abundant examples of it are supplied by experience. But the sole condition, so far as my knowledge extends, under which this unity can be my guide in the investigation of nature, is the assumption that a supreme intelligence has ordered all things according to the wisest ends. Consequently, the hypothesis of a wise author of the universe is necessary for my guidance in the investigation of nature — is the condition under which alone I can fulfil an end which is contingent indeed, but by no means unimportant. Moreover, since the result of my attempts so frequently confirms the utility of this assumption, and since nothing decisive can be adduced against it, it follows that it would be saying far too little to term my judgement, in this case, a mere opinion, and that, even in this theoretical connection, I may assert that I firmly believe in God. Still, if we use words strictly, this must not be called a practical, but a doctrinal belief, which the theology of nature (physico-theology) must also produce in my mind. In the wisdom of a Supreme Being, and in the shortness of life, so inadequate to the development of the glorious powers of human nature, we may find equally sufficient grounds for a doctrinal belief in the future life of the human soul.

The expression of belief is, in such cases, an expression of modesty from the objective point of view, but, at the same time, of firm confidence, from the subjective. If I should venture to term this merely theoretical judgement even so much as a hypothesis which I am entitled to assume; a more complete conception, with regard to another world and to the cause of the world, might then be justly required of me than I am, in reality, able to give. For, if I assume anything, even as a mere hypothesis, I must, at least, know so much of the properties of such a being as will enable me, not to form the conception, but to imagine the existence of it. But the word belief refers only to the guidance which an idea gives me, and to its subjective influence on the conduct of my reason, which forces me to hold it fast, though I may not be in a position to give a speculative account of it.

But mere doctrinal belief is, to some extent, wanting in stability. We often quit our hold of it, in consequence of the difficulties which occur in speculation, though in the end we inevitably return to it again.

It is quite otherwise with moral belief. For in this sphere action is absolutely necessary, that is, I must act in obedience to the moral law in all points. The end is here incontrovertibly established, and there is only one condition possible, according to the best of my perception, under which this end can harmonize with all other ends, and so have practical validity — namely, the existence of a God and of a future world. I know also, to a certainty, that no one can be acquainted with any other conditions which conduct to the same unity of ends under the moral law. But since the moral precept is, at the same time, my maxim (as reason requires that it should be), I am irresistibly constrained to believe in the existence of God and in a future life; and I am sure that nothing can make me waver in this belief, since I should thereby overthrow my moral maxims, the renunciation of which would render me hateful in my own eyes.

Thus, while all the ambitious attempts of reason to penetrate beyond the limits of experience end in disappointment, there is still enough left to satisfy us in a practical point of view. No one, it is true, will be able to boast that he knows that there is a God and a future life; for, if he knows this, he is just the man whom I have long wished to find. All knowledge, regarding an object of mere reason, can be communicated; and I should thus be enabled to hope that my own knowledge would receive this wonderful extension, through the instrumentality of his instruction. No, my conviction is not logical, but moral certainty; and since it rests on subjective grounds (of the moral sentiment), I must not even say: It is morally certain that there is a God, etc., but: I am morally certain, that is, my belief in God and in another world is so interwoven with my moral nature that I am under as little apprehension of having the former torn from me as of losing the latter.

The only point in this argument that may appear open to suspicion is that this rational belief presupposes the existence of moral sentiments. If we give up this assumption, and take a man who is entirely indifferent with regard to moral laws, the question which reason proposes, becomes then merely a problem for speculation and may, indeed, be supported by strong grounds from analogy, but not by such as will compel the most obstinate scepticism to give way.* But in these questions no man is free from all interest. For though the want of good sentiments may place him beyond the influence of moral interests, still even in this case enough may be left to make him fear the existence of God and a future life. For he cannot pretend to any certainty of the non-existence of God and of a future life, unless — since it could only be proved by mere reason, and therefore apodeictically — he is prepared to establish the impossibility of both, which certainly no reasonable man would undertake to do. This would be a negative belief, which could not, indeed, produce morality and good sentiments, but still could produce an analogon of these, by operating as a powerful restraint on the outbreak of evil dispositions.

[Footnote: The human mind (as, I believe, every rational being must of necessity do) takes a natural interest in morality, although this interest is not undivided, and may not be practically in preponderance.

If you strengthen and increase it, you will find the reason become docile, more enlightened, and more capable of uniting the speculative interest with the practical. But if you do not take care at the outset, or at least midway, to make men good, you will never force them into an honest belief.]

But, it will be said, is this all that pure reason can effect, in opening up prospects beyond the limits of experience? Nothing more than two articles of belief? Common sense could have done as much as this, without taking the philosophers to counsel in the matter!

I shall not here eulogize philosophy for the benefits which the laborious efforts of its criticism have conferred on human reason — even granting that its merit should turn out in the end to be only negative — for on this point something more will be said in the next section. But, I ask, do you require that that knowledge which concerns all men, should transcend the common understanding, and should only be revealed to you by philosophers? The very circumstance which has called forth your censure, is the best confirmation of the correctness of our previous assertions, since it discloses, what could not have been foreseen, that Nature is not chargeable with any partial distribution of her gifts in those matters which concern all men without distinction and that, in respect to the essential ends of human nature, we cannot advance further with the help of the highest philosophy, than under the guidance which nature has vouchsafed to the meanest understanding.

CHAPTER III. The Architectonic of Pure Reason.

By the term architectonic I mean the art of constructing a system. Without systematic unity, our knowledge cannot become science; it will be an aggregate, and not a system. Thus architectonic is the doctrine of the scientific in cognition, and therefore necessarily forms part of our methodology.

Reason cannot permit our knowledge to remain in an unconnected and rhapsodistic state, but requires that the sum of our cognitions should constitute a system. It is thus alone that they can advance the ends of reason. By a system I mean the unity of various cognitions under one idea. This idea is the conception — given by reason — of the form of a whole, in so far as the conception determines a priori not only the limits of its content, but the place which each of its parts is to occupy. The scientific idea contains, therefore, the end and the form of the whole which is in accordance with that end. The unity of the end, to which all the parts of the system relate, and through which all have a relation to each other, communicates unity to the whole system, so that the absence of any part can be immediately detected from our knowledge of the rest; and it determines a priori the limits of the system, thus excluding all contingent or arbitrary additions. The whole is thus an organism (articulatio), and not an aggregate (coacervatio); it may grow from within (per intussusceptionem), but it cannot increase by external additions (per appositionem). It is, thus, like an animal body, the growth of which does not add any limb, but, without changing their proportions, makes each in its sphere stronger and more active.

We require, for the execution of the idea of a system, a schema, that is, a content and an arrangement of parts determined a priori by the principle which the aim of the system prescribes. A schema which is not projected in accordance with an idea, that is, from the standpoint of the highest aim of reason, but merely empirically, in accordance with accidental aims and purposes (the number of which cannot be predetermined), can give us nothing more than technical unity. But the schema which is originated from an idea (in which case reason presents us with aims a priori, and does not look for them to experience), forms the basis of architectonical unity. A science, in the proper acceptation of that term, cannot be formed technically, that is, from observation of the similarity existing between different objects, and the purely contingent use we make of our knowledge in concreto with reference to all kinds of arbitrary external aims; its constitution must be framed on architectonical principles, that is, its parts must be shown to possess an essential affinity, and be capable of being deduced from one supreme and internal aim or end, which forms the condition of the possibility of the scientific whole. The schema of a science must give a priori the plan of it (monogramma), and the division of the whole into parts, in conformity with the idea of the science; and it must also distinguish this whole from all others, according to certain understood principles.

No one will attempt to construct a science, unless he have some idea to rest on as a proper basis. But, in the elaboration of the science, he finds that the schema, nay, even the definition which he at first gave of the science, rarely corresponds with his idea; for this idea lies, like a germ, in our reason, its parts undeveloped and hid even from microscopical observation. For this reason, we ought to explain and define sciences, not according to the description which the originator gives of them, but according to the idea which we find based in reason itself, and which is suggested by the natural unity of the parts of the science already accumulated. For it will of ten be found that the originator of a science and even his latest successors remain attached to an erroneous idea, which they cannot render clear to themselves, and that they thus fail in determining the true content, the articulation or systematic unity, and the limits of their science.

It is unfortunate that, only after having occupied ourselves for a long time in the collection of materials, under the guidance of an idea which lies undeveloped in the mind, but not according to any definite plan

of arrangement — nay, only after we have spent much time and labour in the technical disposition of our materials, does it become possible to view the idea of a science in a clear light, and to project, according to architectonical principles, a plan of the whole, in accordance with the aims of reason. Systems seem, like certain worms, to be formed by a kind of generatio aequivoca — by the mere confluence of conceptions, and to gain completeness only with the progress of time. But the schema or germ of all lies in reason; and thus is not only every system organized according to its own idea, but all are united into one grand system of human knowledge, of which they form members. For this reason, it is possible to frame an architectonic of all human cognition, the formation of which, at the present time, considering the immense materials collected or to be found in the ruins of old systems, would not indeed be very difficult. Our purpose at present is merely to sketch the plan of the architectonic of all cognition given by pure reason; and we begin from the point where the main root of human knowledge divides into two, one of which is reason. By reason I understand here the whole higher faculty of cognition, the rational being placed in contradistinction to the empirical.

If I make complete abstraction of the content of cognition, objectively considered, all cognition is, from a subjective point of view, either historical or rational. Historical cognition is cognitio ex datis, rational, cognitio ex principiis. Whatever may be the original source of a cognition, it is, in relation to the person who possesses it, merely historical, if he knows only what has been given him from another quarter, whether that knowledge was communicated by direct experience or by instruction. Thus the Person who has learned a system of philosophy — say the Wolfian — although he has a perfect knowledge of all the principles, definitions, and arguments in that philosophy, as well as of the divisions that have been made of the system, possesses really no more than an historical knowledge of the Wolfian system; he knows only what has been told him, his judgements are only those which he has received from his teachers. Dispute the validity of a definition, and he is completely at a loss to find another. He has formed his mind on another's; but the imitative faculty is not the productive. His knowledge has not been drawn from reason; and although, objectively considered, it is rational knowledge, subjectively, it is merely historical. He has learned this or that philosophy and is merely a plaster cast of a living man. Rational cognitions which are objective, that is, which have their source in reason, can be so termed from a subjective point of view, only when they have been drawn by the individual himself from the sources of reason, that is, from principles; and it is in this way alone that criticism, or even the rejection of what has been already learned, can spring up in the mind.

All rational cognition is, again, based either on conceptions, or on the construction of conceptions. The former is termed philosophical, the latter mathematical. I have already shown the essential difference of these two methods of cognition in the first chapter. A cognition may be objectively philosophical and subjectively historical — as is the case with the majority of scholars and those who cannot look beyond the limits of their system, and who remain in a state of pupilage all their lives. But it is remarkable that mathematical knowledge, when committed to memory, is valid, from the subjective point of view, as rational knowledge also, and that the same distinction cannot be drawn here as in the case of philosophical cognition. The reason is that the only way of arriving at this knowledge is through the essential principles of reason, and thus it is always certain and indisputable; because reason is employed in concreto — but at the same time a priori — that is, in pure and, therefore, infallible intuition; and thus all causes of illusion and error are excluded. Of all the a priori sciences of reason, therefore, mathematics alone can be learned. Philosophy — unless it be in an historical manner — cannot be learned; we can at most learn to philosophize.

Philosophy is the system of all philosophical cognition. We must use this term in an objective sense, if we understand by it the archetype of all attempts at philosophizing, and the standard by which all subjective philosophies are to be judged. In this sense, philosophy is merely the idea of a possible science, which does not exist in concreto, but to which we endeavour in various ways to approximate,

until we have discovered the right path to pursue — a path overgrown by the errors and illusions of sense — and the image we have hitherto tried in vain to shape has become a perfect copy of the great prototype. Until that time, we cannot learn philosophy — it does not exist; if it does, where is it, who possesses it, and how shall we know it? We can only learn to philosophize; in other words, we can only exercise our powers of reasoning in accordance with general principles, retaining at the same time, the right of investigating the sources of these principles, of testing, and even of rejecting them.

Until then, our conception of philosophy is only a scholastic conception — a conception, that is, of a system of cognition which we are trying to elaborate into a science; all that we at present know being the systematic unity of this cognition, and consequently the logical completeness of the cognition for the desired end. But there is also a cosmical conception (conceptus cosmicus) of philosophy, which has always formed the true basis of this term, especially when philosophy was personified and presented to us in the ideal of a philosopher. In this view philosophy is the science of the relation of all cognition to the ultimate and essential aims of human reason (teleologia rationis humanae), and the philosopher is not merely an artist — who occupies himself with conceptions — but a lawgiver, legislating for human reason. In this sense of the word, it would be in the highest degree arrogant to assume the title of philosopher, and to pretend that we had reached the perfection of the prototype which lies in the idea alone.

The mathematician, the natural philosopher, and the logician — how far soever the first may have advanced in rational, and the two latter in philosophical knowledge — are merely artists, engaged in the arrangement and formation of conceptions; they cannot be termed philosophers. Above them all, there is the ideal teacher, who employs them as instruments for the advancement of the essential aims of human reason. Him alone can we call philosopher; but he nowhere exists. But the idea of his legislative power resides in the mind of every man, and it alone teaches us what kind of systematic unity philosophy demands in view of the ultimate aims of reason. This idea is, therefore, a cosmical conception.*

[Footnote: By a cosmical conception, I mean one in which all men necessarily take an interest; the aim of a science must accordingly be determined according to scholastic conceptions, if it is regarded merely as a means to certain arbitrarily proposed ends.]

In view of the complete systematic unity of reason, there can only be one ultimate end of all the operations of the mind. To this all other aims are subordinate, and nothing more than means for its attainment. This ultimate end is the destination of man, and the philosophy which relates to it is termed moral philosophy. The superior position occupied by moral philosophy, above all other spheres for the operations of reason, sufficiently indicates the reason why the ancients always included the idea — and in an especial manner — of moralist in that of philosopher. Even at the present day, we call a man who appears to have the power of self-government, even although his knowledge may be very limited, by the name of philosopher.

The legislation of human reason, or philosophy, has two objects — nature and freedom — and thus contains not only the laws of nature, but also those of ethics, at first in two separate systems, which, finally, merge into one grand philosophical system of cognition. The philosophy of nature relates to that which is, that of ethics to that which ought to be.

But all philosophy is either cognition on the basis of pure reason, or the cognition of reason on the basis of empirical principles. The former is termed pure, the latter empirical philosophy.

The philosophy of pure reason is either propaedeutic, that is, an inquiry into the powers of reason in regard to pure a priori cognition, and is termed critical philosophy; or it is, secondly, the system of pure reason — a science containing the systematic presentation of the whole body of philosophical knowledge, true as well as illusory, given by pure reason — and is called metaphysic. This name may, however, be also given to the whole system of pure philosophy, critical philosophy included, and may designate the

investigation into the sources or possibility of a priori cognition, as well as the presentation of the a priori cognitions which form a system of pure philosophy — excluding, at the same time, all empirical and mathematical elements.

Metaphysic is divided into that of the speculative and that of the practical use of pure reason, and is, accordingly, either the metaphysic of nature, or the metaphysic of ethics. The former contains all the pure rational principles — based upon conceptions alone (and thus excluding mathematics) — of all theoretical cognition; the latter, the principles which determine and necessitate a priori all action. Now moral philosophy alone contains a code of laws — for the regulation of our actions — which are deduced from principles entirely a priori. Hence the metaphysic of ethics is the only pure moral philosophy, as it is not based upon anthropological or other empirical considerations. The metaphysic of speculative reason is what is commonly called metaphysic in the more limited sense. But as pure moral philosophy properly forms a part of this system of cognition, we must allow it to retain the name of metaphysic, although it is not requisite that we should insist on so terming it in our present discussion.

It is of the highest importance to separate those cognitions which differ from others both in kind and in origin, and to take great care that they are not confounded with those with which they are generally found connected. What the chemist does in the analysis of substances, what the mathematician in pure mathematics, is, in a still higher degree, the duty of the philosopher, that the value of each different kind of cognition, and the part it takes in the operations of the mind, may be clearly defined. Human reason has never wanted a metaphysic of some kind, since it attained the power of thought, or rather of reflection; but it has never been able to keep this sphere of thought and cognition pure from all admixture of foreign elements. The idea of a science of this kind is as old as speculation itself; and what mind does not speculate — either in the scholastic or in the popular fashion? At the same time, it must be admitted that even thinkers by profession have been unable clearly to explain the distinction between the two elements of our cognition — the one completely a priori, the other a posteriori; and hence the proper definition of a peculiar kind of cognition, and with it the just idea of a science which has so long and so deeply engaged the attention of the human mind, has never been established. When it was said: “Metaphysic is the science of the first principles of human cognition,” this definition did not signalize a peculiarity in kind, but only a difference in degree; these first principles were thus declared to be more general than others, but no criterion of distinction from empirical principles was given. Of these some are more general, and therefore higher, than others; and — as we cannot distinguish what is completely a priori from that which is known to be a posteriori — where shall we draw the line which is to separate the higher and so-called first principles, from the lower and subordinate principles of cognition? What would be said if we were asked to be satisfied with a division of the epochs of the world into the earlier centuries and those following them? “Does the fifth, or the tenth century belong to the earlier centuries?” it would be asked. In the same way I ask: Does the conception of extension belong to metaphysics? You answer, “Yes.” Well, that of body too? “Yes.” And that of a fluid body? You stop, you are unprepared to admit this; for if you do, everything will belong to metaphysics. From this it is evident that the mere degree of subordination — of the particular to the general — cannot determine the limits of a science; and that, in the present case, we must expect to find a difference in the conceptions of metaphysics both in kind and in origin. The fundamental idea of metaphysics was obscured on another side by the fact that this kind of a priori cognition showed a certain similarity in character with the science of mathematics. Both have the property in common of possessing an a priori origin; but, in the one, our knowledge is based upon conceptions, in the other, on the construction of conceptions. Thus a decided dissimilarity between philosophical and mathematical cognition comes out — a dissimilarity which was always felt, but which could not be made distinct for want of an insight into the criteria of the difference. And thus it happened that, as philosophers themselves failed in the proper development of the idea of their science, the elaboration of the science could not proceed with a definite aim, or under trustworthy guidance. Thus, too, philosophers, ignorant of

the path they ought to pursue and always disputing with each other regarding the discoveries which each asserted he had made, brought their science into disrepute with the rest of the world, and finally, even among themselves.

All pure a priori cognition forms, therefore, in view of the peculiar faculty which originates it, a peculiar and distinct unity; and metaphysic is the term applied to the philosophy which attempts to represent that cognition in this systematic unity. The speculative part of metaphysic, which has especially appropriated this appellation — that which we have called the metaphysic of nature — and which considers everything, as it is (not as it ought to be), by means of a priori conceptions, is divided in the following manner.

Metaphysic, in the more limited acceptation of the term, consists of two parts — transcendental philosophy and the physiology of pure reason. The former presents the system of all the conceptions and principles belonging to the understanding and the reason, and which relate to objects in general, but not to any particular given objects (Ontologia); the latter has nature for its subject-matter, that is, the sum of given objects — whether given to the senses, or, if we will, to some other kind of intuition — and is accordingly physiology, although only rationalis. But the use of the faculty of reason in this rational mode of regarding nature is either physical or hyperphysical, or, more properly speaking, immanent or transcendent. The former relates to nature, in so far as our knowledge regarding it may be applied in experience (in concreto); the latter to that connection of the objects of experience, which transcends all experience. Transcendent physiology has, again, an internal and an external connection with its object, both, however, transcending possible experience; the former is the physiology of nature as a whole, or transcendental cognition of the world, the latter of the connection of the whole of nature with a being above nature, or transcendental cognition of God.

Immanent physiology, on the contrary, considers nature as the sum of all sensuous objects, consequently, as it is presented to us — but still according to a priori conditions, for it is under these alone that nature can be presented to our minds at all. The objects of immanent physiology are of two kinds: 1. Those of the external senses, or corporeal nature; 2. The object of the internal sense, the soul, or, in accordance with our fundamental conceptions of it, thinking nature. The metaphysics of corporeal nature is called physics; but, as it must contain only the principles of an a priori cognition of nature, we must term it rational physics. The metaphysics of thinking nature is called psychology, and for the same reason is to be regarded as merely the rational cognition of the soul.

Thus the whole system of metaphysics consists of four principal parts: 1. Ontology; 2. Rational Physiology; 3. Rational cosmology; and 4. Rational theology. The second part — that of the rational doctrine of nature — may be subdivided into two, physica rationalis* and psychologia rationalis.

[Footnote: It must not be supposed that I mean by this appellation what is generally called physica general is, and which is rather mathematics than a philosophy of nature. For the metaphysic of nature is completely different from mathematics, nor is it so rich in results, although it is of great importance as a critical test of the application of pure understanding — cognition to nature. For want of its guidance, even mathematicians, adopting certain common notions — which are, in fact, metaphysical — have unconsciously crowded their theories of nature with hypotheses, the fallacy of which becomes evident upon the application of the principles of this metaphysic, without detriment, however, to the employment of mathematics in this sphere of cognition.]

The fundamental idea of a philosophy of pure reason of necessity dictates this division; it is, therefore, architectonical — in accordance with the highest aims of reason, and not merely technical, or according to certain accidentally-observed similarities existing between the different parts of the whole science. For this reason, also, is the division immutable and of legislative authority. But the reader may observe in it a few points to which he ought to demur, and which may weaken his conviction of its truth and legitimacy.

In the first place, how can I desire an a priori cognition or metaphysic of objects, in so far as they are given a posteriori? and how is it possible to cognize the nature of things according to a priori principles,

and to attain to a rational physiology? The answer is this. We take from experience nothing more than is requisite to present us with an object (in general) of the external or of the internal sense; in the former case, by the mere conception of matter (impenetrable and inanimate extension), in the latter, by the conception of a thinking being — given in the internal empirical representation, I think. As to the rest, we must not employ in our metaphysic of these objects any empirical principles (which add to the content of our conceptions by means of experience), for the purpose of forming by their help any judgements respecting these objects.

Secondly, what place shall we assign to empirical psychology, which has always been considered a part of metaphysics, and from which in our time such important philosophical results have been expected, after the hope of constructing an a priori system of knowledge had been abandoned? I answer: It must be placed by the side of empirical physics or physics proper; that is, must be regarded as forming a part of applied philosophy, the a priori principles of which are contained in pure philosophy, which is therefore connected, although it must not be confounded, with psychology. Empirical psychology must therefore be banished from the sphere of metaphysics, and is indeed excluded by the very idea of that science. In conformity, however, with scholastic usage, we must permit it to occupy a place in metaphysics — but only as an appendix to it. We adopt this course from motives of economy; as psychology is not as yet full enough to occupy our attention as an independent study, while it is, at the same time, of too great importance to be entirely excluded or placed where it has still less affinity than it has with the subject of metaphysics. It is a stranger who has been long a guest; and we make it welcome to stay, until it can take up a more suitable abode in a complete system of anthropology — the pendant to empirical physics.

The above is the general idea of metaphysics, which, as more was expected from it than could be looked for with justice, and as these pleasant expectations were unfortunately never realized, fell into general disrepute. Our Critique must have fully convinced the reader that, although metaphysics cannot form the foundation of religion, it must always be one of its most important bulwarks, and that human reason, which naturally pursues a dialectical course, cannot do without this science, which checks its tendencies towards dialectic and, by elevating reason to a scientific and clear self-knowledge, prevents the ravages which a lawless speculative reason would infallibly commit in the sphere of morals as well as in that of religion. We may be sure, therefore, whatever contempt may be thrown upon metaphysics by those who judge a science not by its own nature, but according to the accidental effects it may have produced, that it can never be completely abandoned, that we must always return to it as to a beloved one who has been for a time estranged, because the questions with which it is engaged relate to the highest aims of humanity, and reason must always labour either to attain to settled views in regard to these, or to destroy those which others have already established.

Metaphysic, therefore — that of nature, as well as that of ethics, but in an especial manner the criticism which forms the propaedeutic to all the operations of reason — forms properly that department of knowledge which may be termed, in the truest sense of the word, philosophy. The path which it pursues is that of science, which, when it has once been discovered, is never lost, and never misleads. Mathematics, natural science, the common experience of men, have a high value as means, for the most part, to accidental ends — but at last also, to those which are necessary and essential to the existence of humanity. But to guide them to this high goal, they require the aid of rational cognition on the basis of pure conceptions, which, be it termed as it may, is properly nothing but metaphysics.

For the same reason, metaphysics forms likewise the completion of the culture of human reason. In this respect, it is indispensable, setting aside altogether the influence which it exerts as a science. For its subject-matter is the elements and highest maxims of reason, which form the basis of the possibility of some sciences and of the use of all. That, as a purely speculative science, it is more useful in preventing error than in the extension of knowledge, does not detract from its value; on the contrary, the supreme office of censor which it occupies assures to it the highest authority and importance. This office it

administers for the purpose of securing order, harmony, and well-being to science, and of directing its noble and fruitful labours to the highest possible aim — the happiness of all mankind.

CHAPTER IV. The History of Pure Reason.

This title is placed here merely for the purpose of designating a division of the system of pure reason of which I do not intend to treat at present. I shall content myself with casting a cursory glance, from a purely transcendental point of view — that of the nature of pure reason — on the labours of philosophers up to the present time. They have aimed at erecting an edifice of philosophy; but to my eye this edifice appears to be in a very ruinous condition.

It is very remarkable, although naturally it could not have been otherwise, that, in the infancy of philosophy, the study of the nature of God and the constitution of a future world formed the commencement, rather than the conclusion, as we should have it, of the speculative efforts of the human mind. However rude the religious conceptions generated by the remains of the old manners and customs of a less cultivated time, the intelligent classes were not thereby prevented from devoting themselves to free inquiry into the existence and nature of God; and they easily saw that there could be no surer way of pleasing the invisible ruler of the world, and of attaining to happiness in another world at least, than a good and honest course of life in this. Thus theology and morals formed the two chief motives, or rather the points of attraction in all abstract inquiries. But it was the former that especially occupied the attention of speculative reason, and which afterwards became so celebrated under the name of metaphysics.

I shall not at present indicate the periods of time at which the greatest changes in metaphysics took place, but shall merely give a hasty sketch of the different ideas which occasioned the most important revolutions in this sphere of thought. There are three different ends in relation to which these revolutions have taken place.

1. In relation to the object of the cognition of reason, philosophers may be divided into sensualists and intellectualists. Epicurus may be regarded as the head of the former, Plato of the latter. The distinction here signalized, subtle as it is, dates from the earliest times, and was long maintained. The former asserted that reality resides in sensuous objects alone, and that everything else is merely imaginary; the latter, that the senses are the parents of illusion and that truth is to be found in the understanding alone. The former did not deny to the conceptions of the understanding a certain kind of reality; but with them it was merely logical, with the others it was mystical. The former admitted intellectual conceptions, but declared that sensuous objects alone possessed real existence. The latter maintained that all real objects were intelligible, and believed that the pure understanding possessed a faculty of intuition apart from sense, which, in their opinion, served only to confuse the ideas of the understanding.

2. In relation to the origin of the pure cognitions of reason, we find one school maintaining that they are derived entirely from experience, and another that they have their origin in reason alone. Aristotle may be regarded as the bead of the empiricists, and Plato of the noologists. Locke, the follower of Aristotle in modern times, and Leibnitz of Plato (although he cannot be said to have imitated him in his mysticism), have not been able to bring this question to a settled conclusion. The procedure of Epicurus in his sensual system, in which he always restricted his conclusions to the sphere of experience, was much more consequent than that of Aristotle and Locke. The latter especially, after having derived all the conceptions and principles of the mind from experience, goes so far, in the employment of these conceptions and principles, as to maintain that we can prove the existence of God and the existence of God and the immortality of them objects lying beyond the soul — both of them of possible experience — with the same force of demonstration as any mathematical proposition.

3. In relation to method. Method is procedure according to principles. We may divide the methods at present employed in the field of inquiry into the naturalistic and the scientific. The naturalist of pure reason lays it down as his principle that common reason, without the aid of science — which he calls

sound reason, or common sense — can give a more satisfactory answer to the most important questions of metaphysics than speculation is able to do. He must maintain, therefore, that we can determine the content and circumference of the moon more certainly by the naked eye, than by the aid of mathematical reasoning. But this system is mere misology reduced to principles; and, what is the most absurd thing in this doctrine, the neglect of all scientific means is paraded as a peculiar method of extending our cognition. As regards those who are naturalists because they know no better, they are certainly not to be blamed. They follow common sense, without parading their ignorance as a method which is to teach us the wonderful secret, how we are to find the truth which lies at the bottom of the well of Democritus.

Quod sapio satis est mihi, non ego curo Esse quod
Arcesilas aerumnosique Solones. PERSIUS
— Satirae, iii. 78-79.

is their motto, under which they may lead a pleasant and praiseworthy life, without troubling themselves with science or troubling science with them.

As regards those who wish to pursue a scientific method, they have now the choice of following either the dogmatical or the sceptical, while they are bound never to desert the systematic mode of procedure. When I mention, in relation to the former, the celebrated Wolf, and as regards the latter, David Hume, I may leave, in accordance with my present intention, all others unnamed. The critical path alone is still open. If my reader has been kind and patient enough to accompany me on this hitherto untravelled route, he can now judge whether, if he and others will contribute their exertions towards making this narrow footpath a high road of thought, that which many centuries have failed to accomplish may not be executed before the close of the present — namely, to bring Reason to perfect contentment in regard to that which has always, but without permanent results, occupied her powers and engaged her ardent desire for knowledge.

PROLEGOMENA TO ANY FUTURE METAPHYSICS THAT WILL BE ABLE TO PRESENT ITSELF AS A SCIENCE

Translated by Paul Carus

This book was first published in 1783, two years after the first edition of Kant's *Critique of Pure Reason*. One of Kant's shorter works, it contains a summary of the Critique's main conclusions, occasionally with arguments Kant had not used in the previous work. Kant characterises his more accessible approach here as an "analytic" one, as opposed to the *Critique's* "synthetic" examination of successive faculties of the mind and their principles. The *Prolegomena* is also intended as a polemic, as Kant was disappointed by the poor reception of the *Critique of Pure Reason*, and so uses this text to repeatedly emphasise the importance of its critical project for the very existence of metaphysics as a science. The final appendix contains a detailed rebuttal to an unfavourable review of the Critique.

Kant proposed that his work be tested in small increments, beginning with the basic assertions. The *Prolegomena* can be used as a general outline to be compared to the Critique. He was not satisfied with certain parts of the Critique and suggested that the discussions in the *Prolegomena* be used to clarify those sections. The unsatisfactory parts were the deduction of the categories and the paralogisms of pure reason in the Critique. If the Critique and the Prolegomena are studied and revised by a united effort by thinking people, then metaphysics may finally become scientific. In this way, metaphysical knowledge can be distinguished from false knowledge. Theology will also be benefited because it will become independent of mysticism and dogmatic speculation.

Prolegomena

zu

einer jeden

künftigen Metaphysik

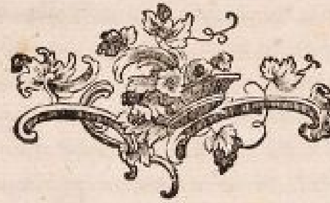
die

als Wissenschaft

wird auftreten können,

von

Immanuel Kant.



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The first edition’s title page

CONTENTS

INTRODUCTION
FIRST PART OF THE TRANSCENDENTAL PROBLEM: HOW IS PURE MATHEMATICS POSSIBLE? Sect. 6.
SECOND PART OF THE MAIN TRANSCENDENTAL PROBLEM: HOW IS THE SCIENCE OF NATURE POSSIBLE?
THIRD PART OF THE MAIN TRANSCENDENTAL PROBLEM. HOW IS METAPHYSICS IN GENERAL POSSIBLE?
SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA
APPENDIX: ON WHAT CAN BE DONE TO MAKE METAPHYSICS AS A SCIENCE ACTUAL
APPENDIX: ON A SPECIMEN OF A JUDGMENT OF THE CRITIQUE PRIOR TO ITS EXAMINATION
APPENDIX: PROPOSALS AS TO AN INVESTIGATION OF THE CRITIQUE UPON WHICH A JUDGMENT MAY FOLLOW.

INTRODUCTION

These Prolegomena are destined for the use, not of pupils, but of future teachers, and even the latter should not expect that they will be serviceable for the systematic exposition of a ready-made science, but merely for the discovery of the science itself.

There are scholarly men, to whom the history of philosophy (both ancient and modern) is philosophy itself; for these the present Prolegomena are not written. They must wait till those who endeavor to draw from the fountain of reason itself have completed their work; it will then be the historian's turn to inform the world of what has been done. Unfortunately, nothing can be said, which in their opinion has not been said before, and truly the same prophecy applies to all future time; for since the human reason has for many centuries speculated upon innumerable objects in various ways, it is hardly to be expected that we should not be able to discover analogies for every new idea among the old sayings of past ages.

My object is to persuade all those who think Metaphysics worth studying, that it is absolutely necessary to pause a moment, and, neglecting all that has been done, to propose first the preliminary question, 'Whether such a thing as metaphysics be at all possible?'

If it is a science, how comes it that it cannot, like other sciences, obtain universal and permanent recognition? If not, how can it maintain its pretensions, and keep the human mind in suspense with hopes, never ceasing, yet never fulfilled? Whether then we demonstrate our knowledge or our ignorance in this field, we must come once for all to a definite conclusion respecting the nature of this so-called science, which cannot possibly remain on its present footing.

It seems almost ridiculous, while every other science is continually advancing, that in this, which pretends to be Wisdom incarnate, for whose oracle every one inquires, we should constantly move round the same spot, without gaining a single step. And so its followers having melted away, we do not find men confident of their ability to shine in other sciences venturing their reputation here, where everybody, however ignorant in other matters, may deliver a final verdict, as in this domain there is as yet no standard weight and measure to distinguish sound knowledge from shallow talk. After all it is nothing extraordinary in the elaboration of a science, when men begin to wonder how far it has advanced, that the question should at last occur, whether and how such a science is possible?

Human reason so delights in constructions, that it has several times built up a tower, and then razed it to examine the nature of the foundation. It is never too late to become wise; but if the change comes late, there is always more difficulty in starting a reform. The question whether a science be possible, presupposes a doubt as to its actuality. But such a doubt offends the men whose whole possessions consist of this supposed jewel; hence he who raises the doubt must expect opposition from all sides.

Some, in the proud consciousness of their possessions, which are ancient, and therefore considered legitimate, will take their metaphysical compendia in their hands, and look down on him with contempt; others, who never see anything except it be identical with what they have seen before, will not understand him, and everything will remain for a time, as if nothing had happened to excite the concern, or the hope, for an impending change.

Nevertheless, I venture to predict that the independent reader of these Prolegomena will not only doubt his previous science, but ultimately be fully persuaded, that it cannot exist unless the demands here stated on which its possibility depends, be satisfied; and, as this has never been done, that there is, as yet, no such thing as Metaphysics. But as it can never cease to be in demand,[P] — since the interests of common sense are intimately interwoven with it, he must confess that a radical reform, or rather a new birth of the science after an original plan, are unavoidable, however men may struggle against it for a while.

Since the Essays of Locke and Leibniz, or rather since the origin of metaphysics so far as we know its

history, nothing has ever happened which was more decisive to its fate than the attack made upon it by David Hume. He threw no light on this species of knowledge, but he certainly struck a spark from which light might have been obtained, had it caught some inflammable substance and had its smoldering fire been carefully nursed and developed.

Hume started from a single but important concept in Metaphysics, viz., that of Cause and Effect (including its derivatives force and action, etc.). He challenges reason, which pretends to have given birth to this idea from herself, to answer him by what right she thinks anything to be so constituted, that if that thing be posited, something else also must necessarily be posited; for this is the meaning of the concept of cause. He demonstrated irrefutably that it was perfectly impossible for reason to think a priori and by means of concepts a combination involving necessity. We cannot at all see why, in consequence of the existence of one thing, another must necessarily exist, or how the concept of such a combination can arise a priori. Hence he inferred, that reason was altogether deluded with reference to this concept, which she erroneously considered as one of her children, whereas in reality it was nothing but a bastard of imagination, impregnated by experience, which subsumed certain representations under the Law of Association, and mistook the subjective necessity of habit for an objective necessity arising from insight. Hence he inferred that reason had no power to think such, combinations, even generally, because her concepts would then be purely fictitious, and all her pretended a priori cognitions nothing but common experiences marked with a false stamp. In plain language there is not, and cannot be, any such thing as metaphysics at all.[P]

However hasty and mistaken Hume’s conclusion may appear, it was at least founded upon investigation, and this investigation deserved the concentrated attention of the brighter spirits of his day as well as determined efforts on their part to discover, if possible, a happier solution of the problem in the sense proposed by him, all of which would have speedily resulted in a complete reform of the science.

But Hume suffered the usual misfortune of metaphysicians, of not being understood. It is positively painful to see how utterly his opponents, Reid, Oswald, Beattie, and lastly Priestley, missed the point of the problem; for while they were ever taking for granted that which he doubted, and demonstrating with zeal and often with impudence that which he never thought of doubting, they so misconstrued his valuable suggestion that everything remained in its old condition, as if nothing had happened. The question was not whether the concept of cause was right, useful, and even indispensable for our knowledge of nature, for this Hume had never doubted; but whether that concept could be thought by reason a priori, and consequently whether it possessed an inner truth, independent of all experience, implying a wider application than merely to the objects of experience. This was Hume’s problem. It was a question concerning the concept’s origin, not concerning the indispensable need of the concept. Were the former decided, the conditions of the use and the sphere of its valid application would have been determined as a matter of course.

But to satisfy the conditions of the problem, the opponents of the great thinker should have penetrated very deeply into the nature of reason, so far as it is concerned with pure thinking, — a task which did not suit them. They found a more convenient method of being defiant without any insight, viz., the appeal to common sense. It is indeed a great gift of God, to possess right, or (as they now call it) plain common sense. But this common sense must be shown practically, by well-considered and reasonable thoughts and words, not by appealing to it as an oracle, when no rational justification can be advanced. To appeal to common sense, when insight and science fail, and no sooner-this is one of the subtle discoveries of modern times, by means of which the most superficial ranter can safely enter the lists with the most thorough thinker, and hold his own. But as long as a particle of insight remains, no one would think of having recourse to this subterfuge. For what is it but an appeal to the opinion of the multitude, of whose applause the philosopher is ashamed, while the popular charlatan glories and confides in it? I should think that Hume might fairly have laid as much claim to common sense as Beattie, and in addition to a critical

reason (such as the latter did not possess), which keeps common sense in check and prevents it from speculating, or, if speculations are under discussion restrains the desire to decide because it cannot satisfy itself concerning its own arguments. By this means alone can common sense remain sound. Chisels and hammers may suffice to work a piece of wood, but for steel-engraving we require an engraver's needle. Thus common sense and speculative understanding are each useful in their own way, the former in judgments which apply immediately to experience, the latter when we judge universally from mere concepts, as in metaphysics, where sound common sense, so called in spite of the inapplicability of the word, has no right to judge at all.

I openly confess, the suggestion of David Hume was the very thing, which many years ago first interrupted my dogmatic slumber, and gave my investigations in the field of speculative philosophy quite a new direction. I was far from following him in the conclusions at which he arrived by regarding, not the whole of his problem, but a part, which by itself can give us no information. If we start from a well-founded, but undeveloped, thought, which another has bequeathed to us, we may well hope by continued reflection to advance farther than the acute man, to whom we owe the first spark of light.

I therefore first tried whether Hume's objection could not be put into a general form, and soon found that the concept of the connection of cause and effect was by no means the only idea by which the understanding thinks the connection of things a priori, but rather that metaphysics consists altogether of such connections. I sought to ascertain their number, and when I had satisfactorily succeeded in this by starting from a single principle, I proceeded to the deduction of these concepts, which I was now certain were not deduced from experience, as Hume had apprehended, but sprang from the pure understanding. This deduction (which seemed impossible to my acute predecessor, which had never even occurred to any one else, though no one had hesitated to use the concepts without investigating the basis of their objective validity) was the most difficult task ever undertaken in the service of metaphysics; and the worst was that metaphysics, such as it then existed, could not assist me in the least, because this deduction alone can render metaphysics possible. But as soon as I had succeeded in solving Hume's problem not merely in a particular case, but with respect to the whole faculty of pure reason, I could proceed safely, though slowly, to determine the whole sphere of pure reason completely and from general principles, in its circumference as well as in its contents. This was required for metaphysics in order to construct its system according to a reliable plan.

But I fear that the execution of Hume's problem in its widest extent (viz., my Critique of the Pure Reason) will fare as the problem itself fared, when first proposed. It will be misjudged because it is misunderstood, and misunderstood because men choose to skim through the book, and not to think through it — a disagreeable task, because the work is dry, obscure, opposed to all ordinary notions, and moreover long-winded. I confess, however, I did not expect, to hear from philosophers complaints of want of popularity, entertainment, and facility, when the existence of a highly prized and indispensable cognition is at stake, which cannot be established otherwise, than by the strictest rules of methodic precision. Popularity may follow, but is inadmissible at the beginning. Yet as regards a certain obscurity, arising partly from the diffuseness of the plan, owing to which. the principal points of the investigation are easily lost sight of, the complaint is just, and I intend to remove it by the present Prolegomena.

The first-mentioned work, which discusses the pure faculty of reason in its whole compass and bounds, will remain the foundation, to which the Prolegomena, as a preliminary exercise, refer; for our critique must first be established as a complete and perfected science, before we can think of letting Metaphysics appear on the scene, or even have the most distant hope of attaining it.

We have been long accustomed to seeing antiquated knowledge produced as new by taking it out of its former context, and reducing it to system in a new suit of any fancy pattern under new titles. Most readers will set out by expecting nothing else from the Critique; these Prolegomena may persuade [a reader that metaphysics] is a perfectly new science, of which no one has ever even thought, the very idea of which

was unknown, and for which nothing hitherto accomplished can be of the smallest use, except it be the suggestion of Hume's doubts. Yet even he did not suspect such a formal science, but ran his ship ashore, for safety's sake, landing on skepticism, there to let it lie and rot; whereas my object is rather to give it a pilot, who, by means of safe astronomical principles drawn from a knowledge of the globe, and provided with a complete chart and compass, may steer the ship safely, whither he goes.

If in a new science, which is wholly isolated and unique in its kind, we started with the prejudice that we can judge of things by means of our previously acquired knowledge, which., is precisely what has first to be called in question, we should only fancy we saw everywhere what we had already known, the expressions, having a similar sound, only that all would appear utterly metamorphosed, senseless and unintelligible, because we should have as a foundation out own notions, made by long habit a second nature, instead of the author's. However, the longwindedness of the work, so far as it depends on the subject, and not the exposition, its consequent unavoidable dryness and its scholastic precision are qualities which can only benefit the science, though they may discredit the book.

Few writers are gifted with the subtlety, and at the same time with the grace, of David Hume, or with the depth, as well as the elegance, of Moses Mendelssohn. Yet I flatter myself I might have made my own exposition popular, had my object been merely to sketch out a plan and leave its completion to others instead of having my heart in the welfare of the science, to which I had devoted myself so long; in truth, it required no little constancy, and even self-denial, to postpone the sweets of an immediate success to the prospect of a slower, but more lasting, reputation.

Making plans is often the occupation of an opulent and boastful mind, which thus obtains the reputation of a creative genius, by demanding what it cannot itself supply; by censuring, what it cannot improve; and by proposing, what it knows not where to find. And yet something more should belong to a sound plan of a general critique of pure reason than mere conjectures, if this plan is to be other than the usual declamations of pious aspirations. But pure reason is a sphere so separate and self-contained, that we cannot touch a part without affecting all the rest. We can therefore do nothing without first determining the position; of each part, and its relation to the rest; for, as our judgment cannot be corrected by anything without, the validity and use of every part depends upon the relation in which it stands to all the rest within the domain of reason. So in the structure of an organized body, the end of each member can only be deduced from the full conception of the whole. It may, then, be said of such a critique that it is never trustworthy except it be perfectly complete, down to the smallest elements of pure reason. In the sphere of this faculty you can determine either everything or nothing.

But although a mere sketch preceding the Critique of Pure Reason would be unintelligible, unreliable, and useless, it is all the more useful as a sequel. For so we are able to grasp the whole, to examine in detail the chief points of importance in the science, and to improve in many respects our exposition, as compared with the first execution of the work.

Having completed that work, I offer here such a plan which is sketched out after an analytical method, while the work itself [the Critique of Pure Reason] had to be executed in the synthetical style, in order that the science may present all its articulations, as the structure of a peculiar cognitive faculty, in their natural combination. But should any reader find this plan, which I publish as the Prolegomena to any future Metaphysics, still obscure, let him consider that not every one is bound to study Metaphysics, that many minds will succeed very well, in the exact and even in deep sciences, more closely allied to intuition [what can be sensed], while they cannot succeed in investigations dealing exclusively with abstract concepts. In such cases men should apply their talents to other subjects. But he who undertakes to judge, or still more, to construct a system of metaphysics, must satisfy the demands here made, either by adopting my solution, or by thoroughly refuting it, and substituting another. To evade it is impossible. In conclusion, let it be remembered that this much-abused obscurity (frequently serving as a mere pretext under which people hide their own indolence or dullness) has its uses, since all who in other sciences

observe a judicious silence, speak authoritatively in metaphysics and make bold decisions, because their ignorance is not here contrasted with the knowledge of others. Yet it does contrast with sound critical principles, which we may therefore commend in the words of Virgil:

"Ignavum, fucos, pecus a praesepibus arcent."

["Bees defend their hives against drones, those indolent ones. "]

Section 1: Of the Sources of Metaphysics

If it becomes desirable to formulate any cognition as science, it will be necessary first to determine accurately those peculiar features which no other science has in common with it, constituting its characteristics; otherwise the boundaries of all sciences become confused, and none of them can be treated thoroughly according to its nature.

The unique characteristics of a science may consist of a simple difference of object, or of the sources of cognition, or of the kind of cognition, or perhaps of all three conjointly. On this, therefore, depends the idea of a possible science and its territory.

First, as concerns the sources of metaphysical cognition, its very concept implies that they cannot be empirical. Its principles (including not only its maxims but its basic notions) must never be derived from experience. It must not be physical but metaphysical knowledge, viz., knowledge lying beyond experience. It can therefore have for its basis neither external experience, which is the source of physics proper, nor internal, which is the basis of empirical psychology. It is therefore a priori knowledge, coming from pure Understanding and pure reason.

But so far Metaphysics would not be distinguishable from pure Mathematics; it must therefore be called pure philosophical cognition; and for the meaning of this term I refer to the Critique of the Pure Reason (II. "Methodology," Chap. I., Sec. 1), where the distinction between these two employments of the reason is sufficiently explained. So much concerning the sources of metaphysical cognition.

Section 2. Concerning the Kind of Cognition which can alone be called Metaphysical

Of the Distinction Between Analytical and Synthetical Judgments in General.

— The peculiarity of its sources demands that metaphysical cognition must consist of nothing but a priori judgments. But whatever be their origin, or their logical form, there is a distinction in judgments, as to their content, according to which they are either merely explicative, adding nothing to the content of the cognition, or expansive [ampliative], increasing the given cognition: the former may be called analytical, the latter synthetical, judgments.

Analytical judgments express nothing in the predicate but what has been already actually thought in the concept of the subject, though not so distinctly or with the same (full) consciousness. When I say: "All bodies are extended," I have not amplified in the least my concept of body, but have only analyzed it, as extension was really thought to belong to that concept before the judgment was made, though it was not expressed, this judgment is therefore analytical. On the other hand, this judgment, "All bodies have weight," contains in its predicate something not actually thought in the general concept of the body; it amplifies my knowledge by adding something to my concept, and must therefore be called synthetical.

The Common Principle of all Analytical Judgments is the Law of Contradiction.

— All analytical judgments depend wholly on the law of Contradiction, and are in their nature a priori cognitions, whether the concepts that supply them with matter be empirical or not. For the predicate of an

affirmative analytical judgment is already contained in the concept of the subject, of which it cannot be denied without contradiction. In the same way its opposite is necessarily denied of the subject in an analytical, but negative, judgment, by the same law of contradiction. Such is the nature of the judgments: all bodies are extended, and no bodies are unextended (i.e., simple).

For this very reason all analytic judgments are a priori even when the concepts are empirical, as, for example, "Gold is a yellow metal," for to know this I require no experience beyond my concept of gold as a yellow metal. It is, in fact, the very concept, and I need only analyze it, without looking beyond it elsewhere.

Synthetical Judgments Require a Different Principle from the Law of Contradiction.

— There are synthetical a posteriori judgments of empirical origin; but there are also others which are proved to be certain a priori, and which spring from pure Understanding and Reason. Yet they both agree in this, that they cannot possibly spring from the principle of analysis, viz., the law of contradiction, alone; they require a quite different principle, though, from whatever they may be deduced, they must be subject to the law of contradiction, which must never be violated, even though everything cannot be deduced from it. I shall first classify synthetic judgments.

Judgments of experience [empirical judgments]

are always synthetical. For it would be absurd to base an analytical judgment on experience, as our concept suffices for the purpose without requiring any testimony from experience. That body is extended, is a judgment established a priori, and not an empirical judgment. For before appealing to experience, we already have all the conditions of the judgment in the concept, from which we have but to elicit the predicate according to the law of contradiction, and thereby to become conscious of the necessity of the judgment, which experience could not even teach us.

Mathematical judgments are all synthetical.

This fact seems hitherto to have altogether escaped the observation of those who have analyzed human reason; it even seems directly opposed to all their conjectures, though incontestably certain, and most important in its consequences. For as it was found that the conclusions of mathematicians all proceed according to the law of contradiction (as is demanded by all apodictic certainty), men persuaded themselves that the fundamental principles were known from the same law. This was a great mistake, for a synthetical proposition can indeed be comprehended according to the law of contradiction, but only by presupposing another synthetical proposition from which it follows, but never in and by itself.

First of all, we must observe that all proper mathematical judgments are a priori, and not empirical, because they carry with them necessity, which cannot be obtained from experience. But if this be not conceded to me, very good; I shall confine my assertion pure Mathematics, the very notion of which implies that it contains pure a priori and not empirical cognitions.

It might at first be thought that the proposition $7 + 5 = 12$ is a mere analytical judgment, following from the concept of the sum of seven and five, according to the law of contradiction. But on closer examination it appears that the concept of the sum of $7+5$ contains merely their union in a single number, without its being at all thought what the particular number is that unites them. The concept of twelve is by no means thought by merely thinking of the combination of seven and five; and analyze this possible sum as we may, we shall not discover twelve in the concept. We must go beyond these concepts, by calling to our aid some intuition [Anschauung], i.e., either our five fingers, or five points (as Segner has it in his Arithmetic), and we must add successively the units of the five, given in some intuition [Anschauung], to

the concept of seven. Hence our concept is really amplified by the proposition 7 + 5 = 12, and we add to the first a second, not thought in it. Arithmetical judgments are therefore synthetical, and the more plainly according as we take larger numbers; for in such cases it is clear that, however closely we analyze our concepts without calling images [Anschauung] to our aid, we can never find the sum by such mere dissection.

All principles of geometry are no less synthetical. That a straight line is the shortest path between two points is a synthetical proposition. For my concept of straight contains nothing of quantity, but only a quality. The concept of shortness is therefore altogether additional, and cannot be obtained by any analysis of the concept of straight. Here, too, intuition [Anschauung] must come to aid us. It alone makes the synthesis possible.

Some other principles, assumed by geometers, are indeed actually analytical, and depend on the law of contradiction; but they only serve, as identical propositions, as a method of concatenation, and not as principles, e. g., a=a, the whole is equal to itself, or a + b > a, the whole is greater than its part. And yet even these, though they are recognized as valid from mere concepts, are only admitted in mathematics, because they can be represented in some intuition [Anschauung].

What usually makes us believe that the predicate of such apodeictic [certain] judgments is already contained in our concept, and that the judgment is therefore analytical, is the duplicity of the expression, requesting us to think a certain predicate as of necessity implied in the thought of a given concept, which necessity attaches to the concept. But the question is not what we are requested to join in thought to the given concept, but what we actually think together with and in it, though obscurely; and so it appears that the predicate belongs to these concepts necessarily indeed, yet not directly but indirectly by an added visualization [Anschauung].

Section 3. A Remark on the General Division of judgments into Analytical and Synthetical

This division is indispensable, as concerns the Critique of human understanding, and therefore deserves to be called classical, though otherwise it is of little use, but this is the reason why dogmatic philosophers, who always seek the sources of metaphysical judgments in Metaphysics itself, and not apart from it, in the pure laws of reason generally, altogether neglected this apparently obvious distinction. Thus the celebrated Wolf, and his acute follower Baumgarten, came to seek the proof of the principle of Sufficient Reason, which is clearly synthetical, in the principle of Contradiction. In Locke’s Essay, however, I find an indication of my division. For in the fourth book (chap. iii. Section 9, seq.), having discussed the various connections of representations in judgments, and their sources, one of which he makes “identity and contradiction” (analytical judgments), and another the coexistence of representations in a subject (synthetical judgments), he confesses (Section 10) that our a priori knowledge of the latter is very narrow, and almost nothing. But in his remarks on this species of cognition, there is so little of what is definite, and reduced to rules, that we cannot wonder if no one, not even Hume, was led to make investigations concerning this sort of judgments. For such general and yet definite principles are not easily learned from other men, who have had them obscurely in their minds. We must hit on them first by our own reflection, then we find them elsewhere, where we could not possibly have found them at first, because the authors themselves did not know that such an idea lay at the basis of their observations. Men who never think independently have nevertheless the acuteness to discover everything, after it has been once shown them, in what was said long since, though no one ever saw it there before.

Section 4. The General Question of the Prolegemena: Is Metaphysics at all Possible?

Were a metaphysics, which could maintain its place as a science, really in existence; could we say, here

is metaphysics, learn it, and it will convince you irresistibly and irrevocably of its truth: this question would be useless, and there would only remain that other question (which would rather be a test of our acuteness, than a proof of the existence of the thing itself), “How is the science possible, and how does reason come to attain it?” But human reason has not been so fortunate in this case. There is no single book to which you can point as you do to Euclid, and say: This is Metaphysics; here you may find the noblest objects of this science, the knowledge of a highest Being, and of a future existence, proved from principles of pure reason. We can be shown indeed many judgments, demonstrably certain, and never questioned; but these are all analytical, and rather concern the materials and the scaffolding for Metaphysics, than the extension of knowledge, which is our proper object in studying it (Sect 2). Even supposing you produce synthetical judgments (such as the law of Sufficient Reason, which you have never proved, as you ought to, from pure reason a priori, though we gladly concede its truth), you lapse when they come to be employed for your principal object, into such doubtful assertions, that in all ages one Metaphysics has contradicted another, either in its assertions, or their proofs, and thus has itself destroyed its own claim to lasting assent. Nay, the very attempts to set up such a science are the main cause of the early appearance of skepticism, a mental attitude in which reason treats itself with such violence that it could never have arisen save from complete despair of ever satisfying our most important aspirations. For long before men began to inquire into nature methodically, they consulted abstract reason, which had to some extent been exercised by means of ordinary experience; for reason is ever present, while laws of nature must usually be discovered with labor. So Metaphysics floated to the surface, like foam, which dissolved the moment it was scooped off. But immediately there appeared a new supply on the surface, to be ever eagerly gathered up by some, while others, instead of seeking in the depths the cause of the phenomenon, thought they showed their wisdom by ridiculing the idle labor of their neighbors.

The essential and distinguishing feature of pure mathematical cognition among all other a priori cognitions is, that it cannot at all proceed from concepts, but only by means of the construction of concepts (see Critique, “Methodology,” Chap. I., Section 1). As therefore in its judgments it must proceed beyond the concept to that which its corresponding visualization [Anschauung] contains, these judgments neither can, nor ought to, arise analytically, by dissecting the concept, but are all synthetical.

I cannot refrain from pointing out the disadvantage resulting to philosophy from the neglect of this easy and apparently insignificant observation. Hume being prompted (a task worthy of a philosopher) to cast his eye over the whole field of a priori cognitions in which human understanding claims such mighty possessions, heedlessly severed from it a whole, and indeed its most valuable, province, viz., pure mathematics; for he thought its nature, or, so to speak, the state-constitution of this empire, depended on totally different principles, namely, on the law of contradiction alone; and although he did not divide judgments in this manner formally and universally as I have done here, what he said was equivalent to this: that mathematics contains only analytical, but metaphysics synthetical, a priori judgments. In this, however, he was greatly mistaken, and the mistake had a decidedly injurious effect upon his whole conception. But for this, he would have extended his question concerning the origin of our synthetical judgments far beyond the metaphysical concept of causality, and included in it the possibility of mathematics a priori also, for this latter he must have assumed to be equally synthetical. And then he could not have based his metaphysical judgments on mere experience without subjecting the axioms of mathematics equally to experience, a thing which he was far too acute to do. The good company into which metaphysics would thus have been brought, would have saved it from the danger of a contemptuous ill-treatment, for the thrust intended for it must have reached mathematics, which was not and could not have been Hume’s intention. Thus that acute man would have been led into considerations which must needs be similar to those that now occupy us, but which would have gained inestimably by his inimitably elegant style.

Metaphysical judgments, properly so called, are all synthetical. We must distinguish judgments

pertaining to metaphysics from metaphysical judgments properly so called. Many of the former are analytical, but they only afford the means for metaphysical judgments, which are the whole end of the science, and which are always synthetical. For if there be concepts pertaining to metaphysics (as, for example, that of substance), the judgments springing from simple analysis of them also pertain to metaphysics, as, for example, substance is that which only exists as subject; and by means of several such analytical judgments, we seek to approach the definition of the concept. But as the analysis of a pure concept of the understanding pertaining to metaphysics, does not proceed in any different manner from the dissection of any other, even empirical, concepts, not pertaining to metaphysics (such as: air is an elastic fluid, the elasticity of which is not destroyed by any known degree of cold), it follows that the concept indeed, but not the analytical judgment, is properly metaphysical. This science has something peculiar in the production of its a priori cognitions, which must therefore be distinguished from the features it has in common with other rational knowledge. Thus the judgment, that all the substance in things is permanent, is a synthetical and properly metaphysical judgment.

If the a priori concepts, which constitute the materials of metaphysics, have first been collected according to fixed principles, then their analysis will be of great value. It might be taught as a particular part (as a philosophia definitiva), containing nothing but analytical judgments pertaining to metaphysics, and could be treated separately from the synthetical which constitute metaphysics proper. For indeed these analyses are not elsewhere of much value, except in metaphysics, i.e., as regards the synthetical judgments, which are to be generated by these previously analyzed concepts.

The conclusion drawn in this section then is, that metaphysics is properly concerned with synthetical propositions a priori, and these alone constitute its end, for which it indeed requires various dissections of its concepts, viz., of its analytical judgments, but wherein the procedure is not different from that in every other kind of knowledge, in which we merely seek to render our concepts distinct by analysis. But the generation of a priori cognition by concrete images as well as by concepts, in fine of synthetical propositions a priori in philosophical cognition, constitutes the essential subject of metaphysics.

Weary therefore of dogmatism, which teaches us nothing, and of skepticism, which does not even promise us anything, not even the quiet state of a contented ignorance; disquieted by the importance of knowledge so much needed; and lastly, rendered suspicious by long experience of all knowledge which we believe we possess, or which offers itself, under the title of pure reason: there remains but one critical question on the answer to which our future procedure depends, viz., is metaphysics at all possible? But this question must be answered not by skeptical objections to the asseverations of some actual system of metaphysics (for we do not as yet admit such a thing to exist), but from the conception, as yet only problematical, of a science of this sort.

In the Critique of Pure Reason I have treated this question synthetically, by making inquiries into pure reason itself, and endeavoring in this source to determine the elements as well as the laws of its pure use according to principles. The task is difficult, and requires a resolute reader to penetrate by degrees into a system, based on no data except reason itself, and which therefore seeks, without resting upon any fact, to unfold knowledge from its original germs. These Prolegomena, however, are designed for preparatory exercises; they are intended rather to point out what we have to do in order if possible to actualize a science, than to propound it. They must therefore rest upon something already known as trustworthy, from which we can set out with confidence, and ascend to sources as yet unknown, the discovery of which will not only explain to us what we knew, but exhibit a sphere of many cognitions which all spring from the same sources. The method of such Prolegomena, especially of those designed as a preparation for future metaphysics, is consequently analytical.

But it happens fortunately, that though we cannot assume metaphysics to be an actual science, we can say with confidence that certain pure a priori synthetical cognitions, pure Mathematics and pure Physics are actual and given; for both contain propositions, which are thoroughly recognized as apodictically

certain, partly by mere reason, partly by general consent arising from experience, and yet as independent of experience. We have therefore some at least uncontested synthetical knowledge a priori, and need not ask whether it be possible, for it is actual, but how it is possible, in order that we may deduce from the principle which makes the given cognitions possible the possibility of all the rest.

Section 5. The General Problem: How is Cognition from Pure Reason Possible?

We have above learned the significant distinction between analytical and synthetical judgments. The possibility of analytical propositions was easily comprehended, being entirely founded on the law of Contradiction. The possibility of synthetical a posteriori judgments, of those which are gathered from experience, also requires no particular explanation; for experience is nothing but a continual synthesis of perceptions. There remain therefore only synthetical propositions a priori, of which the possibility must be sought or investigated, because they must depend upon other principles than the law of contradiction.

But here we need not first establish the possibility of such propositions so as to ask whether they are possible. For there are enough of them which indeed are of undoubted certainty, and as our present method is analytical, we shall start from the fact, that such synthetical but purely rational cognition actually exists; but we must now inquire into the reason of this possibility, and ask, how such cognition is possible, in order that we may from the principles of its possibility be enabled to determine the conditions of its use, its sphere and its limits. The proper problem upon which all depends, when expressed with scholastic precision, is therefore:

How are synthetic propositions a priori possible?

For the sake of popularity I have above expressed this problem somewhat differently, as an inquiry into purely rational cognition, which I could do for once without detriment to the desired comprehension, because, as we have only to do here with metaphysics and its sources, the reader will, I hope, after the foregoing remarks, keep in mind that when we speak of purely rational cognition, we do not mean analytical, but synthetical cognition.[P]

Metaphysics stands or falls with the solution of this problem: its very existence depends upon it. Let any one make metaphysical assertions with ever so much plausibility, let him overwhelm us with conclusions, if he has not previously proved able to answer this question satisfactorily, I have a right to say this is all vain baseless philosophy and false wisdom. You speak through pure reason, and claim, as it were to create cognitions a priori. by not only dissecting given concepts, but also by asserting connections which do not rest upon the law of contradiction, and which you believe you conceive quite independently of all experience; how do you arrive at this, and how will you justify your pretensions? An appeal to the consent of the common sense of mankind cannot be allowed; for that is a witness whose authority depends merely upon rumor. Says Horace:

Quodcunque ostendis mihi sic, incredulus odi. [“All that which is proven to me thus, I hate and remain incredulous.”]

The answer to this question, though indispensable, is difficult; and though the principal reason that it was not made long ago is, that the possibility of the question never occurred to anybody, there is yet another reason, which is this that a satisfactory answer to this one question requires a much more persistent, profound, and painstaking reflection, than the most diffuse work on metaphysics, which on its first appearance promised immortality to its author. And every intelligent reader, when he carefully reflects what this problem requires, must at first be struck with its difficulty, and would regard it as insoluble and even impossible, did there not actually exist pure synthetical cognitions a priori. This actually happened to David Hume, though he did not conceive the question in its entire universality as is done here, and as must be done, should the answer be decisive for all Metaphysics. For how is it possible, says that acute man, that when a concept is given me, I can go beyond it and connect with it

another, which is not contained in it, in such a manner as if the latter necessarily belonged to the former? Nothing but experience can furnish us with such connections (thus he concluded from the difficulty which he took to be an impossibility), and all that vaunted necessity, or, what is the same thing, all cognition assumed to be a priori, is nothing but a long habit of accepting something as true, and hence of mistaking subjective necessity for objective.

Should my reader complain of the difficulty and the trouble which I occasion him in the solution of this problem, he is at liberty to solve it himself in an easier way. Perhaps he will then feel under obligation to the person who has undertaken for him a labor of so profound research, and will rather be surprised at the facility with which, considering the nature of the subject, the solution has been attained. Yet it has cost years of work to solve the problem in its whole universality (using the term in the mathematical sense, viz., for that which is sufficient for all cases), and finally to exhibit it in the analytical form, as the reader finds it here.

All metaphysicians are therefore solemnly and legally suspended from their occupations till they shall have answered in a satisfactory manner the question, How are synthetic cognitions a priori possible? For the answer contains the only credentials which they must show when they have anything to offer in the name of pure reason. But if they do not possess these credentials, they can expect nothing else of reasonable people, who have been deceived so often, than to be dismissed without further ado.

If they on the other hand desire to carry on their business, not as a science, but as an art of wholesome oratory suited to the common sense of man, they cannot in justice be prevented. They will then speak the modest language of a rational belief, they will grant that they are not allowed even to conjecture, far less to know, anything which lies beyond the bounds of all possible experience, but only to assume (not for speculative use, which they must abandon, but for practical purposes only) the existence of something that is possible and even indispensable for the guidance of the understanding and of the will in life. In this mariner alone can they be called useful and wise men, and the more so as they renounce the title of metaphysicians; for the latter profess to be speculative philosophers, and since, when judgments a priori are under discussion, poor probabilities cannot be admitted (for what is declared to be known a priori is thereby announced as necessary), such men cannot be permitted to play with conjectures, but their assertions must be either science, or are worth nothing at all.

It may be said, that the entire transcendental philosophy, which necessarily precedes all metaphysics, is nothing but the complete solution of the problem here propounded, in systematical order and completeness, and hitherto we have never had any transcendental philosophy. For what goes by its name is properly a part of metaphysics, whereas the former [transcendental] sciences has first to constitute the possibility of the latter, and must therefore precede all metaphysics. And it is not surprising that when a whole science, deprived of all help from other sciences, and consequently in itself quite new, is required to answer a single question satisfactorily, we should find the answer troublesome and difficult, nay even shrouded in obscurity.

As we now proceed to this solution according to the analytical method, in which we assume that such cognitions from pure reasons actually exist, we can only appeal to two sciences of theoretical cognition (which alone is under consideration here), namely, pure mathematics and pure natural science (physics). For these alone can exhibit to us objects in intuition (in der Anschauung), and consequently (if there should occur in them a cognition a priori) can show the truth or conformity of the cognition to the object in concreto, that is, its actuality, from which we could proceed to the reason of its possibility by the analytical method. This facilitates our work greatly for here universal considerations are not only applied to facts, but even start from them, while in a synthetic procedure they must strictly be derived in abstracto from concepts.

But, in order to rise from these actual and at the same time well-grounded pure cognitions a priori to such a possible cognition of the same as we are seeking, viz., to metaphysics as a science, we must

comprehend that which occasions it, I mean the mere natural, though in spite of its truth not unsuspected, cognition a priori which lies at the bottom of that science, the elaboration of which without any critical investigation of its possibility is commonly called metaphysics. In a word, we must comprehend the natural conditions of such a science as a part of our inquiry, and thus the transcendental problem will be gradually answered by a division into four questions:

How is pure mathematics possible?

How is pure natural science possible?

How is metaphysics in general possible?

How is metaphysics as a science possible?

It may be seen that the solution of these problems, though chiefly designed to exhibit the essential matter of the Critique, has yet something peculiar, which for itself alone deserves attention. This is the search for the sources of given sciences in reason itself, so that its faculty of knowing something a priori may by its own deeds be investigated and measured. By this procedure these sciences gain, if not with regard to their contents, yet as to their proper use, and while they throw light on the higher question concerning their common origin, they give, at the same time, an occasion better to explain their own nature.

FIRST PART OF THE TRANSCENDENTAL PROBLEM: HOW IS PURE MATHEMATICS POSSIBLE? Sect. 6.

Here is a great and established branch of knowledge, encompassing even now a wonderfully large domain and promising an unlimited extension in the future. Yet it carries with it thoroughly apodeictical certainty, i.e., absolute necessity, which therefore rests upon no empirical grounds. Consequently it is a pure product of reason, and moreover is thoroughly synthetical. [Here the question arises:] “How then is it possible for human reason to produce a cognition of this nature entirely a priori?” Does not this faculty [which produces mathematics], as it neither is nor can be based upon experience, presuppose some ground of cognition a priori, which lies deeply hidden, but which might reveal itself by these its effects, if their first beginnings were but diligently ferreted out?

Sect. 7.

But we find that all mathematical cognition has this peculiarity: it must first exhibit its concept in a visual intuition [Anschauung] and indeed a priori, therefore in an intuition which is not empirical, but pure. Without this mathematics cannot take a single step; hence its judgments are always visual, viz., intuitive; whereas philosophy must be satisfied with discursive judgments from mere concepts, and though it may illustrate its doctrines through a visual figure, can never derive them from it. This observation on the nature of mathematics gives us a clue to the first and highest condition of its possibility, which is, that some pure intuition [reine Anschauung] must form its basis, in which all its concepts can be exhibited or constructed, in concreto and yet a priori. If we can locate this pure intuition and its possibility, we may thence easily explain how synthetical propositions a priori are possible in pure mathematics, and consequently how this science itself is possible. Empirical intuition [viz., sense-perception] enables us without difficulty to enlarge the concept which we frame of an object of intuition [or sense-perception], by new predicates, which intuition [i.e., sense-perception] itself presents synthetically in experience. Pure intuition [viz., the visualization of forms in our imagination, from which every thing sensual, i.e., every thought of material qualities, is excluded] does so likewise, only with this difference, that in the latter case the synthetical judgment is a priori certain and apodeictical, in the former, only a posteriori and empirically certain; because this latter contains only that which occurs in contingent empirical intuition, but the former, that which must necessarily be discovered in pure intuition. Here intuition, being an intuition a priori, is before all experience, viz., before any perception of particular objects, inseparably conjoined with its concept.

Sect. 8.

But with this step our perplexity seems rather to increase than to lessen. For the question now is, “How is it possible to intuit [in a visual form] anything a priori?” An intuition [viz., a visual sense perception] is such a representation as immediately depends upon the presence of the object. Hence it seems impossible to intuit from the outset a priori, because intuition would in that event take place without either a former or a present object to refer to, and by consequence could not be intuition. Concepts indeed are such, that we can easily form some of them a priori, viz., such as contain nothing but the thought of an object in general; and we need not find ourselves in an immediate relation to the object. Take, for instance, the concepts of Quantity, of Cause, etc. But even these require, in order to make them understood, a certain concrete use — that is, an application to some sense-experience [Anschauung], by which an object of

them is given us. But how can the intuition of the object [its visualization] precede the object itself?

Sect. 9.

If our intuition [i.e., our sense-experience] were perforce of such a nature as to represent things as they are in themselves, there would not be any intuition a priori, but intuition would be always empirical. For I can only know what is contained in the object in itself when it is present and given to me. It is indeed even then incomprehensible how the intuition [Anschauung] of a present thing should make me know this thing as it is in itself, as its properties cannot migrate into my faculty of representation. But even granting this possibility, a visualizing of that sort would not take place a priori, that is, before the object were presented to me; for without this latter fact no reason of a relation between my representation and the object can be imagined, unless it depend upon a direct inspiration. Therefore in one way only can my intuition anticipate the actuality of the object, and be a cognition a priori, viz.: if my intuition contains nothing but the form of sensibility, antedating in my subjectivity all the actual impressions through which I am affected by objects. For that objects of sense can only be intuited according to this form of sensibility I can know a priori. Hence it follows: that propositions, which concern this form of sensuous intuition only, are possible and valid for objects of the senses; as also, conversely, that intuitions which are possible a priori can never concern any other things than objects of our senses.

Sect. 10.

Accordingly, it is only the form of sensuous intuition by which we can intuit things a priori, but by which we can know objects only as they appear to us (to our senses), not as they are in themselves; and this assumption is absolutely necessary if synthetical propositions a priori be granted as possible, or if, in case they actually occur, their possibility is to be comprehended and determined beforehand.

Now, the intuitions which pure mathematics lays at the foundation of all its cognitions and judgments which appear at once apodictic and necessary are Space and Time. For mathematics must first have all its concepts in intuition, and pure mathematics in pure intuition, that is, it must construct them. If it proceeded in any other way, it would be impossible to make any headway, for mathematics proceeds, not analytically by dissection of concepts, but synthetically, and if pure intuition be wanting, there is nothing in which the matter for synthetical judgments a priori can be given. Geometry is based upon the pure intuition of space. Arithmetic accomplishes its concept of number by the successive addition of units in time; and pure mechanics especially cannot attain its concepts of motion without employing the representation of time. Both representations, however, are only intuitions; for if we omit from the empirical intuitions of bodies and their alterations (motion) everything empirical, or belonging to sensation, space and time still remain, which are therefore pure intuitions that lie a priori at the basis of the empirical. Hence they can never be omitted, but at the same time, by their being pure intuitions a priori, they prove that they are mere forms of our sensibility, which must precede all empirical intuition, or perception of actual objects, and conformably to which objects can be known a priori, but only as they appear to us.

Sect. 11.

The problem of the present section is therefore solved. Pure mathematics, as synthetical cognition a priori, is only possible by referring to no other objects than those of the senses. At the basis of their empirical intuition lies a pure intuition (of space and of time) which is a priori. This is possible, because the latter intuition is nothing but the mere form of sensibility, which precedes the actual appearance of the objects, in that it, in fact, makes them possible. Yet this faculty of intuiting a priori affects not the matter of the phenomenon (that is, the sense-element in it, for this constitutes that which is empirical), but its form,

viz., space and time. Should any man venture to doubt that these are determinations adhering not to things in themselves, but to their relation to our sensibility, I should be glad to know how it can be possible to know the constitution of things a priori, viz., before we have any acquaintance with them and before they are presented to us. Such, however, is the case with space and time. But this is quite comprehensible as soon as both count for nothing more than formal conditions of our sensibility, while the objects count merely as phenomena; for then the form of the phenomenon, i.e., pure intuition, can by all means be represented as proceeding from ourselves, that is, a priori.

Sect. 12.

In order to add something by way of illustration and confirmation, we need only watch the ordinary and necessary procedure of geometers. All proofs of the complete congruence of two given figures (where the one can in every respect be substituted for the other) come ultimately to this that they may be made to coincide; which is evidently nothing else than a synthetical proposition resting upon immediate intuition, and this intuition must be pure, or given a priori, otherwise the proposition could not rank as apodictically certain, but would have empirical certainty only. In that case, it could only be said that it is always found to be so, and holds good only as far as our perception reaches. That everywhere space (which (in its entirety] is itself no longer the boundary of another space) has three dimensions, and that space cannot in any way have more, is based on the proposition that not more than three lines can intersect at right angles in one point. But this proposition cannot by any means be shown from concepts, but rests immediately on intuition, and indeed on pure and a priori intuition, because it is apodictically certain. That we can require a line to be drawn to infinity (in indefinitum), or that a series of changes (for example, spaces traversed by motion) shall be infinitely continued, presupposes a representation of space and time, which can only attach to intuition, namely, so far as it in itself is bounded by nothing, for from concepts it could never be inferred. Consequently, the basis of mathematics actually are pure intuitions, which make its synthetical and apodictically valid propositions possible. Hence our transcendental [critical] deduction of the notions of space and of time explains at the same time the possibility of pure mathematics. Without some such deduction its truth may be granted, but its existence could by no means be understood, and we must assume "that everything which can be given to our senses (to the external senses in space, to the internal one in time) is intuited by us as it appears to us, not as it is in itself."

Sect. 13.

Those who cannot yet rid themselves of the notion that space and time are actual qualities inhering in things in themselves, may exercise their acumen on the following paradox. When they have in vain attempted its solution, and are free from prejudices at least for a few moments, they will suspect that the degradation of space and of time to mere forms of our sensuous intuition may perhaps be well founded.

If two things are quite equal in all respects as much as can be ascertained by all means possible, quantitatively and qualitatively, it must follow, that the one can in all cases and under all circumstances replace the other, and this substitution would not occasion the least perceptible difference. This in fact is true of plane figures in geometry; but some spherical figures exhibit, notwithstanding a complete internal agreement, such a contrast in their external relation, that the one figure cannot possibly be put in the place of the other. For instance, two spherical triangles on opposite hemispheres, which have an arc of the equator as their common base, may be quite equal, both as regards sides and angles, so that nothing is to be found in either, if it be described for itself alone and completed, that would not equally be applicable to both; and yet the one cannot be put in the place of the other (being situated upon the opposite hemisphere). Here then is an internal difference between the two triangles, which difference our

understanding cannot describe as internal, and which only manifests itself by external relations in space. But I shall adduce examples, taken from common life, that are more obvious still.

What can be more similar in every respect and in every part more alike to my hand and to my ear, than their images in a mirror? And yet I cannot put such a hand as is seen in the glass in the place of its archetype; for if this is a right hand, that in the glass is a left one, and the image or reflection of the right ear is a left one which never can serve as a substitute for the other. There are in this case no internal differences which our understanding could determine by thinking alone. Yet the differences are internal as the senses teach, for, notwithstanding their complete equality and similarity, the left hand cannot be enclosed in the same bounds as the right one (they are not congruent); the glove of one hand cannot be used for the other. What is the solution? These objects are not representations of things as they are in themselves, and as the pure understanding would know them, but sensuous intuitions, that is, appearances, the possibility of which rests upon the relation of certain things unknown in themselves to something else, viz., to our sensibility. Space is the form of the external intuition of this sensibility, and the internal determination of every space is only possible by the determination of its external relation to the whole space, of which it is a part (in other words, by its relation to the external sense). That is to say, the part is only possible through the whole, which is never the case with things in themselves, as objects of the mere understanding, but with appearances only. Hence the difference between similar and equal things, which are yet not congruent (for instance, two symmetric helices), cannot be made intelligible by any concept, but only by the relation to the right and the left hands which immediately refers to intuition.

REMARK 1

Pure Mathematics, and especially pure geometry, can only have objective reality on condition that they refer to objects of sense. But in regard to the latter the principle holds good, that our sense representation is not a representation of things in themselves but of the way in which they appear to us. Hence it follows, that the propositions of geometry are not the results of a mere creation of our poetic imagination, and that therefore they cannot be referred with assurance to actual objects; but rather that they are necessarily valid of space, and consequently of all that may be found in space, because space is nothing else than the form of all external appearances, and it is this form alone in which objects of sense can be given.

Sensibility, the form of which is the basis of geometry, is that upon which the possibility of external appearance depends. Therefore these appearances can never contain anything but what geometry prescribes to them. It would be quite otherwise if the senses were so constituted as to represent objects as they are in themselves. For then it would not by any means follow from the conception of space, which with all its properties serves to the geometer as an a priori foundation, together with what is thence inferred, must be so in nature. The space of the geometer would be considered a mere fiction, and it would not be credited with objective validity, because we cannot see how things must of necessity agree with an image of them, which we make spontaneously and previous to our acquaintance with them. But if this image, or rather this formal intuition, is the essential property of our sensibility, by means of which alone objects are given to us, and if this sensibility represents not things in themselves, but their appearances: we shall easily comprehend, and at the same time indisputably prove, that all external objects of our world of sense must necessarily coincide in the most rigorous way with the propositions of geometry; because sensibility by means of its form of external intuition, viz., by space, the same with which the geometer is occupied, makes those objects at all possible as mere appearances.

It will always remain a remarkable phenomenon in the history of philosophy, that there was a time, when even mathematicians, who at the same time were philosophers, began to doubt, not of the accuracy of their geometrical propositions so far as they concerned space, but of their objective validity and the applicability of this concept itself, and of all its corollaries, to nature. They showed much concern

whether a line in nature might not consist of physical points, and consequently that true space in the object might consist of simple [discrete] parts, while the space which the geometer has in his mind [being continuous] cannot be such. They did not recognize that this mental space renders possible the physical space, i.e., the extension of matter; that this pure space is not at all a quality of things in themselves, but a form of our sensuous faculty of representation; and that all objects in space are mere appearances, i.e., not things in themselves but representations of our sensuous intuition. But such is the case, for the space of the geometer is exactly the form of sensuous intuition which we find a priori in us, and contains the ground of the possibility of all external appearances (according to their form), and the latter must necessarily and most rigidly agree with the propositions of the geometer, which he draws not from any fictitious concept, but from the subjective basis of all external phenomena, which is sensibility itself. In this and no other way can geometry be made secure as to the undoubted objective reality of its propositions against all the intrigues of a shallow Metaphysics, which is surprised at them [the geometrical propositions], because it has not traced them to the sources of their concepts.

REMARK II.

Whatever is given us as object, must be given us in intuition. All our intuition however takes place by means of the senses only; the understanding intuits nothing, but only reflects. And as we have just shown that the senses never and in no manner enable us to know things in themselves, but only their appearances, which are mere representations of the sensibility, we conclude that "all bodies, together with the space in which they are, must be considered nothing but mere representations in us, and exist nowhere but in our thoughts." Now, is not this manifest idealism?

Idealism consists in the assertion, that there are none but thinking beings, all other things, which we think are perceived in intuition, being nothing but representations in the thinking beings, to which no object external to them corresponds in fact. Whereas I say, that things as objects of our senses existing outside us are given, but we know nothing of what they may be in themselves, knowing only their appearances, i. e., the representations which they cause in us by affecting our senses. Consequently I grant by all means that there are bodies without us, that is, things which, though quite unknown to us as to what they are in themselves, we yet know by the representations which their influence on our sensibility procures us, and which we call bodies, a term signifying merely the appearance of the thing which is unknown to us, but not therefore less actual. Can this be termed idealism? It is the very contrary.

Long before Locke's time, but assuredly since him, it has been generally assumed and granted without detriment to the actual existence of external things, that many of their predicates may be said to belong not to the things in themselves, but to their appearances, and to have no proper existence outside our representation. Heat, color, and taste, for instance, are of this kind. Now, if I go farther, and for weighty reasons rank as mere appearances the remaining qualities of bodies also, which are called primary, such as extension, place, and in general space, with all that which belongs to it (impenetrability or materiality, space, etc.) — no one in the least can adduce the reason of its being inadmissible. As little as the man who admits colors not to be properties of the object in itself, but only as modifications of the sense of sight, should on that account be called an idealist, so little can my system be named idealistic, merely because I find that more, nay, all the properties which constitute the intuition of a body belong merely to its appearance. The existence of the thing that appears is thereby not destroyed, as in genuine idealism, but it is only shown, that we cannot possibly know it by the senses as it is in itself.

I should be glad to know what my assertions must be in order to avoid all idealism. Undoubtedly, I should say, that the representation of space is not only perfectly conformable to the relation which our sensibility has to objects — that I have said — but that it is quite similar to the object, — an assertion in which I can find as little meaning as if I said that the sensation of red has a similarity to the property of

vermilion, which excites this sensation in me.

REMARK III

Hence we may at once dismiss an easily foreseen but futile objection, “that by admitting the ideality of space and of time the whole sensible world would be turned into mere sham.” At first all philosophical insight into the nature of sensuous cognition was spoiled, by making the sensibility merely a confused mode of representation, according to which we still know things as they are, but without being able to reduce everything in this our representation to a clear consciousness; whereas proof is offered by us that sensibility consists, not in this logical distinction of clearness and obscurity, but in the genetic one of the origin of cognition itself. For sensuous perception represents things not at all as they are, but only the mode in which they affect our senses, and consequently by sensuous perception appearances only and not things themselves are given to the understanding for reflection. After this necessary corrective, an objection rises from an unpardonable and almost intentional misconception, as if my doctrine turned all the things of the world of sense into mere illusion.

When an appearance is given us, we are still quite free as to how we should judge the matter. The appearance depends upon the senses, but the judgment upon the understanding, and the only question is, whether in the determination of the object there is truth or not. But the difference between truth and dreaming is not ascertained by the nature of the representations, which are referred to objects (for they are the same in both cases), but by their connection according to those rules, which determine the coherence of the representations in the concept of an object, and by ascertaining whether they can subsist together in experience or not. And it is not the fault of the appearances if our cognition takes illusion for truth, i.e., if the intuition, by which an object is given us, is considered a concept of the thing or of its existence also, which the understanding can only think The senses represent to us the paths of the planets as now progressive, now retrogressive, and herein is neither falsehood nor truth, because as long as we hold this path to be nothing but appearance, we do not judge of the objective nature of their motion. But as a false judgment may easily arise when the understanding is not on its guard against this subjective mode of representation being considered objective, we say they appear to move backward; it is not the senses however which must be charged with the illusion, but the understanding, whose province alone it is to give an objective judgment on appearances.

Thus, even if we did not at all reflect on the origin of our representations, whenever we connect our intuitions of sense (whatever they may contain), in space and in time, according to the rules of the coherence of all cognition in experience, illusion or truth will arise according as we are negligent or careful. It is merely a question of the use of sensuous representations in the understanding, and not of their origin. In the same way, if I consider all the representations of the senses, together with their form, space and time, to be nothing but appearances, and space and time to be a mere form of the sensibility, which is not to be met with in objects out of it, and if I make use of these representations in reference to possible experience only, there is nothing in my regarding them as appearances that can lead astray or cause illusion. For all that they can correctly cohere according to rules of truth in experience. Thus all the propositions of geometry hold good of space as well as of all the objects of the senses, consequently of all possible experience, whether I consider space as a mere form of the sensibility, or as something cleaving to the things themselves. In the former case however I comprehend how I can know a priori these propositions concerning all the objects of external intuition. Otherwise, everything else as regards all possible experience remains just as if I had not departed from the ordinary view.

But if I venture to go beyond all possible experience with my notions of space and time, which I cannot refrain from doing if I proclaim them qualities inherent in things in themselves (for what should prevent me from letting them hold good of the same things, even though my senses might be different, and unsuited

to them?), then a grave error may arise due to illusion, for thus I would proclaim to be universally valid what is merely a subjective condition of the intuition of things and sure only for all objects of sense, viz., for all possible experience; I would refer this condition to things in themselves, and do not limit it to the conditions of experience

My doctrine of the ideality of space and of time, therefore, far from reducing the whole sensible world to mere illusion, is the only means of securing the application of one of the most important cognitions (that which mathematics propounds a priori) to actual objects, and of preventing its being regarded as mere illusion. For without this observation it would be quite impossible to make out whether the intuitions of space and time, which we borrow from no experience, and which yet lie in our representation a priori, are not mere phantasms of our brain, to which objects do not correspond, at least not adequately, and consequently, whether we have been able to show its unquestionable validity with regard to all the objects of the sensible world just because they are mere appearances.

Secondly, though these my principles make appearances of the representations of the senses, they are so far from turning the truth of experience into mere illusion, that they are rather the only means of preventing the transcendental illusion, by which metaphysics has hitherto been deceived, leading to the childish endeavor of catching at bubbles, because appearances, which are mere representations, were taken for things in themselves. Here originated the remarkable event of the antimony of Reason which I shall mention by and by, and which is destroyed by the single observation, that appearance, as long as it is employed in experience, produces truth, but the moment it transgresses the bounds of experience, and consequently becomes transcendent, produces nothing but illusion.

Inasmuch therefore, as I leave to things as we obtain them by the senses their actuality, and only limit our sensuous intuition of these things to this, that they represent in no respect, not even in the pure intuitions of space and of time, anything more than mere appearance of those things, but never their constitution in themselves, this is not a sweeping illusion invented for nature by me. My protestation too against all charges of idealism is so valid and clear as even to seem superfluous, were there not incompetent judges, who, while they would have an old name for every deviation from their perverse though common opinion, and never judge of the spirit of philosophic nomenclature, but cling to the letter only, are ready to put their own conceits in the place of well-defined notions, and thereby deform and distort them. I have myself given this my theory the name of transcendental idealism, but that cannot authorize any one to confound it either with the empirical idealism of Descartes, (indeed, his was only an insoluble problem, owing to which he thought every one at liberty to deny the existence of the corporeal world, because it could never be proved satisfactorily), or with the mystical and visionary idealism of Berkeley, against which and other similar phantasms our Critique contains the proper antidote. My idealism concerns not the existence of things (the doubting of which, however, constitutes idealism in the ordinary sense), since it never came into my head to doubt it, but it concerns the sensuous representation of things, to which space and time especially belong. Of these [viz., space and time], consequently of all appearances in general, I have only shown, that they are neither things (but mere modes of representation), nor determinations belonging to things in themselves. But the word "transcendental," which with me means a reference of our cognition, i.e., not to things, but only to the cognitive faculty, was meant to obviate this misconception. Yet rather than give further occasion to it by this word, I now retract it, and desire this idealism of mine to be called critical. But if it be really an objectionable idealism to convert actual things (not appearances) into mere representations, by what name shall we call him who conversely changes mere representations to things? It may, I think, be called dreaming idealism, in contradistinction to the former, which may be called visionary, both of which are to be refuted by my transcendental, or, better, critical idealism.

SECOND PART OF THE MAIN TRANSCENDENTAL PROBLEM: HOW IS THE SCIENCE OF NATURE POSSIBLE?

Sect. 14.

Nature is the existence of things, so far as it is determined according to universal laws. Should nature signify the existence of things in themselves, we could never know it either a priori or a posteriori. Not a priori, for how can we know what belongs to things in themselves, since this never can be done by the dissection of our concepts (in analytical judgments)? We do not want to know what is contained in our concept of a thing (for the [concept describes what] belongs to its logical being), but what is in the actuality of the thing superadded to our concept, and by what the thing itself is determined in its existence outside the concept. Our understanding, and the conditions on which alone it can connect the determinations of things in their existence, do not prescribe any rule to things themselves; these do not conform to our understanding, but it must conform itself to them; they must therefore be first given us in order to gather these determinations from them, wherefore they would not be known a priori.

A cognition of the nature of things in themselves a posteriori would be equally impossible. For, if experience is to teach us laws, to which the existence of things is subject, these laws, if they regard things in themselves, must belong to them of necessity even outside our experience. But experience teaches us what exists and how it exists, but never that it must necessarily exist so and not otherwise. Experience therefore can never teach us the nature of things in themselves.

Sect. 15.

We nevertheless actually possess a pure science of nature in which are propounded, a priori and with all the necessity requisite to apodeictical propositions, laws to which nature is subject. I need only call to witness that propaedeutic of natural science which, under the title of the universal Science of Nature, precedes all Physics (which is founded upon empirical principles). In it we have Mathematics applied to appearance, and also merely discursive principles (or those derived from concepts), which constitute the philosophical part of the pure cognition of nature. But there are several things in it, which are not quite pure and independent of empirical sources: such as the concept of motion, that of impenetrability (upon which the empirical concept of matter rests), that of inertia, and many others, which prevent its being called a perfectly pure science of nature. Besides, it only refers to objects of the external sense and therefore does not give an example of a universal science of nature, in the strict sense, for such a science must reduce nature in general, whether it regards the object of the external or that of the internal sense (the object of Physics as well as Psychology), to universal laws. But among the principles of this universal physics there are a few which actually have the required universality; for instance, the propositions that “substance is permanent, “ and that “every event is determined by a cause according to constant laws,” etc. These are actually universal laws of nature, which subsist completely a priori. There is then in fact a pure science of nature, and the question arises, How is it possible?

Section 16.

The word nature assumes yet another meaning, which determines the object, whereas in the former sense it only denotes the conformity to law of the determinations of the existence of things generally. If we consider it materialiter (i.e., in the matter that forms its objects), nature is the complex of all the objects of

experience. And with this only are we now concerned, for besides, things which can never be objects of experience, if they must be known as to their nature, would oblige us to have recourse to concepts whose meaning could never be given in concreto (by any example of possible experience). Consequently we must form for ourselves a list of concepts of their nature, the reality whereof (i.e., whether they actually refer to objects, or are mere creations of thought) could never be determined. The cognition of what cannot be an object of experience would be hyperphysical, and with things hyperphysical we are here not concerned, but only with the cognition of nature, the actuality of which can be confirmed by experience, though it [the cognition of nature] is possible a priori and precedes all experience.

Section 17.

The formal aspect of nature in this narrower sense is therefore the conformity to law of all the objects of experience, and so far as it is known a priori, their necessary conformity. But it has just been shown that the laws of nature can never be known a priori in objects so far as they are considered not in reference to possible experience, but as things in themselves. And our inquiry here extends not to things in themselves (the properties of which we pass by), but to things as objects of possible experience, and the complex of these is what we properly call nature. And now I ask when the possibility of a cognition of nature a priori is in question, whether it is better to arrange the problem thus: How can we know a priori that things as objects of experience necessarily conform to law? or thus: How is it possible to know a priori the necessary conformity to law of experience itself as regards all its objects generally?

Closely considered, the solution of the problem, represented in either way, amounts, with regard to the pure cognition of nature (which is the point of the question at issue), entirely to the same thing. For the subjective laws, under which alone an empirical cognition of things is possible, hold good of these things, as objects of possible experience (not as things in themselves, which are not considered here). Either of the following statements means quite the same: “A judgment of observation can never rank as experience, without the law, that ‘whenever an event is observed, it is always referred to some antecedent, which it follows according to a universal rule” or else “Everything, of which experience teaches that it happens, must have a cause.”

It is, however, more convenient to choose the first formula. For we can a priori and previous to all given objects have a cognition of those conditions, on which alone experience is possible, but never of the laws to which things may in themselves be subject, without reference to possible experience. We cannot therefore study the nature of things a priori otherwise than by investigating the conditions and the universal (though subjective) laws, under which alone such a cognition as experience (as to mere form) is possible, and we determine accordingly the possibility of things, as objects of experience. For if I should choose the second formula, and seek the conditions a priori, on which nature as an object of experience is possible, I might easily fall into error, and fancy that I was speaking of nature as a thing in itself, and then move round in endless circles, in a vain search for laws concerning things of which nothing is given me.

Accordingly we shall here be concerned with experience only, and the universal conditions of its possibility which are given a priori. Thence we shall determine nature as the whole object of all possible experience. I think it will be understood that I here do not mean the rules of the observation of a nature that is already given, for these already presuppose experience. I do not mean how (through experience) we can study the laws of nature; for these would not then be laws a priori, and would yield us no pure science of nature; but [I mean to ask] how the conditions a priori of the possibility of experience are at the same time the sources from which all the universal laws of nature must be derived.

Sect. 18.

In the first place we must state that, while all judgments of experience [Erfahrungsurtheile] are empirical (i.e., have their ground in immediate sense perception), vice versa, all empirical judgments [empirische Urtheile] are not judgments of experience, but, besides the empirical, and in general besides what is given to the sensuous intuition, particular concepts must yet be superadded — concepts which have their origin quite a priori in the pure understanding, and under which every perception must be first of all subsumed and then by their means changed into experience.

Empirical judgments, so far as they have objective validity, are judgments of experience; but those which are only subjectively valid, I name mere judgments of perception. The latter require no pure concept of the understanding, but only the logical connection of perception in a thinking subject. But the former always require, besides the representation of the sensuous intuition, particular concepts originally begotten in the understanding, which produce the objective validity of the judgment of experience.

All our judgments are at first merely judgments of perception; they hold good only for us (i.e., for our subject), and we do not till afterwards give them a new reference (to an object), and desire that they shall always hold good for us and in the same way for everybody else; for when a judgment agrees with an object, all judgments concerning the same object must likewise agree among themselves, and thus the objective validity of the judgment of experience signifies nothing else than its necessary universality of application. And conversely when we have reason to consider a judgment necessarily universal (which never depends upon perception, but upon the pure concept of the understanding, under which the perception is subsumed), we must consider it objective also, that is, that it expresses not merely a reference of our perception to a subject, but a quality of the object. For there would be no reason for the judgments of other men necessarily agreeing with mine, if it were not the unity of the object to which they all refer, and with which they accord; hence they must all agree with one another.

Sect. 19.

Therefore objective validity and necessary universality (for everybody) are equivalent terms, and though we do not know the object in itself, yet when we consider a judgment as universal, and also necessary, we understand it to have objective validity. By this judgment we know the object (though it remains unknown as it is in itself) by the universal and necessary connection of the given perceptions. As this is the case with all objects of sense, judgments of experience take their objective validity not from the immediate cognition of the object (which is impossible), but from the condition of universal validity in empirical judgments, which, as already said, never rests upon empirical, or, in short, sensuous conditions, but upon a pure concept of the understanding. The object always remains unknown in itself; but when by the concept of the understanding the connection of the representations of the object, which are given to our sensibility, is determined as universally valid, the object is determined by this relation, and it is the judgment that is objective.

To illustrate the matter: When we say, “the room is warm, sugar sweet, and wormwood bitter,”[P] we have only subjectively valid judgments, I do not at all expect that I or any other person shall always find it as I now do; each of these sentences only expresses a relation of two sensations to the same subject, to myself, and that only in my present state of perception; consequently they are not valid of the object. Such are judgments of perception. Judgments of experience are of quite a different nature. What experience teaches me under certain circumstances, it must always teach me and everybody; and its validity is not limited to the subject nor to its state at a particular time. Hence I pronounce all such judgments as being objectively valid. For instance, when I say the air is elastic, this judgment is as yet a judgment of perception only — I do nothing but refer two of my sensations to one another. But, if I would have it called a judgment of experience, I require this connection to stand under a condition, which makes it universally valid. I desire therefore that I and everybody else should always connect necessarily the same

perceptions under the same circumstances.

Section 20.

We must consequently analyze experience in order to see what is contained in this product of the senses and of the understanding, and how the judgment of experience itself is possible. The foundation is the intuition of which I become conscious, i.e., perception (perceptio), which pertains merely to the senses. But in the next place, there are acts of judging (which belong only to the understanding). But this judging may be twofold-first, I may merely compare perceptions and connect them in a particular state of my consciousness; or, secondly, I may connect them in consciousness generally. The former judgment is merely a judgment of perception, and of subjective validity only: it is merely a connection of perceptions in my mental state, without reference to the object. Hence it is not, as is commonly imagined, enough for experience to compare perceptions and to connect them in consciousness through judgment; there arises no universality and necessity, for which alone judgments can become objectively valid and be called experience.

Quite another judgment therefore is required before perception can become experience. The given intuition must be subsumed under a concept, which determines the form of judging in general relatively to the intuition, connects its empirical consciousness in consciousness generally, and thereby procures universal validity for empirical judgments. A concept of this nature is a pure a priori concept of the Understanding, which does nothing but determine for an intuition the general way in which it can be used for judgments. Let the concept be that of cause, then it determined the intuition which is subsumed under it, e.g., that of air, relative to judgments in general, viz., the concept of air serves with regard to its expansion in the relation of antecedent to consequent in a hypothetical judgment. The concept of cause accordingly is a pure concept of the understanding, which is totally disparate from all possible perception, and only serves to determine the representation subsumed under it, relatively to judgments in general, and so to make a universally valid judgment possible.

Before, therefore, a judgment of perception can become a judgment of experience, it is requisite that the perception should be subsumed under some such a concept of the understanding.; for instance, air ranks under the concept of causes, which determines our judgment about it in regard to its expansion as hypothetical.[P] Thereby the expansion of the air is represented not as merely belonging to the perception of the air in my present state or in several states of mine, or in the state of perception of others, but as belonging to it necessarily. The judgment, “the air is elastic,” becomes universally valid, and a judgment of experience, only by certain judgments preceding it, which subsume the intuition of air under the concept of cause and effect: and they thereby determine the perceptions not merely as regards one another in me, but relatively to the form of judging in general, which is here hypothetical, and in this way they render the empirical judgment universally valid.

If all our synthetical judgments are analyzed so far as they are objectively valid, it will be found that they never consist of mere intuitions connected only (as is commonly believed) by comparison into a judgment; but that they would be impossible were not a pure concept of the understanding superadded to the concepts abstracted from intuition, under which concept these latter are subsumed, and in this manner only combined into an objectively valid judgment. Even the judgments of pure mathematics in their simplest axioms are not exempt from this condition. The principle, “a straight line is the shortest between two points,” presupposes that the line is subsumed under the concept of quantity, which certainly is no mere intuition, but has its seat in the understanding alone, and serves to determine the intuition (of the line) with regard to the judgments which may be made about it, relatively to their quantity, that is, to plurality (as judicia plurativa).[P] For under them it is understood that in a given intuition there is contained a plurality of homogenous parts.

Section 21.

To prove, then, the possibility of experience so far as it rests upon pure concepts of the understanding a priori, we must first represent what belongs to judgments in general and the various functions of the understanding, in a complete table. For the pure concepts of the understanding must run parallel to these functions, as such concepts are nothing more than concepts of intuitions in general, so far as these are determined by one or other of these functions of judging, in themselves, that is, necessarily and universally. Hereby also the a priori principles of the possibility of all experience, as of an objectively valid empirical cognition, will be precisely determined. For they are nothing but propositions by which all perception is (under certain universal conditions of intuition) subsumed under those pure concepts of the understanding.

LOGICAL TABLE OF JUDGMENTS.

As to Quantity. Universal. Particular. Singular. 2. As to Quality. Affirmative. Negative. Infinite.

As to Relation. Categorical. Hypothetical. Disjunctive. 4. As to Modality. Problematical. Assertorical. Apodeictical.

TRANSCENDENTAL TABLE OF THE PURE CONCEPTS OF THE UNDERSTANDING.

1 . As to Quantity. Unity (the Measure). Plurality (the Quantity). Totality (the Whole). 2. As to Quality. Reality. Negation. Limitation.

As to Relation. Substance. Cause. Community. 4. As to Modality. Possibility. Existence. Necessity.

PURE PHYSICAL TABLE OF THE UNIVERSAL PRINCIPLES OF THE SCIENCE OF NATURE.

Axioms of Intuition. 2. Anticipations of Perception. 3. Analogies of Experience. 4. Postulates of Empirical Thinking generally.

Section 21a.

In order to comprise the whole matter in one idea, it is first necessary to remind the reader that we are discussing not the origin of experience, but of that which lies in experience. The former pertains to empirical psychology, and would even then never be adequately explained without the latter, which belongs to the Critique of cognition, and particularly of the understanding.

Experience consists of intuitions, which belong to the sensibility, and of judgments, which are entirely a work of the understanding. But the judgments, which the understanding forms alone from sensuous intuitions, are far from being judgments of experience. For in the one case the judgment connects only the perceptions as they are given in the sensuous intuition, while in the other the judgments must express what experience in general, and not what the mere perception (which possesses only subjective validity) contains. The judgment of experience must therefore add to the sensuous intuition and its logical connection in a judgment (after it has been rendered universal by comparison) something that determines the synthetical judgment as necessary and therefore as universally valid. This can be nothing else than that concept which represents the intuition as determined in itself with regard to one form of judgment rather than another, viz., a concept of that synthetical unity of intuitions which can only be represented by a given logical function of judgments.

Section 22.

The sum of the matter is this: the business of the senses is to intuit — that of the understanding is to think. But thinking is uniting representations in one consciousness. This union originates either merely relative to the subject, and is accidental and subjective, or is absolute, and is necessary or objective. The union of representations in one consciousness is judgment. Thinking therefore is the same as judging, or referring

representations to judgments in general. Hence judgments are either merely subjective, when representations are referred to a consciousness in one subject only, and united in it, or objective, when they are united in a consciousness generally, that is, necessarily. The logical functions of all judgments are but various modes of uniting representations in consciousness. But if they serve for concepts, they are concepts of their necessary union in a consciousness, and so principles of objectively valid judgments. This union in a consciousness is either analytical, by identity, or synthetical, by the combination and addition of various representations one to another. Experience consists in the synthetical connection of phenomena (perceptions) in consciousness, so far as this connection is necessary. Hence the pure concepts of the understanding are those under which all perceptions must be subsumed ere they can serve for judgments of experience, in which the synthetical unity of the perceptions is represented as necessary and universally valid.[P]

Section 23.

Judgments, when considered merely as the condition of the union of given representations in a consciousness, are rules. These rules, so far as they represent the union as necessary, are rules a priori, and so far as they cannot be deduced from higher rules, are fundamental principles. But in regard to the possibility of all experience, merely in relation to the form of thinking in it, no conditions of judgments of experience are higher than those which bring the phenomena, according to the various form of their intuition, under pure concepts of the understanding, and render the empirical judgment objectively valid. These concepts are therefore the a priori principles of possible experience.

The principles of possible experience are then at the same time universal laws of nature, which can be known a priori. And thus the problem in our second question, "How is the pure Science of Nature possible?" is solved. For the system which is required for the form of a science is to be met with in perfection here, because, beyond the above-mentioned formal conditions of all judgments in general offered in logic, no others are possible, and these constitute a logical system. The concepts grounded thereupon, which contain the a priori conditions of all synthetical and necessary judgments, accordingly constitute a logical system. The concepts grounded thereupon, which contain the a priori conditions of all synthetical and necessary judgments, accordingly constitute a transcendental system. Finally the principles, by means of which all phenomena are subsumed under these concepts, constitute a physical system, that is, a system of nature, which precedes all empirical cognition of nature, makes it even possible, and hence may in strictness be called the universal and pure natural science.

Section 24.

The first [P] one of the physiological principles [The Axioms of Intuition]] subsumes all phenomena, as intuitions in space and time, under the concept of quantity, and is so far a principle of the application of mathematics to experience. The second one [The Anticipations of Perception] subsumes the empirical element, viz., sensation, which denotes the real in intuitions, not indeed directly under the concept of quantity, because sensation is not an intuition that contains either space or time, though it places the respective object into both. But still there is between reality (sense-representation) and the zero, or total void of intuition in time, a difference which has a quantity. For between every given degree of light and of darkness, between every degree of beat and of absolute cold, between every degree of weight and of absolute lightness, between every degree of occupied space and of totally void space, diminishing degrees can be conceived, in the same manner as between consciousness and total unconsciousness (the darkness of a psychological blank) ever diminishing degrees obtain. Hence there is no perception that can prove an absolute absence of it; for instance, no psychological darkness that cannot be considered as a

kind of consciousness, which is only out-balanced by a stronger consciousness. This occurs in all cases of sensation, and so the understanding can anticipate even sensations, which constitute the peculiar quality of empirical representations (appearances), by means of the principle: "that they all have (consequently that what is real in all phenomena has) a degree." Here is the second application of mathematics (mathesis intensortim) to the science of nature.

Section 25.

In the relation of appearances merely with a view to their existence, the determination is not mathematical but dynamical, and can never be objectively valid, consequently never fit for experience, if it does not come under a priori principles [The Analogies of Experience] by which the cognition of experience relative to appearances becomes even possible. Hence appearances must be subsumed under the concept of Substance, which is the foundation of all determination of existence, as a concept of the thing itself; or secondly so far as a succession is found among phenomena, that is, an event — under the concept of an effect with reference to cause; or lastly — so far as coexistence is to be known objectively, that is, by a judgment of experience — under the concept of community (action and reaction). Thus a priori principles form the basis of objectively valid, though empirical judgments, that is, of the possibility of experience so far as it must connect objects as existing in nature. These principles are the proper laws of nature, which may be termed dynamical.

Finally the cognition of the agreement and connection not only of appearances among themselves in experience [The Postulates of Empirical Thought], but of their relation to experience in general, belongs to the judgments of experience. This relation contains either their agreement with the formal conditions, which the understanding knows, or their coherence with the materials of the senses and of perception, or combines both into one concept. Consequently it contains Possibility, Actuality, and Necessity according to universal laws of nature; and this constitutes the physical doctrine of method, or the distinction of truth and of hypotheses, and the bounds of the certainty of the latter.

Section 26.

The third table of principles drawn from the nature of the understanding itself after the critical method, shows an inherent perfection, which raises it far above every other table which has hitherto though in vain been tried or may yet be tried by analyzing the objects themselves dogmatically. It exhibits all synthetical a priori principles completely and according to one principle, viz., the faculty of judging in general, constituting the essence of experience as regards the understanding, so that we can be certain that there are no more such principles, which affords a satisfaction such as can never be attained by the dogmatic method. Yet is this not all: there is a still greater merit in it.

We must carefully bear in mind the proof which shows the possibility of this cognition a priori, and at the same time limits all such principles to a condition which must never be lost sight of, if we desire it not to be misunderstood, and extended in use beyond the original sense which the understanding attaches to it. This limit is that they contain nothing but the conditions of possible experience in general so far as it is Subjected to laws a priori. Consequently I do not say, that things in themselves possess a quantity, that their actuality possesses a degree, their existence a connection of accidents in a substance, etc. This nobody can prove, because such a synthetical connection from mere concepts, without any reference to sensuous intuition on the one side, or connection of it in a possible experience on the other, is absolutely impossible. The essential limitation of the concepts in these principles then is: That all things stand necessarily a priori under the aforementioned conditions only as objects of experience.

Hence there follows secondly a specifically peculiar mode of proof of these principles: they are not

directly referred to appearances and to their relations, but to the possibility of experience, of which appearances constitute the matter only, not the form. Thus they are referred to objectively and universally valid synthetical propositions, in which we distinguish judgments of experience from those of perception. This takes place because appearances, as mere intuitions, occupying a part of space and time, come under the concept of quantity, which unites their multiplicity a priori according to rules synthetically. Again, so far as the perception contains, besides intuition, sensibility, and between the latter and nothing (i.e., the total disappearance of sensibility), there is an ever-decreasing transition, it is apparent that that which is in appearances must have a degree, so far as it (viz., the perception) does not itself occupy any part of space or of time.[P] Still the transition to actuality from empty time or empty space is only possible in time; consequently though sensibility, as the quality of empirical intuition, can never be known a priori, by its specific difference from other sensibilities, yet it can, in a possible experience in general, as a quantity of perception be intensely distinguished from every other similar perception. Hence the application of mathematics to nature, as regards the sensuous intuition by which nature is given to us, becomes possible and is thus determined.

Above all, the reader must pay attention to the mode of proof of the principles which occur under the title of Analogies of Experience. For these do not refer to the genesis of intuitions, as do the principles of applied mathematics, but to the connection of their existence in experience; and this can be nothing but the determination of their existence in time according to necessary laws, under which alone the connection is objectively valid, and thus becomes experience. The proof therefore does not turn on the synthetical unity in the connection of things in themselves, but merely of perceptions, and of these not in regard to their matter, but to the determination of time and of the relation of their existence in it, according to universal laws. If the empirical determination in relative time is indeed objectively valid (i.e., experience), these universal laws contain the necessary determination of existence in time generally (viz., according to a rule of the understanding a priori). In a Prolegomena I cannot further descant on the subject, but my reader (who has probably been long accustomed to consider experience a mere empirical synthesis of perceptions, and hence not considered that it goes much beyond them, as it imparts to empirical judgments universal validity, and for that purpose requires a pure and a priori unity of the understanding) is recommended to pay special attention to this distinction of experience from a mere aggregate of perceptions, and to judge the mode of proof from this point of view.

Section 27.

Now we are prepared to remove Hume’s doubt. He justly maintains, that we cannot comprehend by reason the possibility of causality, that is, of the reference of the existence of one thing to the existence of another, which is necessitated by the former. I add, that we comprehend just as little the concept of Subsistence, that is, the necessity that at the foundation of the existence of things there lies a subject which cannot itself be a predicate of any other thing; nay, we cannot even form a notion of the possibility of such a thing (though we can point out examples of its use in experience). The very same incomprehensibility affects the Community of things, as we cannot comprehend how from the state of one thing an inference to the state of quite another thing beyond it, and vice versa, can be drawn, and how substances which have each their own separate existence should depend upon one another necessarily. But I am very far from holding these concepts to be derived merely from experience, and the necessity represented in them, to be imaginary and a mere illusion produced in us by long habit. On the contrary, I have amply shown, that they and the theorems derived from them are firmly established a priori, or before all experience, and have their undoubted objective value, though only with regard to experience.

Sect. 28.

Though I have no notion of such a connection of things in themselves, that they can either exist as substances, or act as causes, or stand in community with others (as parts of a real whole), and I can just as little conceive such properties in appearances as such (because those concepts contain nothing that lies in the appearances, but only what the understanding alone must think): we have yet a notion of such a connection of representations in our understanding, and in judgments generally; consisting in this that representations appear in one sort of judgments as subject in relation to predicates, in another as reason in relation to consequences, and in a third as parts, which constitute together a total possible cognition. Besides we know a priori that without considering the representation of an object as determined in some of these respects, we can have no valid cognition of the object, and, if we should occupy ourselves about the object in itself, there is no possible attribute, by which I could know that it is determined under any of these aspects, that is, under the concept either of substance, or of cause, or (in relation to other substances) of community, for I have no notion of the possibility of such a connection of existence. But the question is not how things in themselves, but how the empirical cognition of things is determined as regards the above aspects of judgments in general, that is, how things, as objects of experience, can and shall be subsumed under these concepts of the understanding. And then it is clear, that I completely comprehend not only the possibility, but also the necessity of subsuming all phenomena under these concepts, that is, of using them for principles of the possibility of experience.

Sect. 29.

When making an experiment with Hume’s problematical concept (his crux metaphysicorum), the concept of cause, we have, in the first place, given a priori, by means of logic, the form of a conditional judgment in general, i.e., we have one given cognition as antecedent and another as consequence. But it is possible, that in perception we may meet with a rule of relation, which runs thus: that a certain phenomenon is constantly followed by another (though not conversely), and this is a case for me to use the hypothetical judgment, and, for instance, to say, if the sun shines long enough upon a body, it grows warm. Here there is indeed as yet no necessity of connection, or concept of cause. But I proceed and say, that if this proposition, which is merely a subjective connection of perceptions, is to be a judgment of experience, it must be considered as necessary and universally valid. Such a proposition would be, “the sun is by its light the cause of heat.” The empirical rule is now considered as a law, and as valid not merely of appearances but valid of them for the purposes of a possible experience which requires universal and therefore necessarily valid rules. I therefore easily comprehend the concept of cause, as a concept necessarily belonging to the mere form of experience, and its possibility as a synthetical union of perceptions in consciousness generally; but I do not at all comprehend the possibility of a thing generally as a cause, because the concept of cause denotes a condition not at all belonging to things, but to experience. It is nothing in fact but an objectively valid cognition of appearances and of their succession, so far as the antecedent can be conjoined with the consequent according to the rule of hypothetical judgments.

Sect. 30.

Hence if the pure concepts of the understanding do not refer to objects of experience but to things in themselves (noumena), they have no signification whatever. They serve, as it were, only to decipher appearances, that we may be able to read them as experience. The principles which arise from their reference to the sensible world, only serve our understanding for empirical use. Beyond this they are arbitrary combinations, without objective reality, and we can neither know their possibility a priori, nor

verify their reference to objects, let alone make it intelligible by any example; because examples can only be borrowed from some possible experience, consequently the objects of these concepts can be found nowhere but in a possible experience.

This complete (though to its originator unexpected) solution of Hume's problem rescues for the pure concepts of the understanding their a priori origin, and for the universal laws of nature their validity, as laws of the understanding, yet in such a way as to limit their use to experience, because their possibility depends solely on the reference of the understanding to experience, but with a completely reversed mode of connection which never occurred to Hume, not by deriving them from experience, but by deriving experience from them.

This is therefore the result of all our foregoing inquiries: "All synthetical principles a priori are nothing more than principles of possible experience," and can never be referred to things in themselves, but to appearances as objects of experience. And hence pure mathematics as well as a pure science of nature can never be referred to anything more than mere appearances, and can only represent either that which makes experience generally possible, or else that which, as it is derived from these principles, must always be capable of being represented in some possible experience.

Sect. 31.

And thus we have at last something definite, upon which to depend in all metaphysical enterprises, which have hitherto, boldly enough but always at random, attempted everything without discrimination. That the aim of their exertions should be so near, struck neither the dogmatical thinkers nor those who, confident in their supposed sound common sense, started with concepts and principles of pure reason (which were legitimate and natural, but destined for mere empirical use) in quest of fields of knowledge, to which they neither knew nor could know any determinate bounds, because they bad never reflected nor were able to reflect on the nature or even on the possibility of such a pure understanding.

Many a naturalist of pure reason (by which I mean the man who believes he can decide in matters of metaphysics without any science) may pretend, that lie long ago by the prophetic spirit of his sound sense, not only suspected, but knew and comprehended, what is here propounded with so much ado, or, if he likes, with prolix and pedantic pomp: "that with all our reason we can never reach beyond the field of experience." But when he is questioned about his rational principles individually, he must grant, that there are many of them which be has not taken from experience, and which are therefore independent of it and valid a priori. How then and on what grounds will he restrain both himself and the dogmatist, who makes use of these concepts and principles beyond all possible experience, because they are recognized to be independent of it? And even he, this adept in sound sense, in spite of all his assumed and cheaply acquired wisdom, is not exempt from wandering inadvertently beyond objects of experience into the field of chimeras. He is often deeply enough involved in them, though in announcing everything as mere probability, rational conjecture, or analogy, be gives by his popular language a color to his groundless pretensions.

Sect. 32.

Since the oldest days of philosophy inquirers into pure reason have conceived, besides the things of sense, or appearances (phenomena), which make up the sensible world, certain creations of the understanding, called noumena, which should constitute an intelligible world. And as appearance and illusion were by those men identified (a thing which we may well excuse in an undeveloped epoch), actuality was only conceded to the beings of thought.

And we indeed, rightly considering objects of sense as mere appearances, confess thereby that they are

based upon a thing in itself, though we know not this thing as it is in itself, but only know its appearances, viz., the way in which our senses are affected by this unknown something. The understanding therefore, by assuming appearances, grants the existence of things in themselves also, and so far we may say, that the representation of such things as form the basis of phenomena, consequently of mere creations of the understanding, is not only admissible, but unavoidable.

Our critical deduction by no means excludes things of that sort (noumena), but rather limits the principles of the Aesthetic [the science of the sensibility] in such a way that they shall not extend to all things, as everything would then be turned into mere appearance, but that they shall only hold good of objects of possible experience. Hereby then objects of the understanding are granted, but with the inculcation of this rule which admits of no exception: that we neither know nor can know anything at all definite of these pure objects of the understanding, because our pure concepts of the understanding as well as our pure intuitions extend to nothing but objects of possible experience, consequently to mere things of sense, and as soon as we leave this sphere these concepts retain no meaning whatever.

Sect. 33.

There is indeed something seductive in our pure concepts of the understanding, which tempts us to a transcendent use, — a use which transcends all possible experience. Not only are our concepts of substance, of power, of action, of reality, and others, quite independent of experience, containing nothing of sense appearance, and so apparently applicable to things in themselves (noumena), but, what strengthens this conjecture, they contain a necessity of determination in themselves, which experience never attains. The concept of cause implies a rule, according to which one state follows another necessarily; but experience can only show us, that one state of things often, or at most, commonly, follows another, and therefore affords neither strict universality, nor necessity.

Hence the concepts of the understanding [categories] have a deeper meaning and import than can be exhausted by their empirical use, and so the understanding inadvertently adds for itself to the house of experience a much more extensive wing, which it fills with nothing but creatures of thought, without ever observing that it has transgressed with its otherwise lawful concepts the bounds of their use.

Sect. 34.

Two important, and even indispensable, though very dry, investigations had therefore become indispensable in the Critique of Pure Reason [viz., the two chapters “The Schematism of the Pure Concepts of the Understanding” and “The Ground of the Distinction of All Objects in General into Phenomena and Noumena]. In the former it is shown, that the senses furnish not the pure concepts of the understanding in concreto, but only the schedule for their use, and that the object conformable to it occurs only in experience (as the product of the understanding from materials of the sensibility). In the latter it is shown, that, although our pure concepts of the understanding and our principles are independent of experience, and despite of the apparently greater sphere of their use, still nothing whatever can be thought by them beyond the field of experience, because they can do nothing but merely determine the logical form of the judgment relatively to given intuitions. But as there is no intuition at all beyond the field of the sensibility, these pure concepts, as they cannot possibly be exhibited in concreto, are void of all meaning; consequently all these noumena, together with their complex, the intelligible world,[P] are nothing but representation of a problem, of which the object in itself is possible, but the solution, from the nature of our understanding, totally impossible. For our understanding is not a faculty of intuition, but of the connection of given intuitions in experience. Experience must therefore contain all the objects for our concepts; but beyond it no concepts have any significance, as there is no intuition that might be subsumed

under them.

Sect. 35.

The imagination may perhaps be forgiven for occasional vagaries, and for not keeping carefully within the limits of experience, since it gains life and vigor by such flights, and since it is always easier to moderate its boldness, than to stimulate its languor. But the understanding which ought to think can never be forgiven for indulging in vagaries; for we depend upon it alone for assistance to set bounds, when necessary, to the vagaries of the imagination.

But the understanding begins its aberrations very innocently and modestly. It first elucidates the elementary cognitions, which inhere in it prior to all experience, but yet must always have their application in experience. It gradually drops these limits, and what is there to prevent it, as it has quite freely derived its principles from itself? And then it proceeds first to newly-imagined powers in nature, then to beings outside nature; in short to a world, for whose construction the materials cannot be wanting, because fertile fiction furnishes them abundantly, and though not confirmed, is never refuted, by experience. This is the reason that young thinkers arc so partial to metaphysics of the truly dogmatical kind, and often sacrifice to it their time and their talents, which might be otherwise better employed.

But there is no use in trying to moderate these fruitless endeavors of pure reason by all manner of cautions as to the difficulties of solving questions so occult, by complaints of the limits of our reason, and by degrading our assertions into mere conjectures. For if their impossibility is not distinctly shown, and reason's cognition of its own essence does not become a true science, in which the field of its right use is distinguished, so to say, with mathematical certainty from that of its worthless and idle use, these fruitless efforts will never be abandoned for good.

How is Nature itself possible?

Section 36.

This question — the highest point that transcendental philosophy can ever reach, and to which, as its boundary and completion, it must proceed-properly contains two questions.

First: How is nature at all possible in the material sense, by intuition, considered as the totality of appearances; how are space, time, and that which fills both — the object of sensation, in general possible? The answer is: By means of the constitution of our Sensibility, according to which it is specifically affected by objects, which are in themselves unknown to it, and totally distinct from those appearances. This answer is given in the Critique itself in the Transcendental Aesthetic, and in these Prolegomena by the solution of the first general problem.

Secondly: How is nature possible in the formal sense, as the totality of the rules, under which all phenomena must come, in order to be thought as connected in experience? The answer must be this: it is only possible by means of the constitution of our Understanding, according to which all the above representations of the sensibility are necessarily referred to a consciousness, and by which the peculiar way in which we think (viz., by rules), and hence experience also, are possible, but must be clearly distinguished from an insight into the objects in themselves. This answer is given in the Critique itself in the Transcendental Logic, and in these Prolegomena, in the course of the solution of the second main problem.

But how this peculiar property of our sensibility itself is possible, or that of our understanding and of the apperception which is necessarily its basis and that of all thinking, cannot be further analyzed or answered, because it is of them that we are in need for all our answers and for all our thinking about objects.

There are many laws of nature, which we can only know by means of experience; but conformity to law in the connection of appearances, i.e., in nature in general, we cannot discover by any experience, because experience itself requires laws which are a priori at the basis of its possibility.

The possibility of experience in general is therefore at the same time the universal law of nature, and the principles of the experience are the very laws of nature. For we do not know nature but as the totality of appearances, i.e., of representations in us, and hence we can only derive the laws of its connection from the principles of their connection in us, that is, from the conditions of their necessary union in consciousness, which constitutes the possibility of experience.

Even the main proposition expounded throughout this section — that universal laws of nature can be distinctly known a priori — leads naturally to the proposition: that the highest legislation of nature must lie in ourselves, i.e., in our understanding, and that we must not seek the universal laws of nature in nature by means of experience, but conversely must seek nature, as to its universal conformity to law, in the conditions of the possibility of experience, which lie in our sensibility and in our understanding. For how were it otherwise possible to know a priori these laws, as they are not rules of analytical cognition, but truly synthetical extensions of it? Such a necessary agreement of the principles of possible experience with the laws of the possibility of nature, can only proceed from one of two reasons: either these laws are drawn from nature by means of experience, or conversely nature is derived from the laws of the possibility of experience in general, and is quite the same as the mere universal conformity to law of the latter. The former is self-contradictory, for the universal laws of nature can and must be known a priori (that is, independent of all experience), and be the foundation of all empirical use of the understanding; the latter alternative therefore alone remains.[P]

But we must distinguish the empirical laws of nature, which always presuppose particular perceptions, from the pure or universal laws of nature, which, without being based on particular perceptions, contain merely the conditions of their necessary union in experience. In relation to the latter, nature and possible experience are quite the same, and as the conformity to law here depends upon the necessary connection of appearances in experience (without which we cannot know any object whatever in the sensible world), consequently upon the original laws of the understanding, it seems at first strange, but is not the less certain, to say: the understanding does not derive its laws (a priori) from, but prescribes them to, nature.

Section 37.

We shall illustrate this seemingly bold proposition by an example, which will show, that laws, which we discover in objects of sensuous intuition (especially when these laws are known as necessary), are commonly held by us to be such as have been placed there by the understanding, in spite of their being similar in all points to the laws of nature, which we ascribe to experience.

Section 38.

If we consider the properties of the circle, by which this figure combines so many arbitrary determinations of space in itself, at once in a universal rule, we cannot avoid attributing a nature to this geometrical thing. Two right lines, for example, which intersect one another and the circle, howsoever they may be drawn, are always divided so that the rectangle constructed with the segments of the one is equal to that constructed with the segments of the other. The question now is: Does this law lie in the circle or in the understanding, that is, Does this figure, independently of the understanding, contain in itself the ground of the law, or does the understanding, having constructed according to its concepts (according to the quality of the radii) the figure itself, introduce into it this law of the chords cutting one another in geometrical proportion? When we follow the proofs of this law, we soon perceive, that it can

only be derived from the condition on which the understanding founds the construction of this figure, and which is that of the equality of the radii. But, if we enlarge this concept, to pursue further the unity of various properties of geometrical figures under common laws, and consider the circle as a conic section, which of course is subject to the same fundamental conditions of construction as other conic sections, we shall find that all the chords which intersect within the ellipse, parabola, and hyperbola, always intersect so that the rectangles of their segments are not indeed equal, but always bear a constant ratio to one another. If we proceed still farther, to the fundamental laws of physical astronomy, we find a physical law of reciprocal attraction diffused over all material nature, the rule of which is: "that it decreases inversely as the square of the distance from each attracting point, i.e., as the spherical surfaces increase, over which this force spreads," which law seems to be necessarily inherent in the very nature of things, and hence is usually propounded as knowable a priori. Simple as the sources of this law are, merely resting upon the relation of spherical surfaces of different radii, its consequences are so valuable with regard to the variety of their agreement and its regularity, that not only are all possible orbits of the celestial bodies conic sections, but such a relation of these orbits to each other results, that no other law of attraction, than that of the inverse square of the distance, can be imagined as fit for a cosmical system.

Here accordingly is a nature that rests upon laws which the understanding knows a priori, and chiefly from the universal principles of the determination of space. Now I ask: Do the laws of nature lie in space, and does the understanding learn them by merely endeavoring to find out the enormous wealth of meaning that lies in space; or do they inhere in the understanding and in the way in which it determines space according to the conditions of the synthetical unity in which its concepts are all centered? Space is something so uniform and as to all particular properties so indeterminate, that we should certainly not seek a store of laws of nature in it. Whereas that which determines space to assume the form of a circle or the figures of a cone and a sphere, is the understanding, so far as it contains the ground of the unity of their constructions. The mere universal form of intuition, called space, must therefore be the substratum of all intuitions determinable to particular objects, and in it of course the condition of the possibility and of the variety of these intuitions lies. But the unity of the objects is entirely determined by the understanding, and on conditions which lie in its own nature; and thus the understanding is the origin of the universal order of nature, in that it comprehends all appearances under its own laws, and thereby first constructs, a priori, experience (as to its form), by means of which whatever is to be known only by experience, is necessarily subjected to its laws. For we are not now concerned with the nature of things in themselves, which is independent of the conditions both of our sensibility and our understanding, but with nature, as an object of possible experience, and in this case the understanding, whilst it makes experience possible, thereby insists that the sensuous world is either not an object of experience at all, or else is nature.

APPENDIX TO THE PURE SCIENCE OF NATURE.

Sect. 39.

Of the System of the Categories. There can be nothing more desirable to a philosopher, than to be able to derive the scattered multiplicity of the concepts or the principles, which had occurred to him in concrete use, from a principle a priori, and to unite everything in this way in one cognition. He formerly only believed that those things, which remained after a certain abstraction, and seemed by comparison among one another to constitute a particular kind of cognitions, were completely collected; but this was only an aggregate. Now he knows, that just so many, neither more nor less, can constitute the mode of cognition, and perceives the necessity of his division, which constitutes comprehension; and now only he has attained a system.

To search in our daily cognition for the concepts, which do not rest upon particular experience, and yet occur in all cognition of experience, where they as it were constitute the mere form of connection,

presupposes neither greater reflection nor deeper insight, than to detect in a language the rules of the actual use of words generally, and thus to collect elements for a grammar. In fact both researches are very nearly related, even though we are not able to give a reason why each language has just this and no other formal constitution, and still less why an exact number of such formal determinations in general are found in it.

Aristotle collected ten pure elementary concepts under the name of Categories.[P] To these, which are also called predicaments, he found himself obliged afterwards to add five post-predicaments, some of which however (prius, simul, and motus) are contained in the former; but this random collection must be considered (and commended) as a mere hint for future inquirers, not as a regularly developed idea, and hence it has, in the present more advanced state of philosophy, been rejected as quite useless.

After long reflection on the pure elements of human knowledge (those which contain nothing empirical), I at last succeeded in distinguishing with certainty and in separating the pure elementary notions of the Sensibility (space and time) from those of the Understanding. Thus the 7th, 8th, and 8th Categories had to be excluded from the old list. And the others were of no service to me; because there was no principle [in them], on which the understanding could be investigated, measured in its completion, and all the functions, whence its pure concepts arise, determined exhaustively and with precision.

But in order to discover such a principle, I looked about for an act of the understanding which comprises all the rest, and is distinguished only by various modifications or phases, in reducing the multiplicity of representation to the unity of thinking in general: I found this act of the understanding to consist in judging. Here then the labors of the logicians were ready at hand, though not yet quite free from defects, and with this help I was enabled to exhibit a complete table of the pure functions of the understanding, which are however undetermined in regard to any object. I finally referred these functions of judging to objects in general, or rather to the condition of determining judgments as objectively valid, and so there arose the pure concepts of the understanding, concerning which I could make certain, that these, and this exact number only, constitute our whole cognition of things from pure understanding. I was justified in calling them by their old name, categories, while I reserved for myself the liberty of adding, under the title of predicables, a complete list of all the concepts deducible from them, by combinations whether among themselves, or with the pure form of the appearance, i.e., space or time, or with its matter, so far as it is not yet empirically determined (viz., the object of sensation in general), as soon as a system of transcendental philosophy should be completed with the construction of which I am engaged in the Critique of Pure Reason itself.

Now the essential point in this system of categories, which distinguishes it from the old rhapsodical collection without any principle, and for which alone it deserves to be considered as philosophy, consists in this: that by means of it the true significance of the pure concepts of the understanding and the condition of their use could be precisely determined. For here it became obvious that they are themselves nothing but logical functions, and as such do not produce the least concept of an object, but require some sensuous intuition as a basis. They therefore only serve to determine empirical judgments, which are otherwise undetermined and indifferent as regards all functions of judging, relatively to these functions, thereby procuring them universal validity, and by means of them making judgments of experience in general possible.

Such an insight into the nature of the categories, which limits them at the same time to the mere use of experience, never occurred either to their first author, or to any of his successors; but without this insight (which immediately depends upon their derivation or deduction), they are quite useless and only a miserable list of names, without explanation or rule for their use. Had the ancients ever conceived such a notion, doubtless the whole study of the pure rational knowledge, which under the name of metaphysics has for centuries spoiled many a sound mind, would have reached us in quite another shape, and would have enlightened the human understanding, instead of actually exhausting it in obscure and vain

speculations, thereby rendering it unfit for true science.

This system of categories makes all treatment of every object of pure reason itself systematic, and affords a direction or clue how and through what points of inquiry every metaphysical consideration must proceed, in order to be complete; for it exhausts all the possible movements (momenta) of the understanding, among which every concept must be classed. In like manner the table of Principles has been formulated, the completeness of which we can only vouch for by the system of the categories. Even in the division of the concepts,22 which must go beyond the physical application of the understanding, it is always the very same clue, which, as it must always be determined a priori by the same fixed points of the human understanding, always forms a closed circle. There is no doubt that the object of a pure conception either of the understanding or of reason, so far as it is to be estimated philosophically and on a priori principles, can in this way be completely known. I could not therefore omit to make use of this clue with regard to one of the most abstract ontological divisions, viz., the various distinctions of "the notions of something and of nothing," and to construct accordingly (Critique, B402, B442-3) a regular and necessary table of their divisions (Critique, B348).[P]

And this system, like every other true one founded on a universal principle, shows its inestimable value in this, that it excludes all foreign concepts, which might otherwise intrude among the pure concepts of the understanding, and determines the place of every cognition. Those concepts, which under the name of "concepts of reflection" have been likewise arranged in a table according to the clue of the categories, intrude, without having any privilege or title to be among the pure concepts of the understanding in Ontology. They are concepts of connection, and thereby of the objects themselves, whereas the former are only concepts of a mere comparison of concepts already given, hence of quite another nature and use. By my systematic division24 they are saved from this confusion. But the value of my special table of the categories will be still more obvious, when we separate the table of the transcendental concepts of Reason from the concepts of the understanding. The latter being of quite another nature and origin, they must have quite another form than the former. This so necessary separation has never yet been made in any system of metaphysics for, as a rule, these rational concepts all mixed up with the categories, like children of one family, which confusion was unavoidable in the absence of a definite system of categories.

P1. ^ I freely grant that these examples do not represent such judgments of perception as ever could become judgments of experience, even though a concept of the understanding were superadded, because they refer merely to feeling, which everybody knows to be merely subjective, and which of course can never be attributed to the object, and consequently never become objective. I only wished to give here an example of a judgment that is merely subjectively valid, containing no ground for universal validity, and thereby for a relation to the object. An example of the judgments of perception, which become judgments of experience by superadded concepts of the understanding, will be given in the next note.

P2. ^ As an easier example, we may take the following: " When the sun shines on the stone, it grows warm." This judgment, however often I and others may have perceived it, is a mere judgment of perception, and contains no necessity; perceptions are only usually conjoined in this manner. But if I say, "The sun warms the stone," I add to the perception a concept of the understanding, viz., that of cause, which connects with the concept of sunshine that of heat as a necessary consequence, and the synthetical judgment becomes of necessity universally valid, viz., objective, and is converted from a perception into experience.

P3. ^ This name seems preferable to the term particularia, which is used for these judgments in logic. For the latter implies the idea that they are not universal. But when I start from unity (in single judgments) and so proceed to universality, I must not [even indirectly and negatively] imply any reference to universality. I think plurality merely without universality, and not the exception from universality. This is necessary, if logical considerations shall form the basis of the pure concepts of the understanding.

However, there is no need of making changes in logic.

P4. ^ But how does this proposition, that judgments of experience contain necessity in the synthesis of perceptions," agree with my statement so often before inculcated, that "experience as cognition a posteriori can afford contingent judgments only? "When I say that experience teaches me something, I mean only the perception that lies in experience, — for example, that heat always follows the shining of the sun on a stone; consequently the proposition of experience is always so far accidental. That this heat necessarily follows the shining of the sun is contained indeed in the judgment of experience (by means of the concept of cause), yet is a fact not learned by experience; for conversely, experience is first of all generated by this addition of the concept of the understanding (of cause) to perception. How perception attains this addition may be seen by referring in the Critique itself to the section on the Transcendental faculty of Judgment.

P5. ^ The three following paragraphs will hardly be understood unless reference be made to what the Critique itself says on the subject of the Principles; they will, however, be of service in giving a general view of the Principles, and in fixing the attention of the main points. [Critique, B187 ff.]

P6. ^ Heat and light are in a small space just as large as to degree as in a large one; in like manner the internal representations, pain, consciousness in general, whether they last a short or a long time, need not vary as to the degree. Hence the quantity is here in a point and in a moment just as great as in any space or time however great. Degrees are therefore capable of increase, but not in intuition, rather in mere sensation (or the quantity of the degree of an intuition). Hence they can only be estimated quantitatively by the relation of 1 to 0, viz, by their capability of decreasing by infinite intermediate degrees to disappearance, or of increasing from naught through infinite gradations to a determinate sensation in a certain time. Quantitas qualitatis est gradus [the quantity of quality is degree].

P7. ^ We speak of the "intelligible world," not (as the usual expression is) "intellectual world." For cognitions are intellectual through the understanding, and refer to our world of sense also; but objects, so far as they can be represented merely by the understanding, and to which none of our sensible intuitions can refer, are termed " intelligible." But as some possible intuition must correspond to every object, we would have to assume an understanding that intuits things immediately; but of such we have not the least notion, nor have we of the things of the understanding, to which it should be applied.

P8. ^ Crusius alone thought of a compromise: that a spirit, who can neither err nor deceive, implanted these laws in us originally. But since false principles often intrude themselves, as indeed the very system of this man shows in not a few examples, we are involved ill difficulties as to the use of such a principle in the absence of sure criteria to distinguish the genuine origin from the spurious as we never can know certainly what the Spirit of truth or the father of lies may have instilled into us.

P9. ^ 1. Substantia, 2. Qualitas 3, Quamtitas, 4. Relatio, 5. Actio, 6. Passio, 7. Quando, 8. Ubi, 9. Situs, 10. Habitus.

P10. ^ On the table of the categories many neat observations may be made, for instance (1) that the third arises from the first and the second joined in one concept (2) that in those of Quantity and of Quality there is merely a progress from unity to totality or from something to nothing (for this purpose the categories of Quality must stand thus: reality, limitation, total negation), without correlata or opposita, whereas those of Relation and of Modality have them; (3) that, as in Logic categorical judgments are the basis of all others, so the category of Substance is the basis of all concepts of actual things; (4) that as Modality in the judgment is not a particular predicate, so by the modal concepts a determination is not superadded to things, etc., etc. Such observations are of great use. If we besides enumerate all the predicables, which we can find pretty completely in any good ontology (for example, Baumgarten's), and arrange them in classes under the categories, in which operation we must not neglect to add as complete a dissection of all these concepts as possible, there will then arise a merely analytical part of metaphysics, which does not contain a single synthetical proposition. which might precede the second (the synthetic), and would by

its precision and completeness be not only useful, but, in virtue of its system, be even to some extent elegant.

THIRD PART OF THE MAIN TRANSCENDENTAL PROBLEM. HOW IS METAPHYSICS IN GENERAL POSSIBLE?

Sect. 40.

Pure mathematics and pure science of nature had no occasion for such a deduction, as we have made of both, for their own safety and certainty. For the former rests upon its own evidence; and the latter (though sprung from pure sources of the understanding) upon experience and its thorough confirmation. Physics cannot altogether refuse and dispense with the testimony of the latter; because with all its certainty, it can never, as philosophy, rival mathematics. Both sciences therefore stood in need of this inquiry, not for themselves, but for the sake of another science, metaphysics.

Metaphysics has to do not only with concepts of nature, which always find their application in experience, but also with pure rational concepts, which never can be given in any possible experience. Consequently the objective reality of these concepts (viz., that they are not mere chimeras), and the truth or falsity of metaphysical assertions, cannot be discovered or confirmed by any experience. This part of metaphysics however is precisely what constitutes its essential end, to which the rest is only a means, and thus this science is in need of such a deduction for its own sake. The third question now proposed relates therefore as it were to the root and essential difference of metaphysics, i.e., the occupation of Reason with itself, and the supposed knowledge of objects arising immediately from this incubation of its own concepts, without requiring, or indeed being able to reach that knowledge through, experience.[P]

Without solving this problem reason never is justified. The empirical use to which reason limits the pure understanding, does not fully satisfy the proper destination of the latter. Every single experience is only a part of the whole sphere of its domain, but the absolute totality of all possible experience is itself not experience. Yet it is a necessary [concrete] problem for reason, the mere representation of which requires concepts quite different from the categories, whose use is only immanent, or refers to experience, so far as it can be given. Whereas the concepts of reason aim at the completeness, i.e., the collective unity of all possible experience, and thereby transcend every given experience. Thus they become transcendent.

As the understanding stands in need of categories for experience, reason contains in itself the source of ideas, by which I mean necessary concepts, whose object cannot be given in any experience. The latter are inherent in the nature of reason, as the former are in that of the understanding. While the former carry with them an illusion likely to mislead, the illusion of the latter is inevitable, though it certainly can be kept from misleading us.

Since all illusion consists in holding the subjective ground of our judgments to be objective, a self-knowledge of pure reason in its transcendent (exaggerated) use is the sole preservative from the aberrations into which reason falls when it mistakes its destination, and refers that to the object transcendently, which only regards its own subject and its guidance in all immanent use.

Sect. 41.

The distinction of ideas, that is, of pure concepts of reason, from categories, or pure concepts of the understanding, as cognitions of a quite distinct species, origin and use, is so important a point in founding a science which is to contain the system of all these a priori cognitions, that without this distinction metaphysics is absolutely impossible, or is at best a random, bungling attempt to build a castle in the air without a knowledge of the materials or of their fitness for any purpose. Had the Critique of Pure Reason

done nothing but first point out this distinction, it had thereby contributed more to clear up our conception of, and to guide our inquiry in, the field of metaphysics, than all the vain efforts which have hitherto been made to satisfy the transcendent problems of pure reason, without ever surmising that we were in quite another field than that of the understanding, and hence classing concepts of the understanding and those of reason together, as if they were of the same kind.

Sect. 42.

All pure cognitions of the understanding have this feature, that their concepts present themselves in experience, and their principles can be confirmed by it; whereas the transcendent cognitions of reason cannot, either as ideas, appear in experience, or, as propositions, ever be confirmed or refuted by it. Hence whatever errors may slip in unawares, can only be discovered by pure reason itself — a discovery of much difficulty, because this very reason naturally becomes dialectical by means of its ideas, and this unavoidable illusion cannot be limited by any objective and dogmatical researches into things, but by a subjective investigation of reason itself as a source of ideas.

Sect. 43.

In the Critique of Pure Reason it was always my greatest care to endeavor not only carefully to distinguish the several species of cognition, but to derive concepts belonging to each one of them from their common source. I did this in order that by knowing whence they originated, I might determine their use with safety, and also have the unanticipated but invaluable advantage of knowing the completeness of my enumeration, classification and specification of concepts a priori, and therefore knowing it according to principles. Without this, metaphysics is mere rhapsody, in which no one knows whether he has enough, or whether and where something is still wanting. We can indeed have this advantage only in pure philosophy, but of this philosophy it constitutes the very essence.

As I had found the origin of the categories in the four logical functions of all the judgments of the understanding, it was quite natural to seek the origin of the ideas in the three functions of the syllogisms of reason. For as soon as these pure concepts of reason (the transcendental ideas) are given, they could hardly, except they be held innate, be found anywhere else, than in the same activity of reason, which, so far as it regards mere form, constitutes the logical element of the syllogisms of reason; but, so far as it represents judgments of the understanding with respect to the one or to the other form a priori, constitutes transcendental concepts of pure reason.

The formal distinction of syllogisms renders their division into categorical, hypothetical, and disjunctive necessary. The concepts of reason founded on them contained therefore, first, the idea of the complete subject (the substantial); secondly, the idea of the complete series of conditions; thirdly, the determination of all concepts in the idea of a complete complex of that which is possible.[P] The first idea is psychological, the second cosmological, the third theological, and, as all three give occasion to Dialectics, yet each in its own way, the division of the whole Dialects of pure reason into its paralogism, its Antinomy, and its Ideal, was arranged accordingly. Through this deduction we may feel assured that all the claims of pure reason are completely represented, and that none can be wanting; because the faculty of reason itself, whence they all take their origin, is thereby completely surveyed.

Sect. 44.

In these general considerations it is also remarkable that the ideas of reason are unlike the categories, of no service to the use of our understanding in experience, but quite dispensable, and become even an impediment to the maxims of a rational cognition of nature. Yet in another aspect still to be determined

they are necessary. Whether the soul is or is not a simple substance, is of no consequence to us in the explanation of its phenomena. For we cannot render the notion of a simple being intelligible by any possible experience that is sensuous or concrete. The notion is therefore quite void as regards all hoped-for insight into the cause of phenomena, and cannot at all serve as a principle of the explanation of that which internal or external experience supplies. So the cosmological ideas of the beginning of the world or of its eternity (a parte ante) cannot be of any greater service to us for the explanation of any event in the world itself. And finally we must, according to a right maxim of the philosophy of nature, refrain from all explanations of the design of nature, drawn from the will of a Supreme Being; because this would not be natural philosophy, but an acknowledgment that we have come to the end of it. The use of these ideas, therefore, is quite different from that of those categories by which (and by the principles built upon which) experience itself first becomes possible. But our laborious analytics of the understanding would be superfluous if we had nothing else in view than the mere cognition Of nature as it can be given in experience; for reason does its work, both in mathematics and in the science of nature, quite safely and well without any of this subtle deduction. Therefore our critique of the understanding combines with the ideas of pure reason for a purpose which lies beyond the empirical use of the understanding; but this we have above declared to be in this aspect totally inadmissible, and without any object or meaning. Yet there must be a harmony between that of the nature of reason and that of the understanding, and the former must contribute to the perfection of the latter, and cannot possibly upset it.

The solution of this question is as follows: Pure reason does not in its ideas point to particular objects, which lie beyond the field of experience, but only requires completeness of the use of the understanding in the system of experience. But this completeness can be a completeness of principles only, not of intuitions and of objects. In order however to represent the ideas definitely, reason conceives them after the fashion of the cognition of an object. The cognition is as far as these rules are concerned completely determined, but the object is only an idea invented for the purpose of bringing the cognition of the understanding as near as possible to the completeness represented by that idea.

Prefatory Remark to the Dialectics of Pure Reason

Sect. 45.

We have above shown in Sections 33 and 34 that the purity of the categories from all admixture of sensuous determinations may mislead reason into extending their use, quite beyond all experience, to things in themselves; though as these categories themselves find no intuition which can give them meaning or sense in concreto, they, as mere logical functions, can represent a thing in general, but not give by themselves alone a determinate concept of anything.

Such hyperbolical objects are distinguished by the appellation of noumena, or pure beings of the understanding (or better, beings of thought), such as, for example, “substance,” but conceived without permanence in time, or “cause,” but not acting in time, etc. Here predicates, that only serve to make the conformity-to-law of experience possible, are applied to these concepts, and yet they are deprived of all the conditions of intuition, on which alone experience is possible, and so these concepts lose all significance.

There is no danger, however, of the understanding spontaneously making an excursion so very wantonly beyond its own bounds into the field of the mere creatures of thought, without being impelled by foreign laws. But when reason, which cannot be fully satisfied with any empirical use of the rules of the understanding, as being always conditioned, requires a completion of this chain of conditions, then the understanding is forced out of its sphere. And then it partly represents objects of experience in a series so extended that no experience can grasp, partly even (with a view to complete the series) it seeks entirely beyond it noumena, to which it can attach that chain, and so, having at last escaped from the conditions of

experience, make its attitude as it were final. These are then the transcendental ideas, which, though according to the true but hidden ends of the natural determination of our reason, they may aim not at extravagant concepts, but at an unbounded extension of their empirical use, yet seduce the understanding by an unavoidable illusion to a transcendent use, which, though deceitful, cannot be restrained within the bounds of experience by any resolution, but only by scientific instruction and with much difficulty.

The Psychological Idea

Sect. 46.

People have long since observed, that in all substances the proper subject, that which remains after all the accidents (as predicates) are abstracted, consequently that which forms the substance of things remains unknown, and various complaints have been made concerning these limits to our knowledge. But it will be well to consider that the human understanding is not to be blamed for its inability to know the substance of things, that is, to determine it by itself, but rather for requiring to know it which is a mere idea definitely as though it were a given object. Pure reason requires us to seek for every predicate of a thing its proper subject, and for this subject, which is itself necessarily nothing but a predicate, its subject, and so on indefinitely (or as far as we can reach). But hence it follows, that we must not hold anything, at which we can arrive, to be an ultimate subject, and that substance itself never can be thought by our understanding, however deep we may penetrate, even if all nature were unveiled to us. For the specific nature of our understanding consists in thinking everything discursively, that is, representing it by concepts, and so by mere predicates, to which therefore the absolute subject must always be wanting. Hence all the real properties, by which we know bodies, are mere accidents, not excepting impenetrability, which we can only represent to ourselves as the effect of a power of which the subject is unknown to us.

Now we appear to have this substance in the consciousness of ourselves (in the thinking subject), and indeed in an immediate intuition; for all the predicates of an internal sense refer to the ego, as a subject, and I cannot conceive myself as the predicate of any other subject. Hence completeness in the reference of the given concepts as predicates to a subject — not merely an idea, but an object — that is, the absolute subject itself, seems to be given in experience. But this expectation is disappointed. For the ego is not a concept,[P] but only the indication of the object of the internal sense, so far as we know it by no further predicate. Consequently it cannot be in itself a predicate of any other thing; but just as little can it be a determinate concept of an absolute subject, but is, as in all other cases, only the reference of the internal phenomena to their unknown subject. Yet this idea (which serves very well, as a regulative principle, totally to destroy all materialistic explanations of the internal phenomena of the soul) occasions by a very natural misunderstanding a very specious argument, which, from this supposed cognition of the substance of our thinking being, infers its nature, so far as the knowledge of it falls quite without the complex of experience.

Sect. 47.

But though we may call this thinking self (the soul) substance, as being the ultimate subject of thinking which cannot be further represented as the predicate of another thing; it remains quite empty and without significance, if permanence — the quality which renders the concept of substances in experience fruitful — cannot be proved of it.

But permanence can never be proved of the concept of a substance, as a thing in itself, but for the purposes of experience only. This is sufficiently shown by the first Analogy of Experience [Critique, B224 ff.], and whoever will not yield to this proof may try for himself whether he can succeed in proving,

from the concept of a subject which does not exist itself as the predicate of another thing, that its existence is thoroughly permanent, and that it cannot either in itself or by any natural cause original or be annihilated. These synthetical a priori propositions can never be proved in themselves, but only in reference to things as objects of possible experience.

Sect. 48.

If therefore from the concept of the soul as a substance, we would infer its permanence, this can hold good as regards possible experience only, not [of the soul] as a thing in itself and beyond all possible experience. But life is the subjective condition of all our possible experience, consequently we can only infer the permanence of the soul in life; for the death of man is the end of all experience which concerns the soul as an object of experience, except the contrary be proved, which is the very question in hand. The permanence of the soul can therefore only be proved (and no one cares for that) during the life of man, but not, as we desire to do, after death; and for this general reason, that the concept of substance, so far as it is to be considered necessarily combined with the concept of permanence, can be so combined only according to the principles of possible experience, and therefore for the purposes of experience only.[P]

Sect. 49.

That there is something real without us which not only corresponds, but must correspond, to our external perceptions, can likewise be proved to be not a connection of things in themselves, but for the sake of experience. This means that there is something empirical, i.e., some phenomenon in space without us, that admits of a satisfactory proof, for we have nothing to do with other objects than those which belong to possible experience; because objects which cannot be given us in any experience, do not exist for us. Empirically without me is that which appears in space, and space, together with all the phenomena which it contains, belongs to the representations, whose connection according to laws of experience proves their objective truth, just as the connection of the phenomena of the internal sense proves the actuality of my soul (as an object of the internal sense). By means of external experience I am conscious of the actuality of bodies, as external phenomena in space, in the same manner as by means of the internal experience I am conscious of the existence of my soul in time, but this soul is only known as an object of the internal sense by phenomena that constitute an internal state, and of which the essence in itself, which forms the basis of these phenomena, is unknown. Cartesian idealism therefore does nothing but distinguish external experience from dreaming; and the conformity to law (as a criterion of its truth) of the former, from the irregularity and the false illusion of the latter. In both it presupposes space and time as conditions of the existence of objects, and it only inquires whether the objects of the external senses, which we when awake put in space, are as actually to be found in it, as the object of the internal sense, the soul, is in time; that is, whether experience carries with it sure criteria to distinguish it from imagination. This doubt, however, may easily be disposed of, and we always do so in common life by investigating the connection of phenomena in both space and time according to universal laws of experience, and we cannot doubt, when the representation of external things throughout agrees therewith, that they constitute truthful experience. Material idealism, in which phenomena are considered as such only according to their connection in experience, may accordingly be very easily refuted; and it is just as sure an experience, that bodies exist without us (in space), as that I myself exist according to the representation of the internal sense (in time): for the notion without us, only signifies existence in space. However as the Ego in the proposition, I am," means not only the object of internal intuition (in time), but the subject of consciousness, just as body means not only external intuition (in space), but the thing-in-itself, which is the basis of this phenomenon; [as this is the case] the question, whether bodies (as phenomena of the

external sense) exist as bodies in nature apart from my thoughts, may without any hesitation be denied. But the question, whether I myself as a phenomenon of the internal sense (the soul according to empirical psychology) exist apart from my faculty of representation in time, is an exactly similar inquiry, and must likewise be answered in the negative. Arid in this manner everything, when it is reduced to its true meaning, is decided and certain. The formal (which I have also called transcendental) actually abolishes the material, or Cartesian, idealism. For if space be nothing but a form of my sensibility, it is as a representation in me just as actual as I myself am, and nothing but the empirical truth of the representations in it remains for consideration. But, if this is not the case, if space and the phenomena in it are something existing without us, then all the criteria of experience beyond our perception can never prove the actuality of these objects without us.

The Cosmological Idea

Sect. 50.

This product of pure reason in its transcendent use is its most remarkable curiosity. It serves as a very powerful agent to rouse philosophy from its dogmatic slumber, and to stimulate it to the arduous task of undertaking a critique of reason itself [Critique B432-595].

I term this idea cosmological, because it always takes its object only from the sensible world, and does not use any other than those whose object is given to sense, consequently it remains in this respect in its native home, it does not become transcendent, and is therefore so far not mere idea; whereas, to conceive the soul as a simple substance, already means to conceive such an object (the simple) as cannot be presented to the senses. Yet the cosmological idea extends the connection of the conditioned with its condition (whether the connection is mathematical or dynamical) so far, that experience never can keep up with it. It is therefore with regard to this point always an idea, whose object never can be adequately given in any experience.

Sect. 51.

In the first place, the use of a system of categories becomes here so obvious and unmistakable, that even if there were not several other proofs of it, this alone would sufficiently prove it indispensable in the system of pure reason. There are only four such transcendent ideas, as there are so many classes of categories; in each of which, however, they refer only to the absolute completeness of the series of the conditions for a given conditioned. In analogy to these cosmological ideas there are only four kinds of dialectical assertions of pure reason, which, as they are dialectical, thereby prove, that to each of them, all equally specious principles of pure reason, a contradictory assertion stands opposed. As all the metaphysical art of the most subtle distinction cannot prevent this opposition, it compels the philosopher to recur to the first sources of pure reason itself. This antinomy, not arbitrarily invented, but founded in the nature of human reason, and hence unavoidable and never ceasing, contains the following four theses together with their antitheses:

1

Thesis: The World has, as to, Time and Space, a Beginning (limit).

Antithesis: The World is, as to Time and Space, infinite.

2

Thesis: Everything in the World consists of [elements that are] simple.

Antithesis: There is nothing simple, but everything is composite.

3

Thesis: There are in the World Causes through Freedom.

Antithesis: There is no Liberty, but all is Nature.

4

Thesis: In the Series of the World-Causes there is some necessary Being.

Antithesis: There is Nothing necessary in the World, but in this Series All is incidental.

Sect. 52 a.

Here is the most singular phenomenon of human reason, no other instance of which can be shown in any other use. If we, as is commonly done, represent to ourselves the appearances of the sensible world as things in themselves, if we assume the principles of their combination as principles universally valid of things in themselves and not merely of experience, as is usually, nay without our Critique, unavoidably done, there arises an unexpected conflict, which never can be removed in the common dogmatical way; because the thesis, as well as the antithesis, can be shown by equally clear, evident, and irresistible proofs — for I pledge myself as to the correctness of all these proofs — and reason therefore perceives that it is divided with itself, a state at which the skeptic rejoices, but which must make the critical philosopher pause and feel ill at ease.

Sect. 52b.

We may blunder in various ways in metaphysics without any fear of being detected in falsehood. For we never can be refuted by experience if we but avoid self-contradiction, which in synthetical, though purely fictitious propositions, may be done whenever the concepts, which we connect, are mere ideas, that cannot be given (in their whole content) in experience. For how can we make out by experience, whether the world is from eternity or had a beginning, whether matter is infinitely divisible or consists of simple parts? Such concept cannot be given in any experience, be it ever so extensive, and consequently the falsehood either of the positive or the negative proposition cannot be discovered by this touchstone.

The only possible way in which reason could have revealed unintentionally its secret Dialectics, falsely announced as Dogmatics, would be when it were made to ground an assertion upon a universally admitted principle, and to deduce the exact contrary with the greatest accuracy of inference from another which is equally granted. This is actually here the case with regard to four natural ideas of reason, whence four assertions on the one side, and as many counter-assertions on the other arise, each consistently following from universally-acknowledged principles. Thus they reveal by the use of these principles the dialectical illusion of pure reason which would otherwise forever remain concealed.

This is therefore a decisive experiment, which must necessarily expose any error lying hidden in the assumptions of reason.[P] Contradictory propositions cannot both be false, except the concept, which is the subject of both, is self-contradictory; for example, the propositions, “a square circle is round, and a square circle is not round,” are both false. For, as to the former it is false, that the circle is round, because it is quadrangular; and it is likewise false, that it is not round, that is, angular, because it is a circle. For the logical criterion of the impossibility of a concept consists in this, that if we presuppose it, two contradictory propositions both become false; consequently, as no middle between them is conceivable, nothing at all is thought by that concept.

Sect. 52c.

The first two antinomies, which I call mathematical, because they are concerned with the addition or division of the homogeneous, are founded on such a self-contradictory concept; and hence I explain how it happens, that both the Thesis and Antithesis of the two are false.

When I speak of objects in time and in space, it is not of things in themselves, of which I know nothing, but of things in appearance, that is, of experience, as the particular way of cognizing objects which is afforded to man. I must not say of what I think in time or in space, that in itself, and independent of these my thoughts, it exists in space and in time; for in that case I should contradict myself; because space and time, together with the appearances in them, are nothing existing in themselves and outside of my representations, but are themselves only modes of representation, and it is palpably contradictory to say, that a mere mode of representation exists without our representation. Objects of the senses therefore exist only in experience; whereas to give them a self-subsisting existence apart from experience or before it, is merely to represent to ourselves that experience actually exists apart from experience or prior to it.

Now if I inquire after the magnitude of the world, as to space and time, it is equally impossible, as regards all my notions, to declare it infinite or to declare it finite. For neither assertion can be contained in experience, because experience either of an infinite space, or of an infinite time elapsed, or again, of the boundary of the world by a void space, or by an antecedent void time, is impossible; these are mere ideas. This quantity of the world, which is determined in either way, should therefore exist in the world itself apart from all experience. This contradicts the notion of a world of sense, which is merely a complex of the appearances whose existence and connection occur only in our representations, that is, in experience, since this latter is not an object in itself, but a mere mode of representation. Hence it follows, that as the concept of an absolutely existing world of sense is self-contradictory, the solution of the problem concerning its quantity, whether attempted affirmatively or negatively, is always false.

The same holds good of the second antinomy, which relates to the division of phenomena. For these are mere representations, and the parts exist merely in their representation, consequently in the division, or in a possible experience where they are given, and the division reaches only as far as this latter reaches. To assume that an appearance, e.g., that of body, contains in itself before all experience all the parts, which any possible experience can ever reach, is to impute to a mere appearance, which can exist only in experience, an existence previous to experience. In other words, it would mean that mere representations exist before they can be found in our faculty of representation. Such an assertion is self-contradictory, as also every solution of our misunderstood problem, whether we maintain, that bodies in themselves consist of an infinite number of parts, or of a finite number of simple parts.

Sect. 53.

In the first (the mathematical) class of antinomies the falsehood of the assumption consists in representing in one concept something self-contradictory as if it were compatible (i.e., an appearance as an object in itself). But, as to the second (the dynamical) class of antinomies, the falsehood of the representation consists in representing as contradictory what is compatible; so that, as in the former case, the opposed assertions are both false, in this case, on the other hand, where they are opposed to one another by mere misunderstanding, they may both be true.

Any mathematical connection necessarily presupposes homogeneity of what is connected (in the concept of magnitude), while the dynamical one by no means requires the same. When we have to deal with extended magnitudes, all the parts must be homogeneous with one another and with the whole; whereas, in the connection of cause and effect, homogeneity may indeed likewise be found, but is not necessary; for the concept of causality (by means of which something is posited through something else

quite different from it), at all events, does not require it.

If the objects of the world of sense are taken for things in themselves, and the above laws of nature for the laws of things in themselves, the contradiction would be unavoidable. So also, if the subject of freedom were, like other objects, represented as mere appearance, the contradiction would be just as unavoidable, for the same predicate would at once be affirmed and denied of the same kind of object in the same sense. But if natural necessity is referred merely to appearances, and freedom merely to things in themselves, no contradiction arises, if we at once assume, or admit both kinds of causality, however difficult or impossible it may be to make the latter kind conceivable.

In appearance every effect is an event, or something that happens in time; it must, according to the universal law of nature, be preceded by a determination of the causality of its cause (a state of the cause), which the effect follows according to a constant law. But this determination of the cause as causality must likewise be something that takes place or happens; the cause must have begun to act, otherwise no succession between it and the effect could be conceived. Otherwise the effect, as well as the causality of the cause, would have always existed. Therefore the determination of the cause to act must also have originated among appearances, and must consequently, as well as its effect, be an event, which must again have its cause, and so on; hence natural necessity must be the condition, on which effective causes are determined. Whereas if freedom is to be a property of certain causes of appearances, it must, as regards these, which are events, be a faculty of starting them spontaneously, that is, without the causality of the cause itself, and hence without requiring any other ground to determine its start. But then the cause, as to its causality, must not rank under time-determinations of its state, that is, it cannot be an appearance, and must be considered a thing in itself, while its effects would be only appearances.[P] If without contradiction we can think of the beings of understanding as exercising such an influence on appearances, then natural necessity will attach to all connections of cause and effect in the sensuous world, though on the other hand, freedom can be granted to such cause, as is itself not an appearance (but the foundation of appearance). Nature therefore and freedom can without contradiction be attributed to the very same thing, but in different relations — on one side as a phenomenon, on the other as a thing in itself.

We have in us a faculty, which not only stands in connection with its subjective determining grounds that are the natural causes of its actions, and is so far the faculty of a being that itself belongs to appearances, but is also referred to objective grounds, that are only ideas, so far as they can determine this faculty, a connection which is expressed by the word ought. This faculty is called reason, and, so far as we consider a being (man) entirely according to this objectively determinable reason, he cannot be considered as a being of sense, but this property is that of a thing in itself, of which we cannot comprehend the possibility — I mean how the ought (which however has never yet taken place) should determine its activity, and can become the cause of actions, whose effect is an appearance in the sensible world. Yet the causality of reason would be freedom with regard to the effects in the sensuous world, so far as we can consider objective grounds, which are themselves ideas, as their determinants. For its action in that case would not depend upon subjective conditions, consequently not upon those of time, and of course not upon the law of nature, which serves to determine them, because grounds of reason give to actions the rule universally, according to principles, without the influence of the circumstances of either time or place.

What I adduce here is merely meant as an example to make the thing intelligible, and does not necessarily belong to our problem, which must be decided from mere concepts, independently of the properties which we meet in the actual world.

Now I may say without contradiction: that all the actions of rational beings, so far as they are appearances (occurring in any experience), are subject to the necessity of nature; but the same actions, as regards merely the rational subject and its faculty of acting according to mere reason, are free. For what is required for the necessity of nature? Nothing more than the determinability of every event in the world of

sense according to constant laws, that is, a reference to cause in the appearance; in this process the thing in itself at its foundation and its causality remain unknown. But I say, that the law of nature remains, whether the rational being is the cause of the effects in the sensuous world from reason, that is, through freedom, or whether it does not determine them on grounds of reason. For, if the former is the case, the action is performed according to maxims, the effect of which as appearance is always conformable to constant laws; if the latter is the case, and the action not performed on principles of reason, it is subjected to the empirical laws of the sensibility, and in both cases the effects are connected according to constant laws; more than this we do not require or know concerning natural necessity. But in the former case reason is the cause of these laws of nature, and therefore free; in the latter the effects follow according to mere natural laws of sensibility, because reason does not influence it; but reason itself is not determined on that account by the sensibility, and is therefore free in this case too. Freedom is therefore no hindrance to natural law in appearance, neither does this law abrogate the freedom of the practical use of reason, which is connected with things in themselves, as determining grounds.

Thus practical freedom, viz., the freedom in which reason possesses causality according to objectively determining grounds, is rescued and yet natural necessity is not in the least curtailed with regard to the very same effects, as appearances. The same remarks will serve to explain what we had to say concerning transcendental freedom and its compatibility with natural necessity (in the same subject, but not taken in the same reference). For, as to this, every beginning of the action of a being from objective causes regarded as determining grounds, is always a first start, though the same action is in the series of appearances only a subordinate start, which must be preceded by a state of the cause, which determines it, and is itself determined in the same manner by another immediately preceding. Thus we are able, in rational beings, or in beings generally, so far as their causality is determined in them as things in themselves, to imagine a faculty of beginning from itself a series of states, without falling into contradiction with the laws of nature. For the relation of the action to objective grounds of reason is not a time-relation; in this case that which determines the causality does not precede in time the action, because such determining grounds represent not a reference to objects of sense, e.g., to causes in the appearances, but to determining causes, as things in themselves, which do not rank under conditions of time. And in this way the action, with regard to the causality of reason, can be considered as a first start in respect to the series of appearances, and yet also as a merely subordinate beginning. We may therefore without contradiction consider it in the former aspect as free, but in the latter (in so far as it is merely appearance) as subject to natural necessity.

As to the fourth Antinomy, it is solved in the same way as the conflict of reason with itself in the third. For, provided the cause in the appearance is distinguished from the cause of the appearance (so far as it can be thought as a thing in itself), both propositions are perfectly reconcilable: the one, that there is nowhere in the sensuous world a cause (according to similar laws of causality), whose existence is absolutely necessary; the other, that this world is nevertheless connected with a Necessary Being as its cause (but of another kind and according to another law). The incompatibility of these propositions entirely rests upon the mistake of extending what is valid merely of appearances to things in themselves, and in general confusing both in one concept.

Sect. 54.

This then is the proposition and this the solution of the whole antinomy, in which reason finds itself involved in the application of its principles to the sensible world. The former alone (the mere proposition) would be a considerable service in the cause of our knowledge of human reason, even though the solution might fail to fully satisfy the reader, who has here to combat a natural illusion, which has been but recently exposed to him, and which he had hitherto always regarded as genuine. For one

result at least is unavoidable. As it is quite impossible to prevent this conflict of reason with itself-so long as the objects of the sensible world are taken for things in themselves, and not for mere appearances, which they are in fact-the reader is thereby compelled to examine over again the deduction of all our a priori cognition and the proof which I have given of my deduction in order to come to a decision on the question. This is all I require at present; for when in this occupation he shall have thought himself deep enough into the nature of pure reason, those concepts by which alone the solution of the conflict of reason is possible, will become sufficiently familiar to him. Without this preparation I cannot expect an unreserved assent even from the most attentive reader.

The Theological Idea

Sect. 55.

The third transcendental idea, which affords matter for the most important, but, if pursued only speculatively, transcendent and thereby dialectical use of reason, is the ideal of pure reason. Reason in this case does not, as with the psychological and the cosmological Ideas, begin from experience, and err by exaggerating its grounds, in striving to attain, if possible, the absolute completeness of their series. It rather totally breaks with experience, and from mere concepts of what constitutes the absolute completeness of a thing in general, consequently by means of the idea of a most perfect primal Being, it proceeds to determine the possibility and therefore the actuality of all other things. And so the mere presupposition of a Being, who is conceived not in the series of experience, yet for the purposes of experience-for the sake of comprehending its connection, order, and unity — i.e., the idea [the notion of it], is more easily distinguished from the concept of the understanding here, than in the former cases. Hence we can easily expose the dialectical illusion which arises from our making the subjective conditions of our thinking objective conditions of objects themselves, and an hypothesis necessary for the satisfaction of our reason, a dogma. As the observations of the Critique on the pretensions of transcendental theology are intelligible, clear, and decisive [Critique, B595-670), I have nothing more to add on the subject.

General Remark on the Transcendental Ideas.

Sect. 56.

The objects, which are given us by experience, are in many respects incomprehensible, and many questions, to which the law of nature leads us, when carried beyond a certain point (though quite conformably to the laws of nature), admit of no answer; as for example the question: why substances attract one another? But if we entirely quit nature, or in pursuing its combinations, exceed all possible experience, and so enter the realm of mere ideas, we cannot then say that the object is incomprehensible, and that the nature of things proposes to us insoluble problems. For we are not then concerned with nature or in general with given objects, but with concepts, which have their origin merely in our reason, and with mere creations of thought; and all the problems that arise from our notions of them must be solved, because of course reason can and must give a full account of its own procedure.[P] As the psychological, cosmological, and theological Ideas are nothing but pure concepts of reason, which cannot be given in any experience, the questions which reason asks us about them are put to us not by the objects, but by mere maxims of our reason for the sake of its own satisfaction. They must all be capable of satisfactory answers, which is done by showing that they are principles which bring our use of the understanding into thorough agreement, completeness, and synthetical unity, and that they so far hold good of experience only, but of experience as a whole. Although an absolute whole of experience is impossible, the idea of a whole of cognition according to principles must impart to our knowledge a peculiar kind of unity, that of a

system, without which it is nothing but piecework, and cannot be used for proving the existence of a highest purpose (which can only be the general system of all purposes), I do not here refer only to the practical, but also to the highest purpose of the speculative use of reason.

The transcendental Ideas therefore express the peculiar application of reason as a principle of systematic unity in the use of the understanding. Yet if we assume this unity of the mode of cognition to be attached to the object of cognition, if we regard that which is merely regulative to be constitutive, and if we persuade ourselves that we can by means of these Ideas enlarge our cognition transcendently, or far beyond all possible experience, while it only serves to render experience within itself as nearly complete as possible, i.e., to limit its progress by nothing that cannot belong to experience: we suffer from a mere misunderstanding in our estimate of the proper application of our reason and of its principles, and from a Dialectic, which both confuses the empirical use of reason, and also sets reason at variance with itself.

P1. ^ If we can say, that a science is actual at least in the idea of all men, as soon as it appears that the problems which lead to it are proposed to everybody by the nature of human reason, and that therefore many (though faulty) endeavors are unavoidably made in its behalf, then we are bound to say that metaphysics is subjectively (and indeed necessarily) actual, and therefore we justly ask, how is it (objectively) possible.

P2. ^ In disjunctive judgments we consider all possibility as divided in respect to a particular concept. By the ontological principle of the universal determination of a thing in general, I understand the principle that either the one or the other of all possible contradictory predicates must be assigned to any object. This is at the same time the principle of all disjunctive judgments, constituting the foundation of our conception of possibility, and in it the possibility of every object in general is considered as determined. This may serve as a slight explanation of the above proposition: that the activity of reason in disjunctive syllogisms is formally the same as that by which it fashions the idea of a universal conception of all reality, containing in itself that which is positive in all contradictory predicates.

P3. ^ Were the representation of the apperception (the Ego) a concept, by which anything could be thought, it could be used as a predicate ‘of other things or contain predicates in itself. But it is nothing more than the feeling of an existence without the least definite conception and is only the representation of that to which all thinking stands in relation (relative accidentis).

P4. ^ It is indeed very remarkable how carelessly metaphysicians have always passed over the principle of the permanents of substances without ever attempting a proof of it; doubtless because they found themselves abandoned by all proofs as soon as they began to deal with the concept of substance. Common sense, which felt distinctly that without this presupposition no union of perceptions in experience is possible, supplied the want by a postulate. From experience itself it never could derive such a principle, partly because substances cannot be so traced in all their alterations and dissolutions, that the matter can always be found undiminished, partly because the principle contains necessity, which is always the sign of an a priori principle. People then boldly applied this postulate to the concept of soul as a substance, and concluded a necessary continuance of the soul after the death of man (especially as the simplicity of this substance, which is interred from the indivisibility of consciousness, secured it from destruction by dissolution). Had they found the genuine source of this principles — a discovery which requires deeper researches than they were ever inclined to make — they would have seen, that the law of the permanence of substances has place for the purposes of experience only, and hence can hold good of things so far as they are to be known and conjoined with others in experience, but never independently of all possible experience, and consequently cannot hold good of the soul after death.

P5. ^ I therefore would be pleased to have the critical reader to devote to this antinomy of pure reason his chief attention, because nature itself seems to have established it with a view to stagger reason in its daring pretensions, and to force it to self-examination. For every proof, which I have given, as well of the

thesis as of the antithesis, I undertake to be responsible, and thereby to show the certainty of the inevitable antinomy of reason. When the reader is brought by this curious phenomenon to fall back upon the proof of the presumption upon which it rests, he will feet himself obliged to investigate the ultimate foundation of all the cognition of pure reason with me more thoroughly.

P6. ^ The idea of freedom occurs only in the relation of the intellectual, as cause, to the appearance, as effect. Hence we cannot attribute freedom to matter in regard to the incessant action by which it fills its space. though this action takes place from an internal principle. We can likewise find no notion of freedom suitable to purely rational beings, for instance, to God, so far as his action is immanent. For his action, though independent of external determining causes, is determined in his eternal reason, that is, in the divine nature. It is only, if something, is to start by an action, and so the effect occurs in the sequence of time, or in the world of sense (e.g., the beginning of the world), that we can put the question, whether the causality of the cause must in its turn have been started, or whether the cause can originate an effect without its causality itself beginning. In the former case the concept of this causality is a concept of natural necessity, in the latter, that of freedom. From this the reader will see. that, as I explained freedom to be the faculty of starting an event spontaneously, I have exactly hit the notion which is the problem of metaphysics.

P7. ^ Herr Platner in his Aphorisms acutely says (Sects. 728, 729), "If reason be a criterion, no concept, which is incomprehensible to human reason, can be possible. Incomprehensibility has place in what is actual only. Here incomprehensibility arises from the insufficiency of the acquired ideas." It sounds paradoxical, but is otherwise not strange to say, that in nature there is much incomprehensible (e.g., the faculty of generation) but if we mount still higher, and even go beyond nature, everything again becomes comprehensible; for we then quit entirely the objects, which can be given us, and occupy ourselves merely about ideas, in which occupation we can easily comprehend the law that reason prescribes by them to the understanding for its use in experience, because the law is the reason's own product.

CONCLUSION:

ON THE DETERMINATION OF THE BOUNDS OF PURE REASON

Section 57.

Having adduced the clearest arguments, it would be absurd for us to hope that we can know more of any object, than belongs to the possible experience of it, or lay claim to the least atom of knowledge about anything not assumed to be an object of possible experience, which would determine it according to the constitution it has in itself. For how could we determine anything in this way, since time, space, and the categories, and still more all the concepts formed by empirical experience or perception in the sensible world [Anschauung], have and can have no other use, than to make experience possible. And if this condition is omitted from the pure concepts of the understanding, they do not determine any object, and have no meaning whatever.

But it would be on the other hand a still greater absurdity if we conceded no things in themselves, or set up our experience for the only possible mode of knowing things, our mode of intuition of them in space and in time for the only possible way, and our discursive understanding for the archetype of every possible understanding; in fact if we wished to have the principles of the possibility of experience considered universal conditions of things in themselves.

Our principles, which limit the use of reason to possible experience, might in this way become transcendent, and the limits of our reason be set up as limits of the possibility of things in themselves (as Hume's Dialogues may illustrate), if a careful critique did not guard the bounds of our reason with respect to its empirical use, and set a limit to its pretensions. Skepticism originally arose from metaphysics and

its licentious dialectics. At first it might, merely to favor the empirical use of reason, announce everything that transcends this use as worthless and deceitful; but by and by, when it was perceived that the very same principles that are used in experience, insensibly, and apparently with the same right, led still further than experience extends, then men began to doubt even the propositions of experience. But here there is no danger; for common sense will doubtless always assert its rights. A certain confusion, however, arose in science which cannot determine how far reason is to be trusted, and why only so far and no further, and this confusion can only be cleared up and all future relapses obviated by a formal determination, on principle, of the boundary of the use of our reason.

We cannot indeed, beyond all possible experience, form a definite notion of what things in themselves may be. Yet we are not at liberty to abstain entirely from inquiring into them; for experience never satisfies reason fully, but in answering questions, refers us further and further back, and leaves us dissatisfied with regard to their complete solution. This any one may gather from the Dialectics of pure reason, which therefore has its good subjective grounds. Having acquired, as regards the nature of our soul, a clear conception of the subject, and having come to the conviction, that its manifestations cannot be explained materialistically, who can refrain from asking what the soul really is, and, if no concept of experience suffices for the purpose, from accounting for it by a concept of reason (that of a simple immaterial being), though we cannot by any means prove its objective reality? Who can satisfy himself with mere empirical knowledge in all the cosmological questions of the duration and of the quantity of the world, of freedom or of natural necessity, since every answer given on principles of experience begets a fresh question, which likewise requires its answer and thereby clearly shows the insufficiency of all physical modes of explanation to satisfy reason? Finally, who does not see in the thoroughgoing contingency and dependence of all his thoughts and assumptions on mere principles of experience, the impossibility of stopping there? And who does not feel himself compelled, notwithstanding all interdictions against losing himself in transcendent ideas, to seek rest and contentment beyond all the concepts which he can vindicate by experience, in the concept of a Being, the possibility of which we cannot conceive, but at the same time cannot be refuted, because it relates to a mere being of the understanding, and without it reason must needs remain forever dissatisfied?

Bounds (in extended beings) always presuppose a space existing outside a certain definite place, and enclosing it; limits do not require this, but are mere negations, which affect a quantity, so far as it is not absolutely complete. But our reason, as it were, sees in its surroundings a space for the cognition of things in themselves, though we can never have definite notions of them, and are limited to appearances only.

As long as the cognition of reason is homogeneous, definite bounds to it are inconceivable. In mathematics and in natural philosophy human reason admits of limits but not of bounds, viz., that something indeed lies without it, at which it can never arrive, but not that it will at any point find completion in its internal progress. The enlarging of our views in mathematics, and the possibility of new discoveries, are infinite; and the same is the case with the discovery of new properties of nature, of new powers and laws, by continued experience and its rational combination. But limits cannot be mistaken here, for mathematics refers to appearances only, and what cannot be an object of sensuous contemplation, such as the concepts of metaphysics and of morals, lies entirely without its sphere, and it can never lead to them; neither does it require them. It is therefore not a continual progress and an approximation towards these sciences, and there is not, as it were, any point or line of contact. Natural science will never reveal to us the internal constitution of things, which though not appearance, yet can serve as the ultimate ground of explaining appearance. Nor does that science require this for its physical explanations. Nay even if such grounds should be offered from other sources (for instance, the influence of immaterial beings), they must be rejected and not used in the progress of its explanations. For these explanations must only be grounded upon that which as an object of sense can belong to experience, and be brought into connection with our actual perceptions and empirical laws.

But metaphysics leads us towards bounds in the dialectical attempts of pure reason (not undertaken arbitrarily or wantonly, but stimulated thereto by the nature of reason itself). And the transcendental Ideas, as they do not admit of evasion, and are never capable of realization, serve to point out to us actually not only the bounds of the pure use of reason, but also the way to determine them. Such is the end and the use of this natural predisposition of our reason, which has brought forth metaphysics as its favorite child, whose generation, like every other in the world, is not to be ascribed to blind chance, but to an original germ, wisely organized for great ends. For metaphysics, in its fundamental features, perhaps more than any other science, is placed in us by nature itself, and cannot be considered the production of an arbitrary choice or a casual enlargement in the progress of experience from which it is quite disparate.

Reason with all its concepts and laws of the understanding, which suffice for empirical use, i.e., within the sensible world, finds in itself no satisfaction because ever-recurring questions deprive us of all hope of their complete solution. The transcendental ideas, which have that completion in view, are such problems of reason. But it sees clearly, that the sensuous world cannot contain this completion, neither consequently can all the concepts, which serve merely for understanding the world of sense, such as space and time, and whatever we have adduced under the name of pure concepts of the understanding. The sensuous world is nothing but a chain of appearances connected according to universal laws; it has therefore no subsistence by itself; it is not the thing in itself, and consequently must point to that which contains the basis of this experience, to beings which cannot be known merely as phenomena, but as things in themselves. In the cognition of them alone reason can hope to satisfy its desire of completeness in proceeding from the conditioned to its conditions.

We have above (Sections 33, 34) indicated the limits of reason with regard to all cognition of mere creations of thought. Now, since the transcendental ideas have urged us to approach them, and thus have led us, as it were, to the spot where the occupied space (viz., experience) touches the void (that of which we can know nothing, viz., noumena), we can determine the bounds of pure reason. For in all bounds there is something positive (e.g., a surface is the boundary of corporeal space, and is therefore itself a space, a line is a space, which is the boundary of the surface, a point the boundary of the line, but yet always a place in space), whereas limits contain mere negations. The limits pointed out in those paragraphs are not enough after we have discovered that beyond them there still lies something (though we can never know what it is in itself). For the question now is, What is the attitude of our reason in this connection of what we know with what we do not, and never shall, know? This is an actual connection of a known thing with one quite unknown (and which will always remain so), and though what is unknown should not become the least more known-which we cannot even hope-yet the notion of this connection must be definite, and capable of being rendered distinct.

We must therefore accept an immaterial being, a world of understanding, and a Supreme Being (all merely noumena), because in them only, as things in themselves, reason finds that completion and satisfaction, which it can never hope for in the derivation of appearances from their homogeneous grounds, and because these actually have reference to something distinct from them (and totally heterogeneous), as appearances always presuppose an object in itself, and therefore suggest its existence whether we can know more of it or not.

But as we can never cognize these beings of understanding as they are in themselves, that is, definitely, yet must assume them as regards the sensible world, and connect them with it by reason, we are at least able to think this connection by means of such concepts as express their relation to the world of sense. Yet if we represent to ourselves a being of the understanding by nothing but pure concepts of the understanding, we then indeed represent nothing definite to ourselves, consequently our concept has no significance; but if we think it by properties borrowed from the sensuous world, it is no longer a being of understanding, but is conceived as an appearance, and belongs to the sensible world. Let us take an instance from the notion of the Supreme Being.

Our deistic conception is quite a pure concept of reason, but represents only a thing containing all realities, without being able to determine any one of them; because for that purpose an example must be taken from the world of sense, in which case we should have an object of sense only, not something quite heterogeneous, which can never be an object of sense. Suppose I attribute to the Supreme Being understanding, for instance; I have no concept of an understanding other than my own, one that must receive its intuitions by the senses, and which is occupied in bringing them under rules of the unity of consciousness. Then the elements of my concept would always lie in the appearance; I should however by the insufficiency of the appearance be necessitated to go beyond them to the concept of a being which neither depends upon appearance, nor is bound up with them as conditions of its determination. But if I separate understanding from sensibility to obtain a pure understanding, then nothing remains but the mere form of thinking without intuition, by which form alone I can know nothing definite, and consequently no object. For that purpose I should conceive another understanding, such as would directly perceive its objects, but of which I have not the least notion; because the human understanding is discursive, and can only cognize [indirectly] by means of general concepts. And the very same difficulties arise if I attribute a will to the Supreme Being; for I have this concept only by drawing it from my internal experience, and therefore from my dependence for satisfaction upon objects whose existence we require; and so the notion rests upon sensibility, which is absolutely incompatible with the pure concept of the Supreme Being.

Hume's objections to deism are weak, and affect only the proofs, and not the deistic assertion itself. But as regards theism, which depends on a stricter determination of the concept of the Supreme Being which in deism is merely transcendent, they are very strong, and as this concept is formed, in certain (in fact in all common) cases irrefutable. Hume always insists, that by the mere concept of an original being, to which we apply only ontological predicates (eternity, omnipresence, omnipotence), we think nothing definite, and that properties which can yield a concept in concreto must be superadded; that it is not enough to say, it is cause, but we must explain the nature of its causality, for example, that of an understanding and of a will. He then begins his attacks on the essential point itself, i.e., theism, as he; had previously directed his battery only against the proofs of deism, an attack which is not very dangerous to it in its consequences. All his dangerous arguments refer to anthropomorphism, which he holds to be inseparable from theism, and to make it absurd in itself; but if the former be abandoned, the latter must vanish with it, and nothing remain but deism, of which nothing can come, which is of no value, and which cannot serve as any foundation to religion or morals. If this anthropomorphism were really unavoidable, no proofs whatever of the existence of a Supreme Being, even were they all granted, could determine for us the concept of this Being without involving us in contradictions.

If we connect with the command to avoid all transcendent judgments of pure reason, the command (which apparently conflicts with it) to proceed to concepts that lie beyond the field of its immanent (empirical) use, we discover that both can subsist together, but only at the boundary of all lawful use of reason. For this boundary belongs as well to the field of experience, as to that of the creations of thought, and we are thereby taught, as well, bow these so remarkable ideas serve merely for marking the bounds of human reason. On the one hand they give warning not boundlessly to extend cognition of experience, as if nothing but world remained for us to cognize, and yet, on the other hand, not to transgress the bounds of experience, and to think of judging about things beyond them, as things in themselves.

But we stop at this boundary we limit our judgment merely to the relation which the world may have to a Being whose very concept lies beyond all the knowledge which we can attain within the world. For we then do not attribute to the Supreme Being any of the properties in themselves, by which we represent objects of experience, and thereby avoid dogmatic anthropomorphism; but we attribute them to his relation to the world, and allow ourselves a symbolic anthropomorphism, which in fact concerns language only, and not the object itself.

If I say that we are compelled to consider the world as if it were the work of a Supreme Understanding

and Will, I really say nothing more, than that a watch, a ship, a regiment, bears the same relation to the watchmaker, the shipbuilder, the commanding officer, as the world of sense (or whatever constitutes the substratum of this complex of appearances) does to the unknown, which I do not hereby cognize as it is in itself, but as it is for me or in relation to the world, of which I am a part.

Section 58.

Such a cognition is one of analogy, and does not signify (as is commonly understood) an imperfect similarity of two things, but a perfect similarity of relations between two quite dissimilar things.[P] By means of this analogy, however, there remains a concept of the Supreme Being sufficiently determined for us, though we have left out everything that could determine it absolutely and in itself; for we determine it as regards the world and as regards ourselves, and more do we not require. The attacks which Hume makes upon those who would determine this concept absolutely, by taking the materials for so doing from themselves and the world, do not affect us; and he cannot object to us, that we have nothing left if we give up the objective anthropomorphism of the concept of the Supreme Being.

For let us assume at the outset (as Hume in his Dialogues makes Philo grant Cleanthes), as a necessary hypothesis, the deistical concept of the First Being, in which this Being is thought by the mere ontological predicates of substance, of cause, etc. This must be done, because reason, actuated in the sensible world by mere conditions, which are themselves always conditional, cannot otherwise have any satisfaction, and it therefore can be done without falling into anthropomorphism (which transfers predicates from the world of sense to a Being quite distinct from the world), because those predicates are mere categories, which, though they do not give a determinate concept of God, yet give a concept not limited to any conditions of sensibility. Thus nothing can prevent our predicating of this Being a causality through reason with regard to the world, and thus passing to theism, without being obliged to attribute to God in himself this kind of reason, as a property inhering in him. For as to the former, the only possible way of prosecuting the use of reason (as regards all possible experience, in complete harmony with itself) in the world of sense to the highest point, is to assume a supreme reason as a cause of all the connections in the world. Such a principle must be quite advantageous to reason and can hurt it nowhere in its application to nature. As to the latter, reason is thereby not transferred as a property to the First Being in himself, but only to his relation to the world of sense, and so anthropomorphism is entirely avoided. For nothing is considered here but the cause of the form of reason which is perceived everywhere in the world, and reason is attributed to the Supreme Being, so far as it contains the ground of this form of reason in the world, but according to analogy only, that is, so far as this expression shows merely the relation, which the Supreme Cause unknown to us has to the world, in order to determine everything in it conformably to reason in the highest degree. We are thereby kept from using reason as an attribute for the purpose of conceiving God, but instead of conceiving the world in such a manner as is necessary to have the greatest possible use of reason according to principle. We thereby acknowledge that the Supreme Being is quite inscrutable and even unthinkable in any definite way as to what he is in himself. We are thereby kept, on the one band, from making a transcendent use of the concepts which we have of reason as an efficient cause (by means of the will), in order to determine the Divine Nature by properties, which are only borrowed from human nature, and from losing ourselves in gross and extravagant notions, and on the other hand from deluging the contemplation of the world with hyperphysical modes of explanation according to our notions of human reason, which we transfer to God, and so losing for this contemplation its proper application, according to which it should be a rational study of mere nature, and not a presumptuous derivation of its appearances from a Supreme Reason. The expression suited to our feeble notions is, that we conceive the world as if it came, as regarding its existence and internal plan, from a Supreme Reason. By this notion we both know the constitution, which belongs to the world itself, yet without pretending to determine the

nature of its cause in itself, and on the other hand, we transfer the ground of this constitution (of the form of reason in the world) upon the relation of the Supreme Cause to the world, without finding the world sufficient by itself for that purpose.[P]

Thus the difficulties which seem to oppose theism disappear by combining with Hume's principle, "not to carry the use of reason dogmatically beyond the field of all possible experience," this other principle, which be quite overlooked: "not to consider the field of experience as one which bounds itself in the eye of our reason." The Critique of Pure Reason here points out the true mean between dogmatism, which Hume combats, and skepticism, which he would substitute for it — a mean which is not like other means that we find advisable to determine for ourselves as it were mechanically (by adopting something from one side and something from the other), and by which nobody is taught a better way, but such a one as can be accurately determined on principles.

Section 59.

At the beginning of this note I made use of the metaphor of a boundary, in order to establish the limits of reason in regard to its suitable use. The world of sense contains merely appearances, which are not things in themselves, but the understanding must assume these latter ones, viz., noumena, because it knows the objects of experience to be mere appearances. In our reason both are comprised together, and the question is, How does reason proceed to set boundaries to the understanding as regards both these fields? Experience, which contains all that belongs to the sensuous world, does not bound itself; it only proceeds in every case from the conditioned to some other equally conditioned object. Its boundary must lie quite without it, and this field is that of the pure beings of the understanding. But this field, so far as the determination of the nature of these beings is concerned, is an empty space for us; and if dogmatically determined concepts alone are in question, we cannot pass out of the field of possible experience. But as a boundary itself is something positive, which belongs as well to that which lies within, as to the space that lies without the given complex, it is still an actual positive cognition, which reason only acquires by enlarging itself to this boundary, yet without attempting to pass it; because it there finds itself in the presence of an empty space, in which it can conceive forms of things, but not things themselves. But the setting of a boundary to the field of the understanding by something, which is otherwise unknown to it, is still a cognition which belongs to reason even at this standpoint, and by which it is neither confined within the sensible, nor straying without it, but only refers, as befits the knowledge of a boundary, to the relation between that which lies without it, and that which is contained within it.

Natural theology is such a concept at the boundary of human reason, being constrained to look beyond this boundary to the Idea of a Supreme Being (and, for practical purposes to that of an intelligible world also), not in order to determine anything relatively to this pure creation of the understanding, which lies beyond the world of sense, but in order to guide the use of reason within it according to principles of the greatest possible (theoretical as well as practical) unity. For this purpose we make use of the reference of the world of sense to an independent reason, as the cause of all its connections. Thereby we do not purely invent a being, but, as beyond the sensible world there must be something that can only be thought by the pure understanding, we determine that something in this particular way, though only of course according to analogy.

And thus there remains our original proposition, which is the resume of the whole Critique: "that reason by all its a priori principles never teaches us anything more than objects of possible experience, and even of these nothing more than can be known in experience." But this limitation does not prevent reason leading us to the objective boundary of experience, viz., to the reference to something which is not itself an object of experience, but is the ground of all experience. Reason does not however teach us anything concerning the thing in itself: it only instructs us as regards its own complete and highest use in

the field of possible experience. But this is all that can be reasonably desired in the present case, and with which we have cause to be satisfied.

Section 60.

Thus we have fully exhibited metaphysics as it is actually given in the natural predisposition of human reason, and in that which constitutes the essential end of its pursuit, according to its subjective possibility. Though we have found, that this merely natural use of such a predisposition of our reason, if no discipline arising only from a scientific critique bridles and sets limits to it, involves us in transcendent, either apparently or really conflicting, dialectical syllogisms; and this fallacious metaphysics is not only unnecessary as regards the promotion of our knowledge of nature, but even disadvantageous to it: there yet remains a problem worthy of solution, which is to find out the natural ends intended by this disposition to transcendent concepts in our reason, because everything that lies in nature must be originally intended for some useful purpose.

Such an inquiry is of a doubtful nature; and I acknowledge, that what I can say about it is conjecture only, like every speculation about the first ends of nature. The question does not concern the objective validity of metaphysical judgments, but our natural predisposition to them, and therefore does not belong to the system of metaphysics but to anthropology.

When I compare all the transcendental Ideas, the totality of which constitutes the particular problem of natural pure reason, compelling it to quit the mere contemplation of nature, to transcend all possible experience, and in this endeavor to produce the thing (be it knowledge or fiction) called metaphysics, I think I perceive that the aim of this natural tendency is, to free our notions from the fetters of experience and from the limits of the mere contemplation of nature so far as at least to open to us a field containing mere objects for the pure understanding, which no sensibility can reach, not indeed for the purpose of speculatively occupying ourselves with them (for there we can find no ground to stand on), but because practical principles, which, without finding some such scope for their necessary expectation and hope, could not expand to the universality which reason unavoidably requires from a moral point of view.

So I find that the psychological idea (however little it may reveal to me the nature of the human soul, which is higher than all concepts of experience), shows the insufficiency of these concepts plainly enough, and thereby deters me from materialism, the psychological notion of which is unfit for any explanation of nature, and besides confines reason in practical respects. The cosmological ideas, by the obvious insufficiency of all possible cognition of nature to satisfy reason in its lawful inquiry, serve in the same manner to keep us from naturalism, which asserts nature to be sufficient for itself. Finally, all natural necessity in the sensible world is conditional, as it always presupposes the dependence of things upon others, and unconditional necessity must be sought only in the unity of a cause different from the world of sense. But as the causality of this cause, in its turn, were it merely nature, could never render the existence of the contingent (as its consequent) comprehensible, reason frees itself by means of the Theological Idea from fatalism, (both as a blind natural necessity in the coherence of nature itself, without a first principle, and as a blind causality of this principle itself), and leads to the concept of a cause possessing freedom, or of a Supreme Intelligence. Thus the transcendental Ideas serve, if not to instruct us positively, at least to destroy the rash assertions of Materialism, of Naturalism, and of Fatalism, and thus to afford scope for the moral Ideas beyond the field of speculation. These considerations, I should think, explain in some measure the natural predisposition of which I spoke.

The practical value, which a merely speculative science may have, lies without the bounds of this science, and can therefore be considered as a scholium merely, and like all scholia does not form part of the science itself. This application however surely lies within the bounds of philosophy, especially of philosophy drawn from the pure sources of reason, where its speculative use in metaphysics must

necessarily be at unity with its practical use in morals. Hence the unavoidable dialectics of pure reason, considered in metaphysics, as a natural tendency, deserves to be explained not as an illusion merely, which is to be removed, but also, if possible, as a natural provision as regards its end, though this duty, a work of supererogation, cannot justly be assigned to metaphysics proper.

The solutions of these questions which are treated in the Critique [in the chapter on the Regulative Use of the Ideas of Pure Reason] should be considered a second scholium which, however, has a greater affinity with the subject of metaphysics. For there certain rational principles are expounded which determine a priori the order of nature or rather of the understanding, which seeks nature's laws through experience. They seem to be constitutive and legislative with regard to experience, though they spring from pure reason, which cannot be considered, like the understanding, as a principle of possible experience. Now whether or not this harmony rests upon the fact, that just as nature does not inhere in appearances or in their source (the sensibility) itself, but only in so far as the latter is in relation to the understanding, as also a systematic unity in applying the understanding to bring about an entirety of all possible experience can only belong to the understanding when in relation to reason; and whether or not experience is in this way mediately subordinate to the legislation of reason: may be discussed by those who desire to trace the nature of reason even beyond its use in metaphysics, into the general principles of a history of nature. I have represented this task as important, but not attempted its solution, in the book itself.[P]

And thus I conclude the analytical solution of the main question which I had proposed: "How is metaphysics in general possible?" by ascending from the data of its actual use in its consequences, to the grounds of its possibility.

P1. ^ Thus there is an analogy between the juridical relation of human actions and the mechanical relation of motive powers. I never can do anything to an. other man without giving him a right to do the same to me on the same conditions; just as no mass can act with its motive power on another mass without thereby occasioning the other to react equally against it. Here right and motive power are quite dissimilar things, but in their relation there is complete similarity. By means of such an analogy I can obtain a notion of the relation of things which absolutely are unknown to me. For instance, as the promotion of the welfare of children (= a) is to the love of parents (= b), so the welfare of the human species (= c) is to that unknown [quantity which is] in God (= x), which we call love; not as if it had the least similarity to any human inclination, but because we can suppose its relation to the world to be similar to that which things of the world bear one another. But the concept of relation in this case is a mere category, viz., the concept of cause, which has nothing to do with sensibility.

P2. ^ I may say, that the causality of the Supreme Cause holds the same place with regard to the world that human reason does with regard to its works of art. Here the nature of the Supreme Cause itself remains unknown to me: I only compare its effects (the order of the world) which I know, and their conformity to reason, to the effects of human reason which I also know; and hence I term the former reason, without attributing to it on that account what I understand in man by this term, or attaching to it anything else known to me, as its property.

P3. ^ Throughout in the Critique I never lost sight of the plan not to neglect anything, were it ever so recondite, that could render the inquiry into the nature of pure reason complete. Everybody may afterwards carry his researches as far as he pleases, when he has been merely shown what yet remains to be done. It is this a duty which must reasonably be expected of him who has made it his business to survey the whole field, in order to consign it to others for future cultivation and allotment. And to this branch both the scholia belong, which will hardly recommend themselves by their dryness to amateurs, and hence are added here for connoisseurs only.

SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA

HOW IS METAPHYSICS POSSIBLE AS A SCIENCE?

Metaphysics, as a natural disposition of reason, is actual, but if considered by itself alone (as the analytical solution of the third principal question showed), dialectical and illusory. If we think of taking principles from it, and in using them follow the natural, but on that account not less false, illusion, we can never produce science, but only a vain dialectical art, in which one school may outdo another, but none can ever acquire a just and lasting approbation.

In order that as a science metaphysics may be entitled to claim not mere fallacious plausibility, but insight and conviction, a Critique of Reason must itself exhibit the whole stock of a priori concepts, their division according to their various sources (Sensibility, Understanding, and Reason), together with a complete table of them, the analysis of all these concepts, with all their consequences, especially by means of the deduction of these concepts, the possibility of synthetical cognition a priori, the principles of its application and finally its bounds, all in a complete system. Critique, therefore, and critique alone, contains in itself the whole well-proved and well-tested plan, and even all the means required to accomplish metaphysics, as a science; by other ways and means it is impossible. The question here therefore is not so much how this performance is possible, as how to set it going, and induce men of clear heads to quit their hitherto perverted and fruitless cultivation for one that will not deceive, and how such a union for the common end may best be directed.

This much is certain, that whoever has once tasted critique will be ever after disgusted with all dogmatical twaddle which be formerly put up with, because his reason must have something, and could find nothing better for its support. Critique stands in the same relation to the common metaphysics of the schools, as chemistry does to alchemy, or as astronomy to the astrology of the fortune-teller. I pledge myself that nobody who has read through and through, and grasped the principles of critique, even in these Prolegomena only, will ever return to that old and sophistical pseudo-science; but will rather with a certain delight look forward to metaphysics which is now indeed in his power, requiring no more preparatory discoveries, and now at last affording permanent satisfaction to reason. For here is an advantage upon which, of all possible sciences, metaphysics alone can with certainty reckon: that it can be brought to such completion and fixity as to be incapable of further change, or of any augmentation by new discoveries; because here reason has the sources of its knowledge in itself, not in objects and their observation [Anschauung], by which latter its stock of knowledge cannot be further increased. When therefore it has exhibited the fundamental laws of its faculty completely and so definitely as to avoid all misunderstanding, there remains nothing for pure reason to know a priori, nay, there is even no ground to raise further questions. The sure prospect of knowledge so definite and so compact has a peculiar charm, even though we should set aside all its advantages, of which I shall hereafter speak.

All false art, all vain wisdom, lasts its time, but finally destroys itself, and its highest culture is also the epoch of its decay. That this time is come for metaphysics appears from the state into which it has fallen among all learned nations, despite of all the zeal with which other sciences of every kind are prosecuted. The old arrangement of our university studies still preserves its shadow; now and then an Academy of Science tempts men by offering prizes to write essays on it, but it is no longer numbered among thorough sciences; and let any one judge for himself how a man of genius, if he were called a great metaphysician, would receive the compliment, which may be well- meant, but is scarce envied by anybody.

Yet, though the period of the downfall of all dogmatical metaphysics has undoubtedly arrived, we are yet far from being able to say that the period of its regeneration is come by means of a thorough and

complete Critique of Reason. All transitions from a tendency to its contrary pass through the stage of indifference, and this moment is the most dangerous for an author, but, in my opinion, the most favorable for the science. For, when party spirit has died out by a total dissolution of former connections, minds are in the best state to listen to several proposals for an organization according to a new plan.

When I say, that I hope these Prolegomena will excite investigation in the field of critique and afford a new and promising object to sustain the general spirit of philosophy, which seems on its speculative side to want sustenance, I can imagine beforehand, that every one, whom the thorny paths of my Critique have tired and put out of humor, will ask me, upon what I found this hope. My answer is: upon the irresistible law of necessity.

That the human mind will ever give up metaphysical researches is as little to be expected as that we should prefer to give up breathing altogether, to avoid inhaling impure air. There will therefore always be metaphysics in the world; nay, every one, especially every man of reflection, will have it, and for want of a recognized standard, will shape it for himself after his own pattern. What has hitherto been called metaphysics, cannot satisfy any critical mind, but to forego it entirely is impossible; therefore a critique of pure reason itself must now be attempted or, if one exists, investigated, and brought to the full test, because there is no other means of supplying this pressing want, which is something more than mere thirst for knowledge.

Ever since I have come to know critique, whenever I finish reading a book of metaphysical contents, which, by the preciseness of its notions, by variety, order, and an easy style, was not only entertaining but also helpful, I cannot help asking, "Has this author indeed advanced metaphysics a single step?" The learned men, whose works have been useful to me in other respects and always contributed to the culture of my mental powers, will, I hope, forgive me for saying, that I have never been able to find either their essays or my own less important ones (though self-love may recommend them to me) to have advanced the science of metaphysics in the least, and why? Here is the very obvious reason: metaphysics did not then exist as a science, nor can it be gathered piecemeal, but its germ must be fully preformed in the Critique. But in order to prevent all misconception, we must remember what has been already said, that by the analytical treatment of our concepts the understanding gains indeed a great deal, but the science (of metaphysics) is thereby not in the least advanced, because these dissections of concepts are nothing but the materials from which the intention is to carpenter our science. Let the concepts of substance and of accident be ever so well dissected and determined, all this is very well as a preparation for some future use. But if we cannot prove, that in all which exists the substance endures, and only the accidents vary, our science is not the least advanced by all our analyzes. Metaphysics has hitherto never been able to prove a priori either this proposition, or that of sufficient reason, still less any more complex theorem, such as belongs to psychology or cosmology, or indeed any synthetical proposition. By all its analyzing therefore nothing is affected, nothing obtained or forwarded and the science, after all this bustle and noise, still remains as it was in the days of Aristotle, though far better preparations were made for it than of old, if the clue to synthetical cognitions had only been discovered.

If any one thinks himself offended, he is at liberty to refute my charge by producing a single synthetical proposition belonging to metaphysics, which he would prove dogmatically a priori, for until he has actually performed this feat, I shall not grant that he has truly advanced the science; even should this proposition be sufficiently confirmed by common experience. No demand can be more moderate or more equitable, and in the (inevitably certain) event of its non-performance, no assertion more just, than that hitherto metaphysics has never existed as a science.

But there are two things which, in case the challenge be accepted, I must deprecate: first, trifling about probability and conjecture, which are suited as little to metaphysics, as to geometry; and secondly, a decision by means of the magic wand of common sense, which does not convince every one, but which accommodates itself to personal peculiarities.

For as to the former, nothing can be more absurd, than in metaphysics, a philosophy from pure reason to think of grounding our judgments upon probability and conjecture. Everything that is to be cognized a priori is thereby announced as apodeictically certain, and must therefore be proved in this way. We might as well think of grounding geometry or arithmetic upon conjectures. As to the doctrine of chances in the latter, it does not contain probable, but perfectly certain, judgments concerning the degree of the probability of certain cases, under given uniform conditions, which, in the sum of all possible cases, infallibly happen according to the rule, though it is not sufficiently determined in respect to every single chance. Conjectures (by means of induction and of analogy) can be suffered in an empirical science of nature only, yet even there the possibility at least of what we assume must be quite certain.

The appeal to common sense is even more absurd, when concept and principles are announced as valid, not in so far as they hold with regard to experience, but even beyond the conditions of experience. For what is common sense? It is normal good sense, so far it judges right. But what is normal good sense? It is the faculty of the knowledge and use of rules in concreto, as distinguished from the speculative understanding, which is a faculty of knowing rules in abstracto. Common sense can hardly understand the rule, that every event is determined by means of its cause, and can never comprehend it thus generally. It therefore demands an example from experience, and when it hears that this rule means nothing but what it always thought when a pane was broken or a kitchen-utensil missing, it then understands the principle and grants it. Common sense therefore is only of use so far as it can see its rules (though they actually are a priori) confirmed by experience; consequently to comprehend them a priori, or independently of experience, belongs to the speculative understanding, and lies quite beyond the horizon of common sense. But the province of metaphysics is entirely confined to the latter kind of knowledge, and it is certainly a bad index of common sense to appeal to it as a witness, for it cannot here form any opinion whatever, and men look down upon it with contempt until they are in trouble and can find in their speculation neither advice nor help.

It is a common subterfuge of those false friends of common sense (who occasionally prize it highly, but usually despise it) to say, that there must surely be at all events some propositions which are immediately certain, and of which there is no occasion to give any proof, or even any account at all, because we otherwise could never stop inquiring into the grounds of our judgments. But if we except the principle of contradiction, which is not sufficient to show the truth of synthetical judgments, they can never adduce, in proof of this privilege, anything else indubitable, which they can immediately ascribe to common sense, except mathematical propositions, such as twice two make four, between two points there is but one straight line, etc. But these judgments are radically different from those of metaphysics. For in mathematics I myself can, by thinking, construct whatever I represent to myself as possible by a concept: I add to the first two the other two, one by one, and myself make the number four, or I draw in thought from one point to another all manner of lines, equal as well as unequal; yet I can draw one only, which is like itself in all its parts. But I cannot, by all my power of thinking, extract from the concept of a thing the concept of something else, whose existence is necessarily connected with the former, but I must call in experience. And though my understanding furnishes me a priori (yet only in reference to possible experience) with the concept of such a connection (i.e., causation), I cannot exhibit it a priori in intuition, like the concepts of mathematics, and so show its possibility a priori. This concept, together with the principles of its application, always requires, if it is to hold a priori — as is requisite in metaphysics — a justification and deduction of its possibility, because we cannot otherwise know how far it holds good, and whether it can be used in experience only or beyond it also. Therefore in metaphysics, as a speculative science of pure reason, we can never appeal to common sense, but may do so only when we are forced to surrender it, and to renounce all purely speculative cognition, which must always be knowledge, and consequently when we forego metaphysics itself and its instruction, for the sake of adopting a rational faith which alone may be possible for us, and sufficient to our wants, perhaps even

more salutary than knowledge itself. For in this case the attitude of the question is quite altered. Metaphysics must be science, not only as a whole, but in all its parts, otherwise it is nothing; because, as a speculation of pure reason, it finds a hold only on general opinions. Beyond its field, however, probability and common sense may be used with advantage and justly, but on quite special principles, of which the importance always depends on the reference to practical life.

This is what I hold myself justified in requiring for the possibility of metaphysics as a science.

APPENDIX: ON WHAT CAN BE DONE TO MAKE METAPHYSICS AS A SCIENCE ACTUAL

Since all the ways heretofore taken have failed to attain the goal, and since without a preceding critique of pure reason it is not likely ever to be attained, the present essay now before the public has a fair title to an accurate and careful investigation, except it be thought more advisable to give up all pretensions to metaphysics, to which, if men but would consistently adhere to their purpose, no objection can be made. If we take the course of things as it is, not as it ought to be, there are two sorts of judgments: (1) one a judgment which precedes investigation (in our case one in which the reader from his own metaphysics pronounces judgment on the Critique of Pure Reason which was intended to discuss the very possibility of metaphysics); (2) the other a judgment subsequent to investigation. In the latter the reader is enabled to waive for a while the consequences of the critical researches that may be repugnant to his formerly adopted metaphysics, and first examines the grounds whence those consequences are derived. If what common metaphysics propounds were demonstrably certain, as for instance the theorems of geometry, the former way of judging would bold good. For if the consequences of certain principles are repugnant to established truths, these principles are false and without further inquiry to be repudiated. But if metaphysics does not possess a stock of indisputably certain (synthetical) propositions, and should it even be the case that there are a number of them, which, though among the most specious, are by their consequences in mutual collision, and if no sure criterion of the truth of peculiarly metaphysical (synthetical) propositions is to be met with in it, then the former way of judging is not admissible, but the investigation of the principles of the Critique must precede all judgments as to its value.

APPENDIX: ON A SPECIMEN OF A JUDGMENT OF THE CRITIQUE PRIOR TO ITS EXAMINATION

A judgment is to be found in the Gottingischen gelehrten Anzeigen, in the supplement to the third division, of January 19, 1782, pages 40 et seq. [a review authored by Christian Garve]

When an author who is familiar with the subject of his work and endeavors to present his independent reflections in its elaboration, falls into the hands of a reviewer who in his turn, is keen enough to discern the points on which the worth or worthlessness of the book rests, who does not cling to words, but goes to the heart of the subject, sifting and testing more than the mere principles which the author takes as his point of departure, the severity of the judgment may indeed displease the latter, but the public does not care, because it gains thereby. And the author himself may be contented, as an opportunity of correcting or explaining his positions is afforded to him at an early date by the examination of a competent judge, in such a manner, that if he believes himself fundamentally right, he can remove in time any stone of offense that might hurt the success of his work.

I find myself, with my reviewer, in quite another position. He seems not to see at all the real matter of the investigation with which (successfully or unsuccessfully) I have been occupied. It is either impatience at thinking out a lengthy work, or vexation at a threatened reform of a science in which he believed he had brought everything to perfection long ago, or, what I am unwilling to imagine, real narrow-mindedness, that prevents him from ever carrying his thoughts beyond his school-metaphysics. In short, he passes impatiently in review a long series of propositions, by which, without knowing their premises, we can think nothing, intersperses here and there his censure, the reason of which the reader understands just as little as the propositions against which it is directed; and hence [his report] can neither serve the public nor damage me, in the judgment of experts. I should, for these reasons, have passed over this judgment altogether, were it not that it may afford me occasion for some explanations which may in some cases save the readers of these Prolegomena from a misconception.

In order to take a position from which my reviewer could most easily set the whole work in a most unfavorable light, without venturing to trouble himself with any special investigation, he begins and ends by saying: “This work is a system of transcendent (or, as he translates it, of higher) Idealism.”[P]

A glance at this line soon showed me the sort of criticism that I had to expect, much as though the reviewer were one who had never seen or heard of geometry, having found a Euclid, and coming upon various figures in turning over its leaves, were to say, on being asked his opinion of it: “The work is a text-book of drawing; the author introduces a peculiar terminology, in order to give dark, incomprehensible directions, which in the end teach nothing more than what every one can effect by a fair natural accuracy of eye, etc.”

Let us see, in the meantime, what sort of an idealism it is that goes through my whole work, although it does not by a long way constitute the soul of the system.

The dictum of all genuine idealists from the Eleatic school to Bishop Berkeley, is contained in this formula: “All cognition through the senses and experience is nothing but sheer illusion, and only, in the ideas of the pure understanding and reason there is truth.”

The principle that throughout dominates and determines my Idealism, is on the contrary: “All cognition of things merely from pure understanding or pure reason is nothing but sheer illusion, and only in experience is there truth.”

But this is directly contrary to idealism proper. How came I then to use this expression for quite an opposite purpose, and how came my reviewer to see it everywhere?

The solution of this difficulty rests on something that could have been very easily understood from the

general bearing of the work, if the reader had only desired to do so. Space and time, together with all that they contain, are not things nor qualities in themselves, but belong merely to the appearances of the latter: up to this point I am one in confession with the above idealists. But these, and amongst them more particularly Berkeley, regarded space as a mere empirical presentation that, like the phenomenon it contains, is only known to us by means of experience or perception, together with its determinations. I, on the contrary, prove in the first place, that space (and also time, which Berkeley did not consider) and all its determinations a priori, can be known by us, because, no less than time, it inheres in our sensibility as a pure form before all perception or experience and makes all intuition of the same, and therefore all its phenomena, possible. It follows from this, that as truth rests on universal and necessary laws as its criteria, experience, according to Berkeley, can have no criteria of truth, because its phenomena (according to him) have nothing a priori at their foundation; whence it follows, that they are nothing but sheer illusion; whereas with us, space and time (in conjunction with the pure conceptions of the understanding) prescribe their law to all possible experience a priori, and at the same time afford the certain criterion for distinguishing truth from illusion therein.[P]

My so-called (properly critical) idealism is of quite a special character, in that it subverts the ordinary idealism, and that through it all cognition a priori, even that of geometry, first receives objective reality, which, without my demonstrated ideality of space and time, could not be maintained by the most zealous realists. This being the state of the case, I could have wished, in order to avoid all misunderstanding, to have named this conception of mine otherwise, but to alter it altogether was impossible. It may be permitted me however, in future, as has been above intimated, to term it "formal," or better still, "critical" idealism, to distinguish it from the dogmatic idealism of Berkeley, and from the skeptical idealism of Descartes.

Beyond this, I find nothing further remarkable in the judgment of my book. The reviewer criticizes here and there, makes sweeping criticisms, a mode prudently chosen, since it does not betray one's own knowledge or ignorance; a single thorough criticism in detail, had it touched the main question, as is only fair, would have exposed, it may be my error, or it may be my reviewer's measure of insight into this species of research. It was, moreover, not a badly conceived plan, in order at once to take from readers (who are accustomed to form their conceptions of books from newspaper reports) the desire to read the book itself, to pour out in one breath a number of passages in succession, torn from their connection, and their grounds of proof and explanations, and which must necessarily sound senseless, especially considering how antipathetic they are to all school-metaphysics; to exhaust the reader's patience ad nauseam, and then, after having made me acquainted with the sensible proposition that persistent illusion is truth, to conclude with the crude paternal moralization: to what end, then, the quarrel with accepted language, to what end, and whence, the idealistic distinction? A judgment which seeks all that is characteristic of my book, first supposed to be metaphysically heterodox, in a mere innovation of the nomenclature, proves clearly that my would-be judge has understood nothing of the subject, and in addition, has not understood himself.[P]

My reviewer speaks like a man who is conscious of important and superior insight which he keeps hidden; for I am aware of nothing recent with respect to metaphysics that could justify his tone. But he should not withhold his discoveries from the world, for there are doubtless many who, like myself, have not been able to find in all the fine things that have for long past been written in this department, anything that has advanced the science by so much as a finger-breadth; we find indeed the giving a new point to definitions, the supplying of lame proofs with new crutches, the adding to the crazy-quilt of metaphysics fresh patches or changing its pattern; but all this is not what the world requires. The world is tired of metaphysical assertions; it wants the possibility of the science, the sources from which certainty therein can be derived, and certain criteria by which it may distinguish the dialectical illusion of pure reason from truth. To this the critic seems to possess a key, otherwise he would never have spoken out in such a

high tone.

But I am inclined to suspect that no such requirement of the science has ever entered his thoughts, for in that case he would have directed his judgment to this point, and even a mistaken attempt in such an important matter, would have won his respect. If that be the case, we are once more good friends. He may penetrate as deeply as he likes into metaphysics, without any one hindering him; only as concerns that which lies outside metaphysics, its sources, which are to be found in reason, he cannot form a judgment. That my suspicion is not without foundation, is proved by the fact that he does not mention a word about the possibility of synthetic knowledge a priori, the special problem upon the solution of which the fate of metaphysics wholly rests, and upon which my Critique (as well as the present Prolegomena) entirely hinges. The Idealism he encountered, and which he hung upon,: was only taken up in the doctrine as the sole means of solving the above problem (although it received its confirmation on other grounds), and hence he must have shown either that the above problem does not possess the importance I attribute to it (even in these Prolegomena), or that by my conception of appearances, it is either not solved at all, or can be better solved in another way; but I do not find a word of this in the criticism. The reviewer, then, understands nothing of my work, and possibly also nothing of the spirit and essential nature of metaphysics itself; and it is not, what I would rather assume, the hurry of a man incensed at the labor of plodding through so many obstacles, that threw an unfavorable shadow over the work lying before him, and made its fundamental features unrecognizable.

There is a good deal to be done before a learned journal, it matters not with what care its writers may be selected, can maintain its otherwise well-merited reputation, in the field of metaphysics as elsewhere. Other sciences and branches of knowledge have their standard. Mathematics has it, in itself; history and theology, in profane or sacred books; natural science and the art of medicine, in mathematics and experience; jurisprudence, in law books; and even matters of taste in the examples of the ancients. But for the judgment of the thing called metaphysics, the standard has yet to be found. I have made an attempt to determine it, as well as its use. What is to be done, then, until it be found, when works of this kind have to be judged of? If they are of a dogmatic character, one may do what one likes; no one will play the master over others here for long, before some one else appears to deal with him in the same manner. If, however, they are critical in their character, not indeed with reference to other works, but to reason itself, so that the standard of judgment cannot be assumed but has first of all to be sought for, then, though objection and blame may indeed be permitted, yet a certain degree of leniency is indispensable, since the need is common to us all, and the lack of the necessary insight makes the high-handed attitude of judge unwarranted.

In order, however, to connect my defense with the interest of the philosophical commonwealth, I propose a test, which must be decisive as to the mode, whereby all metaphysical investigations may be directed to their common purpose. This is nothing more than what formerly mathematicians have done, in establishing the advantage of their methods by competition. I challenge my critic to demonstrate, as is only just, on a priori grounds, in his way, a single really metaphysical principle asserted by him. Being metaphysical it must be synthetic and cognized a priori from concepts, but it may also be any one of the most indispensable principles, as for instance, the principle of the persistence of substance, or of the necessary determination of events in the world by their causes. If he cannot do this (silence however is confession), he must admit, that as metaphysics without apodictic certainty of propositions of this kind is nothing at all, its possibility or impossibility must before all things be established in a critique of the pure reason. Thus he is bound either to confess that my principles in the Critique are correct, or he must prove their invalidity. But as I can already foresee, that, confidently as he has hitherto relied on the certainty of his principles, when it comes to a strict test he will not find a single one in the whole range of metaphysics he can bring forward, I will concede to him an advantageous condition, which can only be expected in such a competition, and will relieve him of the onus probandi by laying it on myself.

He finds in these Prolegomena and in my Critique [chapter on the theses and antitheses in “The Antinomy of Pure Reason”] eight propositions, of which two and two contradict one another, but each of which necessarily belongs to metaphysics, by which it must either be accepted or rejected (although there is not one that has not in this time been held by some philosopher). Now he has the liberty of selecting any one of these eight propositions at his pleasure, and accepting it without any proof, of which I shall make him a present, but only one (for waste of time will be just as little serviceable to him as to me), and then of attacking my proof of the opposite proposition. If I can save this one, and at the same time show, that according to principles which every dogmatic metaphysics must necessarily recognize, the opposite of the proposition adopted by him can be just as clearly proved, it is thereby established that metaphysics has an hereditary failing, not to be explained, much less set aside, until we ascend to its birth-place, pure reason itself, and thus my Critique must either be accepted or a better one take its place; it must at least be studied, which is the only thing I now require. If, on the other hand, I cannot save my demonstration, then a synthetic proposition a priori from dogmatic principles is to be reckoned to the score of my opponent, then also I will deem my impeachment of ordinary metaphysics as unjust, and pledge myself to recognize his stricture on my Critique as justified (although this would not be the consequence by a long way). To this end it would be necessary, it seems to me, that he should step out of his incognito. Otherwise I do not see how it could be avoided, that instead of dealing with one, I should be honored by several problems coming from anonymous and unqualified opponents.

P1. ^ By no means “higher.” High towers, and metaphysically-great man resembling them, round both of which there is commonly much wind, are not for me. My place is the fruitful bathos, the bottom-land, of experience; and the word transcendental, the meaning of which is so often explained by me but not once grasped by my reviewer (so carelessly has he regarded everything), does not signify something passing beyond all experience, but some. thing that indeed precedes it a priori, but that is intended simply to make cognition of experience possible. If these conceptions overstep experience, their employment is termed transcendent, a word which must be distinguished from transcendental, the latter being limited to the immanent use, that is, to experience. All misunderstandings of this kind have been sufficiently guarded against in the work itself, but my reviewer found his advantage in misunderstanding me.

P2. ^ Idealism proper always has a mystical tendency, and can have no other, but mine is solely designed for the purpose of comprehending the possibility of our cognition a priori as to objects of experience, which is a problem never hitherto solved or even suggested. In this way all mystical idealism falls to the ground, for (as may be seen already in Plato) it inferred from our cognitions a priori (even from those of geometry) another intuition different from that of the senses (namely, an intellectual intuition), because it never occurred to any one that the senses themselves might intuit a priori.

P3. ^ The reviewer often fights with his own shadow. When I oppose the truth of experience to dream, he never thinks that I am here speaking simply of the well-known somnio objective sumto [“dreams taken objectively”] of the Wolffian philosophy, which is merely formal, and with which the distinction between sleeping and waking is in no way concerned, and in a transcendental philosophy indeed can have no place. For the rest, he calls my deduction of the categories and table of the principles of the understanding, “common well-known axioms of logic and ontology, expressed in an idealistic manner.” The reader need only consult these Prolegomena upon this point, to convince himself that a more miserable and historically incorrect judgment could hardly be made.

APPENDIX: PROPOSALS AS TO AN INVESTIGATION OF THE CRITIQUE UPON WHICH A JUDGMENT MAY FOLLOW.

I feel obliged to the honored public even for the silence with which it for a long time favored my Critique, for this proves at least a postponement of judgment, and some supposition that in a work, leaving all beaten tracks and striking out on a new path, in which one cannot at once perhaps so easily find one's way, something may perchance lie, from which an important but at present dead branch of human knowledge may derive new life and productiveness. Hence may have originated a solicitude for the as yet tender shoot, lest it be destroyed by a hasty judgment. A specimen of a judgment, delayed for the above reasons, is now before my eye in the Gothaischen gelehrten Zeitung [24 August 1782], the thoroughness of which (without taking into consideration my praise, which might be suspicious) every reader will himself perceive, from the clear and unperverted presentation of a fragment of one of the first principles of my work.

Since an extensive structure cannot be judged of as a whole from a hurried glance, I propose to test it piece by piece from its foundations, so thereby the present Prolegomena may fitly be used as a general outline with which the work itself may occasionally be compared. This notion, if it were founded on nothing more than my conceit of importance, such as vanity commonly attributes to one's own productions, would be immodest and would deserve to be repudiated with disgust. But now, the interests of speculative philosophy have arrived at the point of total extinction, while human reason hangs upon them with inextinguishable affection, and only after having been ceaselessly deceived does it vainly attempt to change this into indifference.

In our thinking age it is not to be supposed but that many deserving men would use any good opportunity of working for the common interest of the more and more enlightened reason, if there were only some hope of attaining the goal. Mathematics, natural science, laws, arts, even morality, etc., do not completely fill the soul; there is always a space left over, reserved for pure and speculative reason, the vacuity of which prompts us to seek in vagaries, buffooneries, and mysticism for what seems to be employment and entertainment, but what actually is mere pastime; in order to deaden the troublesome voice of reason, which in accordance with its nature requires something that can satisfy it, and not merely subserve other ends or the interests of our inclinations. A consideration, therefore, which is concerned only with reason as it exists for it itself, has as I may reasonably suppose a great fascination for every one who has attempted thus to extend his conceptions, and I may even say a greater than any other theoretical branch of knowledge, for which he would not willingly exchange it, because here all other cognitions, and even purposes, must meet and unite themselves in a whole.

I offer, therefore, these Prolegomena as a sketch and text-book for this investigation, and not the work itself. Although I am even now perfectly satisfied with the latter as far as contents, order, and mode of presentation, and the care that I have expended in weighing and testing every sentence before writing it down, are concerned (for it has taken me years to satisfy myself fully, not only as regards the whole but in some cases even as to the sources of one particular proposition); yet I am not quite satisfied with my exposition in some sections of the doctrine of elements, as for instance in the deduction of the conceptions of the Understanding, or in that on the paralogisms of pure reason, because a certain diffuseness takes away from their clearness, and in place of them, what is here said in the Prolegomena respecting these sections, may be made the basis of the test.

It is the boast of the Germans that where steady and continuous industry are requisite, they can carry things farther than other nations. If this opinion be well founded, an opportunity, a business, presents itself, the successful issue of which we can scarcely doubt, and in which all thinking men can equally take

part, though they have hitherto been unsuccessful in accomplishing it and in thus confirming the above good opinion. This is chiefly because the science in question is of so peculiar a kind, that it can be at once brought to completion and to that enduring state that it will never be able to be brought in the least degree farther or increased by later discoveries, or even changed (leaving here out of account adornment by greater clearness in some places, or additional uses), and this is an advantage no other science has or can have, because there is none so fully isolated and independent of others, and which is concerned with the faculty of cognition pure and simple. And the present moment seems, moreover, not to be unfavorable to my expectation, for just now, in Germany, no one seems to know wherewith to occupy himself, apart from the so-called useful sciences, so as to pursue not mere play, but a business possessing an enduring purpose.

To discover the means how the endeavors of the learned may be united in such a purpose, I must leave to others. In the meantime, it is my intention to persuade any one merely to follow my propositions, or even to flatter me with the hope that he will do so; but attacks, repetitions, limitations, or confirmation, completion, and extension, as the case may be, should be appended. If the matter be but investigated from its foundation, it cannot fail that a system, albeit not my own, shall be erected, that shall be a possession for future generations for which they may have reason to be grateful.

It would lead us too far here to show what kind of metaphysics may be expected, when only the principles of criticism have been perfected, and how, because the old false feathers have been pulled out, she need by no means appear poor and reduced to an insignificant figure, but may be in other respects richly and respectably adorned. But other and great uses which would result from such a reform, strike one immediately. The ordinary metaphysics had its uses, in that it sought out the elementary conceptions of the pure understanding in order to make them clear through analysis, and definite by explanation. In this way it was a training for reason, in whatever direction it might be turned. But this was all the good it did. This service was subsequently effaced when it favored conceit by venturesome assertions, sophistry by subtle dodges and adornment, and shallowness by the ease with which it decided the most difficult problems by means of a little school-wisdom, which is only the more seductive the more it has the choice, on the one hand, of taking something from the language of science, and on the other from that of popular discourse — thus being everything to everybody, but in reality nothing at all. By criticism, however, a standard is given to our judgment, whereby knowledge may be with certainty distinguished from pseudo-science, and firmly founded, being brought into full operation in metaphysics — a mode of thought extending by degrees its beneficial influence over every other use of reason, at once infusing into it the true philosophical spirit. But the service also that metaphysics performs for theology, by making it independent of the judgment of dogmatic speculation, thereby assuring it completely against the attacks of all such opponents, is certainly not to be valued lightly. For ordinary metaphysics, although it promised the latter much advantage, could not keep this promise, and moreover, by summoning speculative dogmatics to its assistance, did nothing but arm enemies against itself. Mysticism, which can prosper in a rationalistic age only when it hides itself behind a system of school-metaphysics, under the protection of which it may venture to rave with a semblance of rationality, is driven from this, its last hiding-place, by critical philosophy. Last, but not least, it cannot be otherwise than important to a teacher of metaphysics, to be able to say with universal assent, that what he expounds is science, and that thereby genuine services will be rendered to the commonweal.

AN ANSWER TO THE QUESTION: “WHAT IS ENLIGHTENMENT?”

Translated by Lewis White Beck

Enlightenment is man’s release from his self-incurred tutelage. Tutelage is man’s inability to make use of his understanding without direction from another. Self-incurred is this tutelage when its cause lies not in lack of reason but in lack of resolution and courage to use it without direction from another. *Sapere aude!* “Have courage to use your own reason!” - that is the motto of enlightenment.

Laziness and cowardice are the reasons why so great a portion of mankind, after nature has long since discharged them from external direction (naturaliter maiorennes), nevertheless remains under lifelong tutelage, and why it is so easy for others to set themselves up as their guardians. It is so easy not to be of age. If I have a book which understands for me, a pastor who has a conscience for me, a physician who decides my diet, and so forth, I need not trouble myself. I need not think, if I can only pay - others will easily undertake the irksome work for me.

That the step to competence is held to be very dangerous by the far greater portion of mankind (and by the entire fair sex) - quite apart from its being arduous is seen to by those guardians who have so kindly assumed superintendence over them. After the guardians have first made their domestic cattle dumb and have made sure that these placid creatures will not dare take a single step without the harness of the cart to which they are tethered, the guardians then show them the danger which threatens if they try to go alone. Actually, however, this danger is not so great, for by falling a few times they would finally learn to walk alone. But an example of this failure makes them timid and ordinarily frightens them away from all further trials.

For any single individual to work himself out of the life under tutelage which has become almost his nature is very difficult. He has come to be fond of his state, and he is for the present really incapable of making use of his reason, for no one has ever let him try it out. Statutes and formulas, those mechanical tools of the rational employment or rather misemployment of his natural gifts, are the fetters of an everlasting tutelage. Whoever throws them off makes only an uncertain leap over the narrowest ditch because he is not accustomed to that kind of free motion. Therefore, there are few who have succeeded by their own exercise of mind both in freeing themselves from incompetence and in achieving a steady pace.

But that the public should enlighten itself is more possible; indeed, if only freedom is granted enlightenment is almost sure to follow. For there will always be some independent thinkers, even among the established guardians of the great masses, who, after throwing off the yoke of tutelage from their own shoulders, will disseminate the spirit of the rational appreciation of both their own worth and every man’s vocation for thinking for himself. But be it noted that the public, which has first been brought under this yoke by their guardians, forces the guardians themselves to remain bound when it is incited to do so by some of the guardians who are themselves capable of some enlightenment - so harmful is it to implant prejudices, for they later take vengeance on their cultivators or on their descendants. Thus the public can only slowly attain enlightenment. Perhaps a fall of personal despotism or of avaricious or tyrannical oppression may be accomplished by revolution, but never a true reform in ways of thinking. Farther, new prejudices will serve as well as old ones to harness the great unthinking masses.

For this enlightenment, however, nothing is required but freedom, and indeed the most harmless among all the things to which this term can properly be applied. It is the freedom to make public use of one’s reason at every point. But I hear on all sides, “Do not argue!” The Officer says: “Do not argue but drill!”

The tax collector: “Do not argue but pay!” The cleric: “Do not argue but believe!” Only one prince in the world says, “Argue as much as you will, and about what you will, but obey!” Everywhere there is restriction on freedom.

Which restriction is an obstacle to enlightenment, and which is not an obstacle but a promoter of it? I answer: The public use of one’s reason must always be free, and it alone can bring about enlightenment among men. The private use of reason, on the other hand, may often be very narrowly restricted without particularly hindering the progress of enlightenment. By the public use of one’s reason I understand the use which a person makes of it as a scholar before the reading public. Private use I call that which one may make of it in a particular civil post or office which is entrusted to him. Many affairs which are conducted in the interest of the community require a certain mechanism through which some members of the community must passively conduct themselves with an artificial unanimity, so that the government may direct them to public ends, or at least prevent them from destroying those ends. Here argument is certainly not allowed - one must obey. But so far as a part of the mechanism regards himself at the same time as a member of the whole community or of a society of world citizens, and thus in the role of a scholar who addresses the public (in the proper sense of the word) through his writings, he certainly can argue without hurting the affairs for which he is in part responsible as a passive member. Thus it would be ruinous for an officer in service to debate about the suitability or utility of a command given to him by his superior; he must obey. But the right to make remarks on errors in the military service and to lay them before the public for judgment cannot equitably be refused him as a scholar. The citizen cannot refuse to pay the taxes imposed on him; indeed, an impudent complaint at those levied on him can be punished as a scandal (as it could occasion general refractoriness). But the same person nevertheless does not act contrary to his duty as a citizen, when, as a scholar, he publicly expresses his thoughts on the inappropriateness or even the injustices of these levies, Similarly a clergyman is obligated to make his sermon to his pupils in catechism and his congregation conform to the symbol of the church which he serves, for he has been accepted on this condition. But as a scholar he has complete freedom, even the calling, to communicate to the public all his carefully tested and well meaning thoughts on that which is erroneous in the symbol and to make suggestions for the better organization of the religious body and church. In doing this there is nothing that could be laid as a burden on his conscience. For what he teaches as a consequence of his office as a representative of the church, this he considers something about which he has not freedom to teach according to his own lights; it is something which he is appointed to propound at the dictation of and in the name of another. He will say, “Our church teaches this or that; those are the proofs which it adduces.” He thus extracts all practical uses for his congregation from statutes to which he himself would not subscribe with full conviction but to the enunciation of which he can very well pledge himself because it is not impossible that truth lies hidden in them, and, in any case, there is at least nothing in them contradictory to inner religion. For if he believed he had found such in them, he could not conscientiously discharge the duties of his office; he would have to give it up. The use, therefore, which an appointed teacher makes of his reason before his congregation is merely private, because this congregation is only a domestic one (even if it be a large gathering); with respect to it, as a priest, he is not free, nor can he be free, because he carries out the orders of another. But as a scholar, whose writings speak to his public, the world, the clergyman in the public use of his reason enjoys an unlimited freedom to use his own reason to speak in his own person. That the guardian of the people (in spiritual things) should themselves be incompetent is an absurdity which amounts to the eternalization of absurdities.

But would not a society of clergymen, perhaps a church conference or a venerable classis (as they call themselves among the Dutch), be justified in obligating itself by oath to a certain unchangeable symbol in order to enjoy an unceasing guardianship over each of its numbers and thereby over the people as a whole, and even to make it eternal? I answer that this is altogether impossible. Such contract, made to shut off all further enlightenment from the human race, is absolutely null and void even if confirmed by the

supreme power, by parliaments, and by the most ceremonious of peace treaties. An age cannot bind itself and ordain to put the succeeding one into such a condition that it cannot extend its (at best very occasional) knowledge, purify itself of errors, and progress in general enlightenment. That would be a crime against human nature, the proper destination of which lies precisely in this progress and the descendants would be fully justified in rejecting those decrees as having been made in an unwarranted and malicious manner.

The touchstone of everything that can be concluded as a law for a people lies in the question whether the people could have imposed such a law on itself. Now such religious compact might be possible for a short and definitely limited time, as it were, in expectation of a better. One might let every citizen, and especially the clergyman, in the role of scholar, make his comments freely and publicly, i.e. through writing, on the erroneous aspects of the present institution. The newly introduced order might last until insight into the nature of these things had become so general and widely approved that through uniting their voices (even if not unanimously) they could bring a proposal to the throne to take those congregations under protection which had united into a changed religious organization according to their better ideas, without, however hindering others who wish to remain in the order. But to unite in a permanent religious institution which is not to be subject to doubt before the public even in the lifetime of one man, and thereby to make a period of time fruitless in the progress of mankind toward improvement, thus working to the disadvantage of posterity - that is absolutely forbidden. For himself (and only for a short time) a man may postpone enlightenment in what he ought to know, but to renounce it for posterity is to injure and trample on the rights of mankind. And what a people may not decree for itself can even less be decreed for them by a monarch, for his lawgiving authority rests on his uniting the general public will in his own. If he only sees to it that all true or alleged improvement stands together with civil order, he can leave it to his subjects to do what they find necessary for their spiritual welfare. This is not his concern, though it is incumbent on him to prevent one of them from violently hindering another in determining and promoting this welfare to the best of his ability. To meddle in these matters lowers his own majesty, since by the writings in which his own subjects seek to present their views he may evaluate his own governance. He can do this when, with deepest understanding, he lays upon himself the reproach, Caesar non est supra grammaticos. Far more does he injure his own majesty when he degrades his supreme power by supporting the ecclesiastical despotism of some tyrants in his state over his other subjects.

If we are asked, “Do we now live in an enlightened age?” the answer is, “No,” but we do live in an age of enlightenment. As things now stand, much is lacking which prevents men from being, or easily becoming, capable of correctly using their own reason in religious matters with assurance and free from outside direction. But on the other hand, we have clear indications that the field has now been opened wherein men may freely deal with these things and that the obstacles to general enlightenment or the release from self-imposed tutelage are gradually being reduced. In this respect, this is the age of enlightenment, or the century of Frederick.

A prince who does not find it unworthy of himself to say that he holds it to be his duty to prescribe nothing to men in religious matters but to give them complete freedom while renouncing the haughty name of tolerance, is himself enlightened and deserves to be esteemed by the grateful world and posterity as the first, at least from the side of government, who divested the human race of its tutelage and left each man free to make use of his reason in matters of conscience. Under him venerable ecclesiastics are allowed, in the role of scholar, and without infringing on their official duties, freely to submit for public testing their judgments and views which here and there diverge from the established symbol. And an even greater freedom is enjoyed by those who are restricted by no official duties. This spirit of freedom spreads beyond this land, even to those in which it must struggle with external obstacles erected by a government which misunderstands its own interest. For an example gives evidence to such a government that in

freedom there is not the least cause for concern about public peace and the stability of the community. Men work themselves gradually out of barbarity if only intentional artifices are not made to hold them in it.

I have placed the main point of enlightenment - the escape of men from their self-incurred tutelage - chiefly in matters of religion because our rulers have no interest in playing guardian with respect to the arts and sciences and also because religious incompetence is not only the most harmful but also the most degrading of all. But the manner of thinking of the head of a state who favors religious enlightenment goes further, and he sees that there is no danger to his lawgiving in allowing his subjects to make public use of their reason and to publish their thoughts on a better formulation of his legislation and even their open-minded criticisms of the laws already made. Of this we have a shining example wherein no monarch is superior to him we honor.

But only one who is himself enlightened, is not afraid of shadows, and has a numerous and well-disciplined army to assure public peace, can say: “Argue as much as you will, and about what you will, only obey!” A republic could not dare say such a thing. Here is shown a strange and unexpected trend in human affairs in which almost everything, looked at in the large, is paradoxical. A greater degree of civil freedom appears advantageous to the freedom of mind of the people, and yet it places inescapable limitations upon it. A lower degree of civil freedom, on the contrary, provides the mind with room for each man to extend himself to his full capacity. As nature has uncovered from under this hard shell the seed for which she most tenderly cares - the propensity and vocation to free thinking - this gradually works back upon the character of the people, who thereby gradually become capable of managing freedom; finally, it affects the principles of government, which finds it to its advantage to treat men, who are now more than machines, in accordance with their dignity.

IDEA FOR A UNIVERSAL HISTORY WITH A COSMOPOLITAN PURPOSE

Translated by Thomas De Quincey

This 1784 essay was completed when Kant was a lecturer in anthropology and geography at Königsberg University. It was published as Kant was gaining repute as a philosopher following the publication of his revolutionary treatise on epistemology, the *Critique of Pure Reason* (1781) and preceding his critique of ethical theory, *Critique of Practical Reason* (1788). *Idea for a Universal History with a Cosmopolitan Purpose* would go on to embroil Kant in controversy due to the political implications of its critique of his contemporary Johann Gottfried Herder.

The essay presents nine propositions through which Kant seeks to prove his claim that rational and moral autonomy will inevitably defeat the compulsions of self-interested individualism. Kant aims to achieve this by advancing a hierarchical account of development of world history. Writing from the perspective of a universal history, Kant valorises an unrealised future state (though he is aware of the problem of theorising without empirical basis, recognising the appearance of irrationality that such an enterprise exhibits and criticising Herder for extracting conclusions from speculative psychologising).

Kant classifies the constitutional republics of contemporary Western Europe — marked as they were by federalism, status-seeking, individualism and a degree of moral and cultural maturity — as belonging to an advanced, though still intermediate, stage of development, judging them to be civilised but not thoroughly moral. All other societies are deemed inferior and judged according to the benchmark of European nation-states. Kant proposes that the European nations were tending towards statehood in a federation characterised by a universalist and cosmopolitan moral culture — a historical end-state also approached by those inferior non-European societies, defined as they still were by the embrace of faith.

Johann Gottfried Herder (1744-1803) was a German philosopher, theologian, poet and literary critic. He is associated with the periods of Enlightenment, Sturm und Drang and Weimar Classicism.

CONTENTS

A TRANSLATION FROM KANT
PROPOSITION THE FIRST
PROPOSITION THE SECOND
PROPOSITION THE THIRD
PROPOSITION THE FOURTH
PROPOSITION THE FIFTH
PROPOSITION THE SIXTH
PROPOSITION THE SEVENTH
PROPOSITION THE EIGHTH
PROPOSITION THE NINTH

A TRANSLATION FROM KANT

Whatsoever difference there may be in our notions of the *freedom of the will* metaphysically considered, it is evident that the manifestations of this will, viz. human actions, are as much under the control of universal laws of nature as any other physical phenomena. It is the province of History to narrate these manifestations; and, let their causes be ever so secret, we know that History, simply by taking its station at a distance and contemplating the agency of the human will upon a large scale, aims at unfolding to our view a regular stream of tendency in the great succession of events, — so that the very same course of incidents which, taken separately and individually, would have seemed perplexed, incoherent, and lawless, yet viewed in their connexion and as the actions of the human *species* and not of independent beings, never fail to discover a steady and continuous, though slow, development of certain great predispositions in our nature. Thus, for instance, deaths, births, and marriages, considering how much they are separately dependent on the freedom of the human will, should seem to be subject to no law according to which any calculation could be made beforehand of their amount: and yet the yearly registers of these events in great countries prove that they go on with as much conformity to the laws of nature as the oscillations of the weather. These, again, are events which in detail are so far irregular that we cannot predict them individually; and yet, taken as a whole series, we find that they never fail to support the growth of plants, the currents of rivers, and other arrangements of nature, in a uniform and uninterrupted course. Individual men, and even nations, are little aware that, whilst they are severally pursuing their own peculiar and often contradictory purposes, they are unconsciously following the guidance of a great natural purpose which is wholly unnoticed by themselves, and are thus promoting and making efforts for a great process which, even if they perceived it, they would little regard.

Considering that men, taken collectively as a body, do not proceed, like brute animals, under the law of an instinct, nor yet again, like rational cosmopolites, under the law of a preconcerted plan, one might imagine that no systematic history of their actions (such, for instance, as the history of bees or beavers) could be possible. At the sight of the actions of man displayed on the great stage of the world, it is impossible to escape a certain degree of disgust: with all the occasional indications of wisdom scattered here and there, we cannot but perceive the whole sum of these actions to be a web of folly, childish vanity, and often even of the idlest wickedness and spirit of destruction. Hence, at last, one is puzzled to know what judgment to form of our species, so conceited of its high advantages. In such a perplexity there is no resource for the philosopher but this, — that, finding it impossible to presume in the human race any *rational* purpose of its own, he must endeavour to detect some *natural* purpose in such a senseless current of human actions; by means of which a history of creatures that pursue no plan of their own may yet admit a systematic form as the history of creatures that are blindly pursuing a plan of nature. Let us now see whether we can succeed in finding out a clue to such a history, leaving it to nature to produce a man capable of executing it, — just as she produced a Kepler who unexpectedly brought the eccentric courses of the planets under determinate laws, and afterwards a Newton who explained these laws out of a universal ground in Nature: —

PROPOSITION THE FIRST

All tendencies of any creature to which it is predisposed by Nature are destined in the end to develop themselves perfectly and agreeably to their final purpose.

External as well as internal (or anatomical) examination confirms this remark in all animals. An organ which is not to be used, a natural arrangement that misses its purpose, would be a contradiction in physics. Once departing from this fundamental proposition, we have a Nature no longer tied to laws, but objectless and working at random; and a cheerless reign of Chance steps into the place of Reason.

PROPOSITION THE SECOND

In Man, as the sole rational creature upon earth, those tendencies which have the use of his reason for their object are destined to obtain their perfect development in the species only, and not in the individual.

Reason in a creature is a faculty for extending the rules and purposes of the exercise of all its powers far beyond natural instinct; and it is illimitable in its plans. It works, however, not instinctively, but tentatively, by means of practice, through progress and regress, in order to ascend gradually from one degree of illumination to another. On this account, either it would be necessary for each man to live an inordinate length of time in order to learn how to make a perfect use of his natural tendencies; or else, supposing the actual case that Nature has limited his term of life, she must then require an incalculable series of generations (each delivering its quota of knowledge to its immediate successor) in order to ripen the germs which she has laid in our species to that degree of development which corresponds with her final purpose. And the period of this mature development must exist at least in idea to Man as the object of his efforts: because otherwise his own natural predispositions must of necessity be regarded as objectless; and this would at once take away all *practical* principles, and would expose Nature, the wisdom of whose arrangements must in all other cases be assumed as a fundamental postulate, to the suspicion of capricious dealing in the case of Man only.

PROPOSITION THE THIRD

It is the will of Nature that Man should owe to himself alone everything which transcends the mere mechanic constitution of his animal existence, and that he should be susceptible of no other happiness or perfection than what he has created for himself, instinct apart, through his own reason.

Nature does nothing superfluously, and in the use of means to her ends does not play the prodigal. Having given to Man reason, and freedom of the will grounded upon reason, she had hereby sufficiently made known the purpose which governed her in the choice of the furniture and appointments, intellectual and physical, with which she has accoutred him. Thus provided, he had no need for the guidance of instinct, or for knowledge and forethought created to his hand; for these he was to be indebted to himself. The means of providing for his own shelter from the elements, for his own security, and the whole superstructure of delights which add comfort and embellishment to life, were to be the work of his own hands. So far indeed has she pushed this principle that she seems to have been frugal even to niggardliness in the dispensation of her animal endowments to Man, and to have calculated her allowance to the nicest rigour of the demand in the very earliest stage of his existence: as if it had been her intention hereby to proclaim that the highest degree of power, of intellectual perfection, and of happiness to which he should ever toil upwards from a condition utterly savage, must all be wrung and extorted from the difficulties and thwartings of his situation, and the merit therefore be exclusively his own; thus implying that she had at heart his own rational self-estimation rather than his convenience or comfort. She has indeed beset Man with difficulties; and in no way could she have so clearly made known that her purpose with Man was not that he might live in pleasure, but that by a strenuous wrestling with those difficulties he might make himself worthy of living in pleasure. Undoubtedly it seems surprising on this view of the case that the earlier generations appear to exist only for the sake of the latter, viz. for the sake of forwarding that edifice of man’s grandeur in which only the latest generations are to dwell, though all have undesignedly taken part in raising it. Mysterious as this appears, it is, however, at the same time necessary, if we once assume a race of rational animals as destined by means of this characteristic reason to a perfect development of their tendencies, and subject to mortality in the individual, but immortal in the species.

PROPOSITION THE FOURTH

The means which Nature employs to bring about the development of all the tendencies she has laid in Man is the antagonism of these tendencies in the social state — no farther, however, than to that point at which this antagonism becomes the cause of social arrangements founded in law.

By antagonism of this kind I mean the unsocial sociality of man, — that is, a tendency to enter the social state, combined with a perpetual resistance to that tendency which is continually threatening to dissolve it. Man has gregarious inclinations, feeling himself in the social state more than Man, by means of the development thus given to his natural tendencies. But he has also strong anti-gregarious inclinations, prompting him to insulate himself, which arise out of the unsocial desire (existing concurrently with his social propensities) to force all things into compliance with his own humour, — a propensity to which he naturally anticipates resistance from his consciousness of a similar spirit of resistance to others existing in himself. Now, this resistance it is which awakens all the powers of Man, drives him to master his propensity to indolence, and, in the shape of ambition, love of honour, or avarice, impels him to procure distinction for himself amongst his fellows. In this way arise the first steps from the savage state to the state of culture, which consists peculiarly in the social worth of Man. Talents of every kind are now unfolded, taste formed, and by gradual increase of light a preparation is made for such a mode of thinking as is capable of converting the rude natural tendency to moral distinctions into determinate practical principles, and finally of exalting a social concert that had been *pathologically* extorted from the mere necessities of situation into a *moral* union founded on the reasonable choice. But for these anti-social propensities, so unamiable in themselves, which give birth to that resistance which every man meets with in his own self-interested pretensions, an Arcadian life would arise, of perfect harmony and mutual love, such as must suffocate and stifle all talents in their very germs. Men, as gentle as the sheep they fed, would communicate to their existence no higher value than belongs to mere animal life, and would leave the vacuum of creation, which exists in reference to the final purpose of man's nature as a rational nature, unfilled. Thanks, therefore, to Nature for the enmity, for the jealous spirit of envious competition, for the insatiable thirst after wealth and power! These wanting, all the admirable tendencies in man's nature would remain for ever undeveloped. Man, for his own sake as an individual, wishes for concord; but Nature knows better what is good for Man as a species; and she ordains discord. He would live in ease and passive content: but Nature wills that he shall precipitate himself out of this luxury of indolence into labours and hardships, in order that he may devise remedies against them, and thus raise himself above them by an intellectual conquest, not sink below them by an unambitious evasion. The impulses which she has with this view laid in his moral constitution, the sources of that anti-sociality and universal antagonism from which so many evils arise, but which again stimulate a fresh reaction of the faculties, and by consequence more and more aid the development of the primitive tendencies, all tend to betray the adjusting hand of a wise Creator, not that of an Evil Spirit that has bungled in the execution of his own designs, or has malevolently sought to perplex them with evil.

PROPOSITION THE FIFTH

The highest problem for the Human Species, to the solution of which it is irresistibly urged by natural impulses, is the establishment of a universal Civil Society founded on the empire of political justice.

Since it is only in the social state that the final purpose of Nature with regard to Man (viz. the development of all his tendencies) can be accomplished, — and in such a social state as combines with the utmost possible freedom and consequent antagonism of its members the most rigorous determination of the boundaries of this freedom, in order that the freedom of such individual may co-exist with the freedom of others, — and since it is the will of Nature that this as well as all other objects of his destination should be the work of men's own efforts: on these accounts a society in which freedom under laws is united with the greatest possible degree of irresistible power, — *i.e*. a perfect civil constitution, — is the highest problem of Nature for Man: because it is only by the solution of this problem that Nature can accomplish the rest of her purposes with our species. Into this state of restraint Man, who is otherwise so much enamoured of lawless freedom, is compelled to enter by necessity, — and that the greatest of all necessity, viz. a necessity self-imposed; his natural inclinations making it impossible for Man to preserve a state of perfect liberty for any length of time in the neighbourhood of his fellows. But, under the restraint of a civil community, these very inclinations lead to the best effects: just as trees in a forest, for the very reason that each endeavours to rob the other of air and sun, compel each other to shoot upwards in quest of both, and thus attain a fine erect growth, — whereas those which stand aloof from each other under no mutual restraint, and throw out their boughs at pleasure, become crippled and distorted. All the gifts of art and cultivation which adorn the human race, — in short, the most beautiful forms of social order, — are the fruits of the anti-social principle, which is compelled to discipline itself, and by means won from the very resistance of Man's situation in this world to give perfect development to all the germs of Nature.

PROPOSITION THE SIXTH

This problem is at the same time the most difficult of all, and the one which is latest solved by Man.

The difficulty which is involved in the bare idea of such a problem is this: — Man is an animal that, so long as he lives amongst others of his species, stands in need of a master. For he inevitably abuses his freedom in regard to his equals; and, although, as a reasonable creature, he wishes for a law that may set bounds to the liberty of all, yet do his self-interested animal propensities seduce him into making an exception in his own favour whensoever he dares. He requires a master, therefore, to curb his will, and to compel him into submission to a universal will which may secure the possibility of universal freedom. Now, where is he to find this master? Of necessity, amongst the human species. But, as a human being, this master will also be an animal that requires a master. Lodged in one or many, it is impossible that the supreme and irresponsible power can be certainly prevented from abusing its authority. Hence it is that this problem is the most difficult of any; nay, its perfect solution is impossible: out of wood so crooked and perverse as that which man is made of, nothing absolutely straight can ever be wrought. An approximation to this idea is therefore all which Nature enjoins us. That it is also the last of all problems to which the human species addresses itself is clear from this, — that it presupposes *just notions* of the nature of a good constitution, great *experience*, and above all a *will* favourably disposed to the adoption of such a constitution: three elements that can hardly, and not until after many fruitless trials, be expected to concur.

PROPOSITION THE SEVENTH

The problem of the establishment of a perfect Constitution of Society depends upon the problem of a system of International Relations adjusted to law, and apart from this latter problem cannot be solved.

To what purpose is labour bestowed upon a civil constitution adjusted to law for individual men, *i.e*. upon the creation of a Commonwealth? The same anti-social impulse which first drove men to such a creation is again the cause that every commonwealth, in its external relations, — *i.e*. as a state in reference to other states, — occupies the same ground of lawless and uncontrolled liberty; consequently each must anticipate from the other the very same evils which compelled individuals to enter the social state. Nature accordingly avails herself of the spirit of enmity in Man, as existing even in the great national corporations of that animal, for the purpose of attaining through the inevitable antagonism of this spirit a state of rest and security: *i.e*. by wars, by the immoderate exhaustion of incessant preparations for war, and by the pressure of evil consequences which war at last entails upon any nation even through the midst of peace, she drives nations to all sorts of experiments and expedients; and finally, after infinite devastations, ruin, and universal exhaustion of energy, to one which reason should have suggested without the cost of so sad an experience, — viz. to quit the barbarous condition of lawless power, and to enter into a federal league of nations, in which even the weakest member looks for its rights and for protection not to its own power, or its own adjudication, but to this great confederation (*Fœdus Amphictyonum*), to the united power, and the adjudication of the collective will. Visionary as this idea may seem, and as such laughed at in the Abbé de St. Pierre and in Rousseau (possibly because they deemed it too near to its accomplishment), — it is notwithstanding the inevitable resource and mode of escape under that pressure of evil which nations reciprocally inflict; and, hard as it may be to realize such an idea, states must of necessity be driven at last to the very same resolution to which the savage man of nature was driven with equal reluctance — viz. to sacrifice brutal liberty, and to seek peace and security in a civil constitution founded upon law. All wars therefore are so many tentative essays (not in the intention of Man, but in the intention of Nature) to bring about new relations of states, and by revolutions and dismemberments to form new political bodies. These again, either from internal defects or external attacks, cannot support themselves, but must undergo similar revolutions; until at last, partly by the best possible arrangement of civil government within, and partly by common concert and legal compact without, a condition is attained which, like a well-ordered commonwealth, can maintain itself in the way of an automaton.

Now, whether (in the first place) it is to be anticipated from an epicurean concourse of efficient causes that states, like atoms, by accidental shocking together, should go through all sorts of new combinations to be again dissolved by the fortuitous impulse of fresh shocks, until at length by pure accident some combination emerges capable of supporting itself (a case of luck that could hardly be looked for); or whether (in the second place) we should rather assume that Nature is in this instance pursuing her regular course of raising our species gradually from the lower steps of animal existence to the very highest of a human existence, and *that* not by any direct interposition in our favour, but through man's own spontaneous and artificial efforts (spontaneous, but yet extorted from him by his situation), and in this apparently wild arrangement of things is developing with perfect regularity the original tendencies she has implanted; or whether (in the third place) it is more reasonable to believe that out of all this action and reaction of the human species upon itself nothing in the shape of a wise result will ever issue, — that it will continue to be as it has been, and therefore that it cannot be known beforehand, but that the discord which is so natural to our species will finally prepare for us a hell of evils under the most moral condition of society, such as may swallow up this very moral condition itself and all previous advance in culture by a reflux of the original barbaric spirit of desolation (a fate, by the way, against which it is

impossible to be secured under the government of blind chance, with which liberty uncontrolled by law is identical, unless by underlaying this chance with a secret nexus of wisdom): — to all this the answer turns upon the following question: Whether it be reasonable to assume a final purpose of all natural processes and arrangements in the parts, and yet a want of purpose in the whole? What therefore the objectless condition of savage life effected in the end, — viz. that it checked the development of the natural tendencies in the human species, but then, by the very evils it thus caused, drove man into a state where those tendencies could unfold and mature themselves, namely, the state of civilisation, — that same service is performed for states by the barbaric freedom in which they are now existing, — viz. that, by causing the dedication of all national energies and resources to war, by the desolations of war, and still more by causing the necessity of standing continually in a state of preparation for war, it checks the full development of the natural tendencies in its progress, but, on the other hand, by these very evils and their consequences, it compels our species at last to discover some law of counterbalance to the principle of antagonism between nations, and, in order to give effect to this law, to introduce a federation of states, and consequently a cosmopolitical condition of security (or police) corresponding to that municipal security which arises out of internal police. This federation will itself not be exempt from danger, — else the powers of the human race would go to sleep; it will be sufficient that it contain a principle for restoring the equilibrium between its own action and reaction, and thus checking the two functions from destroying each other. Before this last step is taken, human nature — then about half-way advanced in its progress — is in the deepest abyss of evils under the deceitful semblance of external prosperity; and Rousseau was not so much in the wrong when he preferred the condition of the savage to that of the civilized man at the point where he has reached, but is hesitating to take, the final step of his ascent. We are at this time in a high degree of *culture* as to arts and sciences. We are *civilized* to superfluity in what regards the graces and decorums of life. But to entitle us to consider ourselves *moralized* much is still wanting. Yet the idea of morality belongs even to that of *culture*; but the use of this idea, as it comes forward in mere *civilisation*, is restrained to its influence on manners, as seen in the principle of honour, in respectability of deportment, &c. Nothing indeed of a true moral influence can be expected so long as states direct all their energies to idle plans of aggrandizement by force, and thus incessantly check the slow motions by which the intellect of the species is unfolding and forming itself, to say nothing of their shrinking from all *positive* aid to those motions. But all good that is not engrafted upon moral good is mere show and hollow speciousness — the dust and ashes of mortality. And in this delusive condition will the human race linger, until it shall have toiled upwards in the way I have mentioned from its present chaotic abyss of political relations.

PROPOSITION THE EIGHTH

The History of the Human Species as a whole may be regarded as the unravelling of a hidden Plan of Nature for accomplishing a perfect State of Civil Constitution for society in its internal relations (and, as the condition of that, by the last proposition, in its external relations also) as the sole state of society in which the tendencies of human nature can be all and fully developed.

This proposition is an inference from the preceding. A question arises upon it — whether experience has yet observed any traces of such an unravelling in History? I answer — some little: for the whole period (to speak astronomically) of this unravelling is probably too vast to admit of our collecting even the form of its orbit or the relation of the parts to the whole from the small fraction of it which Man has yet left behind him; just as little as it is possible from the astronomical observations hitherto made to determine the course which our sun together with his whole system of planets pursues amongst the heavenly host; although, upon universal grounds derived from the systematic frame of the universe, as well as upon the little stock of observation as yet accumulated, enough is known to warrant us in asserting that there *is* such a course. Meantime our human nature obliges us to take an interest even in the remotest epoch to which our species is destined, provided we can anticipate it with certainty. So much the less can *we* be indifferent to it, inasmuch as it appears within our power by intellectual arrangements to contribute something towards the acceleration of the species in its advance to this great epoch. On this account the faintest traces of any approximation in such a direction become of importance to us. At present all states are so artificially interconnected that no one can possibly become stationary in its internal culture without retrograding in power and influence with respect to all the rest; and thus, if not the progress, yet the non-declension, of this purpose of Nature is sufficiently secured through the ambition of nations. Moreover, civil liberty cannot at this day any longer be so arrested in its progress but that all the sources of livelihood, and more immediately trade, must betray a close sympathy with it, and sicken as *that* sickens; and hence a decay of the state in its external relations. Gradually, too, this liberty extends itself. If the citizen be hindered from pursuing his interest in any way most agreeable to himself provided only it can co-exist with the liberty of others, in that case the vivacious life of general business is palsied, and in connexion with that again the powers of the whole. Hence it arises that all personal restriction, whether as to commission or omission, is more and more withdrawn; religious liberty is established; and thus, by little and little, with occasional interruptions, arises *Illumination*: a blessing which the human race must win even from the self-interested purposes of its rulers, if they comprehend what is for their own advantage. Now, this Illumination, and with it a certain degree of cordial interest which the enlightened man cannot forbear taking in all the good which he perfectly comprehends, must by degrees mount upwards even to the throne, and exert an influence on the principles of government. At present, for example, our governments have no money disposable for national education, because the estimates for the next war have absorbed the whole by anticipation. The first act, therefore, by which the state will express its interest in the advancing spirit of the age will be by withdrawing its opposition at least to the feeble and tardy exertions of the people in this direction. Finally, war itself becomes gradually not only so artificial a process, so uncertain in its issue, but also in the after-pains of inextinguishable national debts (a contrivance of modern times) so anxious and burthensome, and, at the same time, the influence which any convulsions of one state exert upon every other state is so remarkable in our quarter of the globe, — linked as it is in all parts by the systematic intercourse of trade, — that at length those governments which have no immediate participation in the war, under a sense of their own danger, offer themselves as mediators, though as yet without any authentic sanction of law, and thus prepare all things from afar for the formation of a great primary state-body, or Cosmopolitic Areopagus, such as is wholly unprecedented in

all preceding ages. Although this body at present exists only in rude outline, yet already a stirring is beginning to be perceptible in all its limbs, each of which is interested in the maintenance of the whole. Even now there is enough to justify a hope that, after many revolutions and remodellings of states, the supreme purpose of Nature will be accomplished in the establishment of a Cosmopolitic State, as the bosom in which all the original tendencies of the human species are to be developed.

PROPOSITION THE NINTH

A philosophical attempt to compose a Universal History, in the sense of a Cosmopolitical History, upon a plan tending to unfold the purpose of Nature in a perfect Civil Union of the Human Species (instead of the present imperfect union), is to be regarded as possible, and as capable even of helping forward this very purpose of Nature.

At first sight it is certainly a strange, and apparently an extravagant, project, to propose a History of Man founded on any idea of the course which human affairs would take if adjusted to certain reasonable ends. On such a plan it may be thought that nothing better than a romance could be the result. Yet, if we assume that Nature proceeds not without plan and final purpose even in the motions of human free-will, this idea may possibly turn out very useful; and, although we are too short-sighted to look through the secret mechanism of her arrangements, this idea may yet serve as a clue for connecting into something like *systematic* unity the great abstract of human actions that else seem a chaotic and incoherent *aggregate*. For, if we take our beginning from the Grecian History, as the depository, or at least the collateral voucher, for all elder or synchronous History; if we pursue down to our own times its influence upon the formation and malformation of the Roman People as a political body that swallowed up the Grecian state, and the influence of Rome upon the Barbarians by whom Rome itself was destroyed; and if to all this we add, by way of episode, the political history of every other people so far as it has come to our knowledge through the records of the two enlightened nations above mentioned; we shall then discover a regular gradation of improvement in civil polity as it has grown up in our quarter of the globe, which quarter is in all probability destined to give laws to all the rest. If further we direct an exclusive attention to the civil constitution, with its laws and the external relations of the state, in so far as both, by means of the good which they contained, served for a period to raise and to dignify other nations, and with them the arts and sciences, — yet again by their defects served also to precipitate them into ruin, but so that always some germ of illumination survived which, being more and more developed by every revolution, prepared continually a still higher step of improvement, — in that case, I believe that a clue will be discovered not only for the unravelling of the intricate web of human affairs, and for the guidance of future statesmen in the art of political prophecy (a benefit which has been extracted from History even whilst it was regarded as an incoherent result from a lawless freedom of will), but also such a clue as will open a consolatory prospect into futurity, in which at a remote distance we shall discover the human species seated upon an eminence won by infinite toil, where all the germs are unfolded which Nature has implanted, and its destination upon this earth accomplished. Such a justification of Nature, or rather of Providence, is no mean motive for choosing this cosmopolitical station for the survey of History. For what does it avail to praise and to draw forth to view the magnificence and wisdom of the creation in the irrational kingdom of Nature, if that part in the great stage of the supreme wisdom which contains the object of all this mighty display, — viz. the history of the human species, — is to remain an eternal objection to it, the bare sight of which obliges us to turn away our eyes with displeasure, and (from the despair which it raises of ever discovering in it a perfect and rational purpose) finally leads us to look for such a purpose only in another world?

My object in this essay would be wholly misinterpreted if it were supposed that, under the idea of a Cosmopolitical History which to a certain degree has its course determined *a priori*, I had any wish to discourage the cultivation of *empirical* History in the ordinary sense. On the contrary, the philosopher must be well versed in History who could execute the plan I have sketched, which is indeed a most extensive survey of History, only taken from a new station. However, the extreme, and, simply considered, praiseworthy, circumstantiality with which the history of every nation is written in our times,

must naturally suggest a question of some embarrassment. In what way will our remote posterity be able to cope with the enormous accumulation of historical records which a few centuries will bequeath to them? There is no doubt that they will estimate the historical details of times far removed from their own, the original monuments of which will long have perished, simply by the value of that which will then concern themselves, — viz. by the good or evil performed by nations and their governments in a *cosmopolitical* view. To direct the eye upon this point as connected with the ambition of rulers and their servants, in order to guide them to the only means of bequeathing an honourable record of themselves to distant ages, may furnish some small motive (over and above the great one of justifying Providence) for attempting a Philosophic History on the plan I have here explained.

FUNDAMENTAL PRINCIPLES OF THE METAPHYSIC OF MORALS

Translated by homas Kingsmill Abbott

Also known as *Groundwork of the Metaphysic of Morals*, this is the first of Kant's mature works on moral philosophy and remains one of the most influential in the field. Kant conceives his investigation as a work of foundational ethics — one that clears the ground for future research by explaining the core concepts and principles of moral theory and showing that they are normative for rational agents. Kant aims to lay bare the fundamental principle of morality and show that it applies to us. In the text, the philosopher provides a groundbreaking argument that the rightness of an action is determined by the character of the principle that a person chooses to act upon. Kant thus stands in stark contrast to the moral sense theories and teleological moral theories that dominated moral philosophy at the time he was writing. Central to the work is the role of what Kant refers to as the categorical imperative, the concept that one must act only according to that precept which he or she would will to become a universal law.

The *Groundwork of the Metaphysic of Morals* is broken into a preface, followed by three sections. Kant's argument works from common reason up to the supreme unconditional law, in order to identify its existence. He then works backwards from there to prove the relevance and weight of the moral law. The third and final section of the book is famously obscure, and it is partly because of this that Kant later, in 1788, decided to publish the *Critique of Practical Reason*.

Grundlegung

zur

Metaphysik

der Sitten

von

Immanuel Kant.

Riga,

bey Johann Friedrich Hartknoch

1785.

The first edition's title page

CONTENTS

PREFACE
FIRST SECTION
SECOND SECTION
THIRD SECTION

PREFACE

Ancient Greek philosophy was divided into three sciences: physics, ethics, and logic. This division is perfectly suitable to the nature of the thing; and the only improvement that can be made in it is to add the principle on which it is based, so that we may both satisfy ourselves of its completeness, and also be able to determine correctly the necessary subdivisions.

All rational knowledge is either material or formal: the former considers some object, the latter is concerned only with the form of the understanding and of the reason itself, and with the universal laws of thought in general without distinction of its objects. Formal philosophy is called logic. Material philosophy, however, has to do with determinate objects and the laws to which they are subject, is again twofold; for these laws are either laws of nature or of freedom. The science of the former is physics, that of the latter, ethics; they are also called natural philosophy and moral philosophy respectively.

Logic cannot have any empirical part; that is, a part in which the universal and necessary laws of thought should rest on grounds taken from experience; otherwise it would not be logic, i.e., a canon for the understanding or the reason, valid for all thought, and capable of demonstration. Natural and moral philosophy, on the contrary, can each have their empirical part, since the former has to determine the laws of nature as an object of experience; the latter the laws of the human will, so far as it is affected by nature: the former, however, being laws according to which everything does happen; the latter, laws according to which everything ought to happen. Ethics, however, must also consider the conditions under which what ought to happen frequently does not.

We may call all philosophy empirical, so far as it is based on grounds of experience: on the other band, that which delivers its doctrines from a priori principles alone we may call pure philosophy. When the latter is merely formal it is logic; if it is restricted to definite objects of the understanding it is metaphysic.

In this way there arises the idea of a twofold metaphysic- a metaphysic of nature and a metaphysic of morals. Physics will thus have an empirical and also a rational part. It is the same with Ethics; but here the empirical part might have the special name of practical anthropology, the name morality being appropriated to the rational part.

All trades, arts, and handiworks have gained by division of labour, namely, when, instead of one man doing everything, each confines himself to a certain kind of work distinct from others in the treatment it requires, so as to be able to perform it with greater facility and in the greatest perfection. Where the different kinds of work are not distinguished and divided, where everyone is a jack-of-all-trades, there manufactures remain still in the greatest barbarism. It might deserve to be considered whether pure philosophy in all its parts does not require a man specially devoted to it, and whether it would not be better for the whole business of science if those who, to please the tastes of the public, are wont to blend the rational and empirical elements together, mixed in all sorts of proportions unknown to themselves, and who call themselves independent thinkers, giving the name of minute philosophers to those who apply themselves to the rational part only- if these, I say, were warned not to carry on two employments together which differ widely in the treatment they demand, for each of which perhaps a special talent is required, and the combination of which in one person only produces bunglers. But I only ask here whether the nature of science does not require that we should always carefully separate the empirical from the rational part, and prefix to Physics proper (or empirical physics) a metaphysic of nature, and to practical anthropology a metaphysic of morals, which must be carefully cleared of everything empirical, so that we may know how much can be accomplished by pure reason in both cases, and from what sources it draws this its a priori teaching, and that whether the latter inquiry is conducted by all moralists (whose name is legion), or only by some who feel a calling thereto.

As my concern here is with moral philosophy, I limit the question suggested to this: Whether it is not of the utmost necessity to construct a pure thing which is only empirical and which belongs to anthropology? for that such a philosophy must be possible is evident from the common idea of duty and of the moral laws. Everyone must admit that if a law is to have moral force, i.e., to be the basis of an obligation, it must carry with it absolute necessity; that, for example, the precept, “Thou shalt not lie,” is not valid for men alone, as if other rational beings had no need to observe it; and so with all the other moral laws properly so called; that, therefore, the basis of obligation must not be sought in the nature of man, or in the circumstances in the world in which he is placed, but a priori simply in the conception of pure reason; and although any other precept which is founded on principles of mere experience may be in certain respects universal, yet in as far as it rests even in the least degree on an empirical basis, perhaps only as to a motive, such a precept, while it may be a practical rule, can never be called a moral law.

Thus not only are moral laws with their principles essentially distinguished from every other kind of practical knowledge in which there is anything empirical, but all moral philosophy rests wholly on its pure part. When applied to man, it does not borrow the least thing from the knowledge of man himself (anthropology), but gives laws a priori to him as a rational being. No doubt these laws require a judgement sharpened by experience, in order on the one hand to distinguish in what cases they are applicable, and on the other to procure for them access to the will of the man and effectual influence on conduct; since man is acted on by so many inclinations that, though capable of the idea of a practical pure reason, he is not so easily able to make it effective in concreto in his life.

A metaphysic of morals is therefore indispensably necessary, not merely for speculative reasons, in order to investigate the sources of the practical principles which are to be found a priori in our reason, but also because morals themselves are liable to all sorts of corruption, as long as we are without that clue and supreme canon by which to estimate them correctly. For in order that an action should be morally good, it is not enough that it conform to the moral law, but it must also be done for the sake of the law, otherwise that conformity is only very contingent and uncertain; since a principle which is not moral, although it may now and then produce actions conformable to the law, will also often produce actions which contradict it. Now it is only a pure philosophy that we can look for the moral law in its purity and genuineness (and, in a practical matter, this is of the utmost consequence): we must, therefore, begin with pure philosophy (metaphysic), and without it there cannot be any moral philosophy at all. That which mingles these pure principles with the empirical does not deserve the name of philosophy (for what distinguishes philosophy from common rational knowledge is that it treats in separate sciences what the latter only comprehends confusedly); much less does it deserve that of moral philosophy, since by this confusion it even spoils the purity of morals themselves, and counteracts its own end.

Let it not be thought, however, that what is here demanded is already extant in the propaedeutic prefixed by the celebrated Wolf to his moral philosophy, namely, his so-called general practical philosophy, and that, therefore, we have not to strike into an entirely new field. Just because it was to be a general practical philosophy, it has not taken into consideration a will of any particular kind- say one which should be determined solely from a priori principles without any empirical motives, and which we might call a pure will, but volition in general, with all the actions and conditions which belong to it in this general signification. By this it is distinguished from a metaphysic of morals, just as general logic, which treats of the acts and canons of thought in general, is distinguished from transcendental philosophy, which treats of the particular acts and canons of pure thought, i.e., that whose cognitions are altogether a priori. For the metaphysic of morals has to examine the idea and the principles of a possible pure will, and not the acts and conditions of human volition generally, which for the most part are drawn from psychology. It is true that moral laws and duty are spoken of in the general moral philosophy (contrary indeed to all fitness). But this is no objection, for in this respect also the authors of that science remain true to their idea of it; they do not distinguish the motives which are prescribed as such by reason alone altogether a

priori, and which are properly moral, from the empirical motives which the understanding raises to general conceptions merely by comparison of experiences; but, without noticing the difference of their sources, and looking on them all as homogeneous, they consider only their greater or less amount. It is in this way they frame their notion of obligation, which, though anything but moral, is all that can be attained in a philosophy which passes no judgement at all on the origin of all possible practical concepts, whether they are a priori, or only a posteriori.

Intending to publish hereafter a metaphysic of morals, I issue in the first instance these fundamental principles. Indeed there is properly no other foundation for it than the critical examination of a pure practical Reason; just as that of metaphysics is the critical examination of the pure speculative reason, already published. But in the first place the former is not so absolutely necessary as the latter, because in moral concerns human reason can easily be brought to a high degree of correctness and completeness, even in the commonest understanding, while on the contrary in its theoretic but pure use it is wholly dialectical; and in the second place if the critique of a pure practical reason is to be complete, it must be possible at the same time to show its identity with the speculative reason in a common principle, for it can ultimately be only one and the same reason which has to be distinguished merely in its application. I could not, however, bring it to such completeness here, without introducing considerations of a wholly different kind, which would be perplexing to the reader. On this account I have adopted the title of Fundamental Principles of the Metaphysic of Morals instead of that of a Critical Examination of the pure practical reason.

But in the third place, since a metaphysic of morals, in spite of the discouraging title, is yet capable of being presented in popular form, and one adapted to the common understanding, I find it useful to separate from it this preliminary treatise on its fundamental principles, in order that I may not hereafter have need to introduce these necessarily subtle discussions into a book of a more simple character.

The present treatise is, however, nothing more than the investigation and establishment of the supreme principle of morality, and this alone constitutes a study complete in itself and one which ought to be kept apart from every other moral investigation. No doubt my conclusions on this weighty question, which has hitherto been very unsatisfactorily examined, would receive much light from the application of the same principle to the whole system, and would be greatly confirmed by the adequacy which it exhibits throughout; but I must forego this advantage, which indeed would be after all more gratifying than useful, since the easy applicability of a principle and its apparent adequacy give no very certain proof of its soundness, but rather inspire a certain partiality, which prevents us from examining and estimating it strictly in itself and without regard to consequences.

I have adopted in this work the method which I think most suitable, proceeding analytically from common knowledge to the determination of its ultimate principle, and again descending synthetically from the examination of this principle and its sources to the common knowledge in which we find it employed. The division will, therefore, be as follows:

1 FIRST SECTION. Transition from the common rational knowledge of morality to the philosophical.

2 SECOND SECTION. Transition from popular moral philosophy to the metaphysic of morals.

3 THIRD SECTION. Final step from the metaphysic of morals to the critique of the pure practical reason.

FIRST SECTION

TRANSITION FROM THE COMMON RATIONAL KNOWLEDGE

OF MORALITY TO THE PHILOSOPHICAL

Nothing can possibly be conceived in the world, or even out of it, which can be called good, without qualification, except a good will. Intelligence, wit, judgement, and the other talents of the mind, however they may be named, or courage, resolution, perseverance, as qualities of temperament, are undoubtedly good and desirable in many respects; but these gifts of nature may also become extremely bad and mischievous if the will which is to make use of them, and which, therefore, constitutes what is called character, is not good. It is the same with the gifts of fortune. Power, riches, honour, even health, and the general well-being and contentment with one's condition which is called happiness, inspire pride, and often presumption, if there is not a good will to correct the influence of these on the mind, and with this also to rectify the whole principle of acting and adapt it to its end. The sight of a being who is not adorned with a single feature of a pure and good will, enjoying unbroken prosperity, can never give pleasure to an impartial rational spectator. Thus a good will appears to constitute the indispensable condition even of being worthy of happiness.

There are even some qualities which are of service to this good will itself and may facilitate its action, yet which have no intrinsic unconditional value, but always presuppose a good will, and this qualifies the esteem that we justly have for them and does not permit us to regard them as absolutely good. Moderation in the affections and passions, self-control, and calm deliberation are not only good in many respects, but even seem to constitute part of the intrinsic worth of the person; but they are far from deserving to be called good without qualification, although they have been so unconditionally praised by the ancients. For without the principles of a good will, they may become extremely bad, and the coolness of a villain not only makes him far more dangerous, but also directly makes him more abominable in our eyes than he would have been without it.

A good will is good not because of what it performs or effects, not by its aptness for the attainment of some proposed end, but simply by virtue of the volition; that is, it is good in itself, and considered by itself is to be esteemed much higher than all that can be brought about by it in favour of any inclination, nay even of the sum total of all inclinations. Even if it should happen that, owing to special disfavour of fortune, or the niggardly provision of a step-motherly nature, this will should wholly lack power to accomplish its purpose, if with its greatest efforts it should yet achieve nothing, and there should remain only the good will (not, to be sure, a mere wish, but the summoning of all means in our power), then, like a jewel, it would still shine by its own light, as a thing which has its whole value in itself. Its usefulness or fruitlessness can neither add nor take away anything from this value. It would be, as it were, only the setting to enable us to handle it the more conveniently in common commerce, or to attract to it the attention of those who are not yet connoisseurs, but not to recommend it to true connoisseurs, or to determine its value.

There is, however, something so strange in this idea of the absolute value of the mere will, in which no account is taken of its utility, that notwithstanding the thorough assent of even common reason to the idea, yet a suspicion must arise that it may perhaps really be the product of mere high-flown fancy, and that we may have misunderstood the purpose of nature in assigning reason as the governor of our will. Therefore we will examine this idea from this point of view.

In the physical constitution of an organized being, that is, a being adapted suitably to the purposes of life, we assume it as a fundamental principle that no organ for any purpose will be found but what is also the fittest and best adapted for that purpose. Now in a being which has reason and a will, if the proper object of nature were its conservation, its welfare, in a word, its happiness, then nature would have hit upon a very bad arrangement in selecting the reason of the creature to carry out this purpose. For all the actions which the creature has to perform with a view to this purpose, and the whole rule of its conduct, would be far more surely prescribed to it by instinct, and that end would have been attained thereby much more certainly than it ever can be by reason. Should reason have been communicated to this favoured creature over and above, it must only have served it to contemplate the happy constitution of its nature, to admire it, to congratulate itself thereon, and to feel thankful for it to the beneficent cause, but not that it should subject its desires to that weak and delusive guidance and meddle bunglingly with the purpose of nature. In a word, nature would have taken care that reason should not break forth into practical exercise, nor have the presumption, with its weak insight, to think out for itself the plan of happiness, and of the means of attaining it. Nature would not only have taken on herself the choice of the ends, but also of the means, and with wise foresight would have entrusted both to instinct.

And, in fact, we find that the more a cultivated reason applies itself with deliberate purpose to the enjoyment of life and happiness, so much the more does the man fail of true satisfaction. And from this circumstance there arises in many, if they are candid enough to confess it, a certain degree of misology, that is, hatred of reason, especially in the case of those who are most experienced in the use of it, because after calculating all the advantages they derive, I do not say from the invention of all the arts of common luxury, but even from the sciences (which seem to them to be after all only a luxury of the understanding), they find that they have, in fact, only brought more trouble on their shoulders, rather than gained in happiness; and they end by envying, rather than despising, the more common stamp of men who keep closer to the guidance of mere instinct and do not allow their reason much influence on their conduct. And this we must admit, that the judgement of those who would very much lower the lofty eulogies of the advantages which reason gives us in regard to the happiness and satisfaction of life, or who would even reduce them below zero, is by no means morose or ungrateful to the goodness with which the world is governed, but that there lies at the root of these judgements the idea that our existence has a different and far nobler end, for which, and not for happiness, reason is properly intended, and which must, therefore, be regarded as the supreme condition to which the private ends of man must, for the most part, be postponed.

For as reason is not competent to guide the will with certainty in regard to its objects and the satisfaction of all our wants (which it to some extent even multiplies), this being an end to which an implanted instinct would have led with much greater certainty; and since, nevertheless, reason is imparted to us as a practical faculty, i.e., as one which is to have influence on the will, therefore, admitting that nature generally in the distribution of her capacities has adapted the means to the end, its true destination must be to produce a will, not merely good as a means to something else, but good in itself, for which reason was absolutely necessary. This will then, though not indeed the sole and complete good, must be the supreme good and the condition of every other, even of the desire of happiness. Under these circumstances, there is nothing inconsistent with the wisdom of nature in the fact that the cultivation of the reason, which is requisite for the first and unconditional purpose, does in many ways interfere, at least in this life, with the attainment of the second, which is always conditional, namely, happiness. Nay, it may even reduce it to nothing, without nature thereby failing of her purpose. For reason recognizes the establishment of a good will as its highest practical destination, and in attaining this purpose is capable only of a satisfaction of its own proper kind, namely that from the attainment of an end, which end again is determined by reason only, notwithstanding that this may involve many a disappointment to the ends of inclination.

We have then to develop the notion of a will which deserves to be highly esteemed for itself and is good without a view to anything further, a notion which exists already in the sound natural understanding, requiring rather to be cleared up than to be taught, and which in estimating the value of our actions always takes the first place and constitutes the condition of all the rest. In order to do this, we will take the notion of duty, which includes that of a good will, although implying certain subjective restrictions and hindrances. These, however, far from concealing it, or rendering it unrecognizable, rather bring it out by contrast and make it shine forth so much the brighter.

I omit here all actions which are already recognized as inconsistent with duty, although they may be useful for this or that purpose, for with these the question whether they are done from duty cannot arise at all, since they even conflict with it. I also set aside those actions which really conform to duty, but to which men have no direct inclination, performing them because they are impelled thereto by some other inclination. For in this case we can readily distinguish whether the action which agrees with duty is done from duty, or from a selfish view. It is much harder to make this distinction when the action accords with duty and the subject has besides a direct inclination to it. For example, it is always a matter of duty that a dealer should not over charge an inexperienced purchaser; and wherever there is much commerce the prudent tradesman does not overcharge, but keeps a fixed price for everyone, so that a child buys of him as well as any other. Men are thus honestly served; but this is not enough to make us believe that the tradesman has so acted from duty and from principles of honesty: his own advantage required it; it is out of the question in this case to suppose that he might besides have a direct inclination in favour of the buyers, so that, as it were, from love he should give no advantage to one over another. Accordingly the action was done neither from duty nor from direct inclination, but merely with a selfish view.

On the other hand, it is a duty to maintain one's life; and, in addition, everyone has also a direct inclination to do so. But on this account the of anxious care which most men take for it has no intrinsic worth, and their maxim has no moral import. They preserve their life as duty requires, no doubt, but not because duty requires. On the other band, if adversity and hopeless sorrow have completely taken away the relish for life; if the unfortunate one, strong in mind, indignant at his fate rather than desponding or dejected, wishes for death, and yet preserves his life without loving it- not from inclination or fear, but from duty- then his maxim has a moral worth.

To be beneficent when we can is a duty; and besides this, there are many minds so sympathetically constituted that, without any other motive of vanity or self-interest, they find a pleasure in spreading joy around them and can take delight in the satisfaction of others so far as it is their own work. But I maintain that in such a case an action of this kind, however proper, however amiable it may be, has nevertheless no true moral worth, but is on a level with other inclinations, e.g., the inclination to honour, which, if it is happily directed to that which is in fact of public utility and accordant with duty and consequently honourable, deserves praise and encouragement, but not esteem. For the maxim lacks the moral import, namely, that such actions be done from duty, not from inclination. Put the case that the mind of that philanthropist were clouded by sorrow of his own, extinguishing all sympathy with the lot of others, and that, while he still has the power to benefit others in distress, he is not touched by their trouble because he is absorbed with his own; and now suppose that he tears himself out of this dead insensibility, and performs the action without any inclination to it, but simply from duty, then first has his action its genuine moral worth. Further still; if nature has put little sympathy in the heart of this or that man; if he, supposed to be an upright man, is by temperament cold and indifferent to the sufferings of others, perhaps because in respect of his own he is provided with the special gift of patience and fortitude and supposes, or even requires, that others should have the same- and such a man would certainly not be the meanest product of nature- but if nature had not specially framed him for a philanthropist, would he not still find in himself a source from whence to give himself a far higher worth than that of a good-natured temperament could be? Unquestionably. It is just in this that the moral worth of the character is brought out which is incomparably

the highest of all, namely, that he is beneficent, not from inclination, but from duty.

To secure one's own happiness is a duty, at least indirectly; for discontent with one's condition, under a pressure of many anxieties and amidst unsatisfied wants, might easily become a great temptation to transgression of duty. But here again, without looking to duty, all men have already the strongest and most intimate inclination to happiness, because it is just in this idea that all inclinations are combined in one total. But the precept of happiness is often of such a sort that it greatly interferes with some inclinations, and yet a man cannot form any definite and certain conception of the sum of satisfaction of all of them which is called happiness. It is not then to be wondered at that a single inclination, definite both as to what it promises and as to the time within which it can be gratified, is often able to overcome such a fluctuating idea, and that a gouty patient, for instance, can choose to enjoy what he likes, and to suffer what he may, since, according to his calculation, on this occasion at least, he has not sacrificed the enjoyment of the present moment to a possibly mistaken expectation of a happiness which is supposed to be found in health. But even in this case, if the general desire for happiness did not influence his will, and supposing that in his particular case health was not a necessary element in this calculation, there yet remains in this, as in all other cases, this law, namely, that he should promote his happiness not from inclination but from duty, and by this would his conduct first acquire true moral worth.

It is in this manner, undoubtedly, that we are to understand those passages of Scripture also in which we are commanded to love our neighbour, even our enemy. For love, as an affection, cannot be commanded, but beneficence for duty's sake may; even though we are not impelled to it by any inclination- nay, are even repelled by a natural and unconquerable aversion. This is practical love and not pathological- a love which is seated in the will, and not in the propensions of sense- in principles of action and not of tender sympathy; and it is this love alone which can be commanded.

The second proposition is: That an action done from duty derives its moral worth, not from the purpose which is to be attained by it, but from the maxim by which it is determined, and therefore does not depend on the realization of the object of the action, but merely on the principle of volition by which the action has taken place, without regard to any object of desire. It is clear from what precedes that the purposes which we may have in view in our actions, or their effects regarded as ends and springs of the will, cannot give to actions any unconditional or moral worth. In what, then, can their worth lie, if it is not to consist in the will and in reference to its expected effect? It cannot lie anywhere but in the principle of the will without regard to the ends which can be attained by the action. For the will stands between its a priori principle, which is formal, and its a posteriori spring, which is material, as between two roads, and as it must be determined by something, it that it must be determined by the formal principle of volition when an action is done from duty, in which case every material principle has been withdrawn from it.

The third proposition, which is a consequence of the two preceding, I would express thus Duty is the necessity of acting from respect for the law. I may have inclination for an object as the effect of my proposed action, but I cannot have respect for it, just for this reason, that it is an effect and not an energy of will. Similarly I cannot have respect for inclination, whether my own or another's; I can at most, if my own, approve it; if another's, sometimes even love it; i.e., look on it as favourable to my own interest. It is only what is connected with my will as a principle, by no means as an effect- what does not subserve my inclination, but overpowers it, or at least in case of choice excludes it from its calculation- in other words, simply the law of itself, which can be an object of respect, and hence a command. Now an action done from duty must wholly exclude the influence of inclination and with it every object of the will, so that nothing remains which can determine the will except objectively the law, and subjectively pure respect for this practical law, and consequently the maxim * that I should follow this law even to the thwarting of all my inclinations.

* A maxim is the subjective principle of volition. The objective principle (i.e., that which would also serve subjectively as a practical principle to all rational beings if reason had full power over the faculty

of desire) is the practical law.

Thus the moral worth of an action does not lie in the effect expected from it, nor in any principle of action which requires to borrow its motive from this expected effect. For all these effects- agreeableness of one’s condition and even the promotion of the happiness of others- could have been also brought about by other causes, so that for this there would have been no need of the will of a rational being; whereas it is in this alone that the supreme and unconditional good can be found. The pre-eminent good which we call moral can therefore consist in nothing else than the conception of law in itself, which certainly is only possible in a rational being, in so far as this conception, and not the expected effect, determines the will. This is a good which is already present in the person who acts accordingly, and we have not to wait for it to appear first in the result. *

* It might be here objected to me that I take refuge behind the word respect in an obscure feeling, instead of giving a distinct solution of the question by a concept of the reason. But although respect is a feeling, it is not a feeling received through influence, but is self-wrought by a rational concept, and, therefore, is specifically distinct from all feelings of the former kind, which may be referred either to inclination or fear, What I recognise immediately as a law for me, I recognise with respect. This merely signifies the consciousness that my will is subordinate to a law, without the intervention of other influences on my sense. The immediate determination of the will by the law, and the consciousness of this, is called respect, so that this is regarded as an effect of the law on the subject, and not as the cause of it. Respect is properly the conception of a worth which thwarts my self-love. Accordingly it is something which is considered neither as an object of inclination nor of fear, although it has something analogous to both. The object of respect is the law only, and that the law which we impose on ourselves and yet recognise as necessary in itself. As a law, we are subjected too it without consulting self-love; as imposed by us on ourselves, it is a result of our will. In the former aspect it has an analogy to fear, in the latter to inclination. Respect for a person is properly only respect for the law (of honesty, etc.) of which he gives us an example. Since we also look on the improvement of our talents as a duty, we consider that we see in a person of talents, as it were, the example of a law (viz., to become like him in this by exercise), and this constitutes our respect. All so-called moral interest consists simply in respect for the law.

But what sort of law can that be, the conception of which must determine the will, even without paying any regard to the effect expected from it, in order that this will may be called good absolutely and without qualification? As I have deprived the will of every impulse which could arise to it from obedience to any law, there remains nothing but the universal conformity of its actions to law in general, which alone is to serve the will as a principle, i.e., I am never to act otherwise than so that I could also will that my maxim should become a universal law. Here, now, it is the simple conformity to law in general, without assuming any particular law applicable to certain actions, that serves the will as its principle and must so serve it, if duty is not to be a vain delusion and a chimerical notion. The common reason of men in its practical judgements perfectly coincides with this and always has in view the principle here suggested. Let the question be, for example: May I when in distress make a promise with the intention not to keep it? I readily distinguish here between the two significations which the question may have: Whether it is prudent, or whether it is right, to make a false promise? The former may undoubtedly of be the case. I see clearly indeed that it is not enough to extricate myself from a present difficulty by means of this subterfuge, but it must be well considered whether there may not hereafter spring from this lie much greater inconvenience than that from which I now free myself, and as, with all my supposed cunning, the consequences cannot be so easily foreseen but that credit once lost may be much more injurious to me than any mischief which I seek to avoid at present, it should be considered whether it would not be more prudent to act herein according to a universal maxim and to make it a habit to promise nothing except with the intention of keeping it. But it is soon clear to me that such a maxim will still only be based on the fear

of consequences. Now it is a wholly different thing to be truthful from duty and to be so from apprehension of injurious consequences. In the first case, the very notion of the action already implies a law for me; in the second case, I must first look about elsewhere to see what results may be combined with it which would affect myself. For to deviate from the principle of duty is beyond all doubt wicked; but to be unfaithful to my maxim of prudence may often be very advantageous to me, although to abide by it is certainly safer. The shortest way, however, and an unerring one, to discover the answer to this question whether a lying promise is consistent with duty, is to ask myself, “Should I be content that my maxim (to extricate myself from difficulty by a false promise) should hold good as a universal law, for myself as well as for others?” and should I be able to say to myself, “Every one may make a deceitful promise when he finds himself in a difficulty from which he cannot otherwise extricate himself?” Then I presently become aware that while I can will the lie, I can by no means will that lying should be a universal law. For with such a law there would be no promises at all, since it would be in vain to allege my intention in regard to my future actions to those who would not believe this allegation, or if they over hastily did so would pay me back in my own coin. Hence my maxim, as soon as it should be made a universal law, would necessarily destroy itself.

I do not, therefore, need any far-reaching penetration to discern what I have to do in order that my will may be morally good. Inexperienced in the course of the world, incapable of being prepared for all its contingencies, I only ask myself: Canst thou also will that thy maxim should be a universal law? If not, then it must be rejected, and that not because of a disadvantage accruing from it to myself or even to others, but because it cannot enter as a principle into a possible universal legislation, and reason extorts from me immediate respect for such legislation. I do not indeed as yet discern on what this respect is based (this the philosopher may inquire), but at least I understand this, that it is an estimation of the worth which far outweighs all worth of what is recommended by inclination, and that the necessity of acting from pure respect for the practical law is what constitutes duty, to which every other motive must give place, because it is the condition of a will being good in itself, and the worth of such a will is above everything.

Thus, then, without quitting the moral knowledge of common human reason, we have arrived at its principle. And although, no doubt, common men do not conceive it in such an abstract and universal form, yet they always have it really before their eyes and use it as the standard of their decision. Here it would be easy to show how, with this compass in hand, men are well able to distinguish, in every case that occurs, what is good, what bad, conformably to duty or inconsistent with it, if, without in the least teaching them anything new, we only, like Socrates, direct their attention to the principle they themselves employ; and that, therefore, we do not need science and philosophy to know what we should do to be honest and good, yea, even wise and virtuous. Indeed we might well have conjectured beforehand that the knowledge of what every man is bound to do, and therefore also to know, would be within the reach of every man, even the commonest. Here we cannot forbear admiration when we see how great an advantage the practical judgement has over the theoretical in the common understanding of men. In the latter, if common reason ventures to depart from the laws of experience and from the perceptions of the senses, it falls into mere inconceivabilities and self-contradictions, at least into a chaos of uncertainty, obscurity, and instability. But in the practical sphere it is just when the common understanding excludes all sensible springs from practical laws that its power of judgement begins to show itself to advantage. It then becomes even subtle, whether it be that it chicanes with its own conscience or with other claims respecting what is to be called right, or whether it desires for its own instruction to determine honestly the worth of actions; and, in the latter case, it may even have as good a hope of hitting the mark as any philosopher whatever can promise himself. Nay, it is almost more sure of doing so, because the philosopher cannot have any other principle, while he may easily perplex his judgement by a multitude of considerations foreign to the matter, and so turn aside from the right way. Would it not therefore be wiser

in moral concerns to acquiesce in the judgement of common reason, or at most only to call in philosophy for the purpose of rendering the system of morals more complete and intelligible, and its rules more convenient for use (especially for disputation), but not so as to draw off the common understanding from its happy simplicity, or to bring it by means of philosophy into a new path of inquiry and instruction?

Innocence is indeed a glorious thing; only, on the other hand, it is very sad that it cannot well maintain itself and is easily seduced. On this account even wisdom- which otherwise consists more in conduct than in knowledge- yet has need of science, not in order to learn from it, but to secure for its precepts admission and permanence. Against all the commands of duty which reason represents to man as so deserving of respect, he feels in himself a powerful counterpoise in his wants and inclinations, the entire satisfaction of which he sums up under the name of happiness. Now reason issues its commands unyieldingly, without promising anything to the inclinations, and, as it were, with disregard and contempt for these claims, which are so impetuous, and at the same time so plausible, and which will not allow themselves to be suppressed by any command. Hence there arises a natural dialectic, i.e., a disposition, to argue against these strict laws of duty and to question their validity, or at least their purity and strictness; and, if possible, to make them more accordant with our wishes and inclinations, that is to say, to corrupt them at their very source, and entirely to destroy their worth- a thing which even common practical reason cannot ultimately call good.

Thus is the common reason of man compelled to go out of its sphere, and to take a step into the field of a practical philosophy, not to satisfy any speculative want (which never occurs to it as long as it is content to be mere sound reason), but even on practical grounds, in order to attain in it information and clear instruction respecting the source of its principle, and the correct determination of it in opposition to the maxims which are based on wants and inclinations, so that it may escape from the perplexity of opposite claims and not run the risk of losing all genuine moral principles through the equivocation into which it easily falls. Thus, when practical reason cultivates itself, there insensibly arises in it a dialetic which forces it to seek aid in philosophy, just as happens to it in its theoretic use; and in this case, therefore, as well as in the other, it will find rest nowhere but in a thorough critical examination of our reason.

SECOND SECTION

TRANSITION FROM POPULAR MORAL PHILOSOPHY

TO THE METAPHYSIC OF MORALS

If we have hitherto drawn our notion of duty from the common use of our practical reason, it is by no means to be inferred that we have treated it as an empirical notion. On the contrary, if we attend to the experience of men's conduct, we meet frequent and, as we ourselves allow, just complaints that one cannot find a single certain example of the disposition to act from pure duty. Although many things are done in conformity with what duty prescribes, it is nevertheless always doubtful whether they are done strictly from duty, so as to have a moral worth. Hence there have at all times been philosophers who have altogether denied that this disposition actually exists at all in human actions, and have ascribed everything to a more or less refined self-love. Not that they have on that account questioned the soundness of the conception of morality; on the contrary, they spoke with sincere regret of the frailty and corruption of human nature, which, though noble enough to take its rule an idea so worthy of respect, is yet weak to follow it and employs reason which ought to give it the law only for the purpose of providing for the interest of the inclinations, whether singly or at the best in the greatest possible harmony with one another.

In fact, it is absolutely impossible to make out by experience with complete certainty a single case in which the maxim of an action, however right in itself, rested simply on moral grounds and on the conception of duty. Sometimes it happens that with the sharpest self-examination we can find nothing beside the moral principle of duty which could have been powerful enough to move us to this or that action and to so great a sacrifice; yet we cannot from this infer with certainty that it was not really some secret impulse of self-love, under the false appearance of duty, that was the actual determining cause of the will. We like them to flatter ourselves by falsely taking credit for a more noble motive; whereas in fact we can never, even by the strictest examination, get completely behind the secret springs of action; since, when the question is of moral worth, it is not with the actions which we see that we are concerned, but with those inward principles of them which we do not see.

Moreover, we cannot better serve the wishes of those who ridicule all morality as a mere chimera of human imagination over stepping itself from vanity, than by conceding to them that notions of duty must be drawn only from experience (as from indolence, people are ready to think is also the case with all other notions); for or is to prepare for them a certain triumph. I am willing to admit out of love of humanity that even most of our actions are correct, but if we look closer at them we everywhere come upon the dear self which is always prominent, and it is this they have in view and not the strict command of duty which would often require self-denial. Without being an enemy of virtue, a cool observer, one that does not mistake the wish for good, however lively, for its reality, may sometimes doubt whether true virtue is actually found anywhere in the world, and this especially as years increase and the judgement is partly made wiser by experience and partly, also, more acute in observation. This being so, nothing can secure us from falling away altogether from our ideas of duty, or maintain in the soul a well-grounded respect for its law, but the clear conviction that although there should never have been actions which really sprang from such pure sources, yet whether this or that takes place is not at all the question; but that reason of itself, independent on all experience, ordains what ought to take place, that accordingly actions of which perhaps the world has hitherto never given an example, the feasibility even of which might be very much doubted by one who founds everything on experience, are nevertheless inflexibly commanded by reason;

that, e.g., even though there might never yet have been a sincere friend, yet not a whit the less is pure sincerity in friendship required of every man, because, prior to all experience, this duty is involved as duty in the idea of a reason determining the will by a priori principles.

When we add further that, unless we deny that the notion of morality has any truth or reference to any possible object, we must admit that its law must be valid, not merely for men but for all rational creatures generally, not merely under certain contingent conditions or with exceptions but with absolute necessity, then it is clear that no experience could enable us to infer even the possibility of such apodeictic laws. For with what right could we bring into unbounded respect as a universal precept for every rational nature that which perhaps holds only under the contingent conditions of humanity? Or how could laws of the determination of our will be regarded as laws of the determination of the will of rational beings generally, and for us only as such, if they were merely empirical and did not take their origin wholly a priori from pure but practical reason?

Nor could anything be more fatal to morality than that we should wish to derive it from examples. For every example of it that is set before me must be first itself tested by principles of morality, whether it is worthy to serve as an original example, i.e., as a pattern; but by no means can it authoritatively furnish the conception of morality. Even the Holy One of the Gospels must first be compared with our ideal of moral perfection before we can recognise Him as such; and so He says of Himself, “Why call ye Me (whom you see) good; none is good (the model of good) but God only (whom ye do not see)?” But whence have we the conception of God as the supreme good? Simply from the idea of moral perfection, which reason frames a priori and connects inseparably with the notion of a free will. Imitation finds no place at all in morality, and examples serve only for encouragement, i.e., they put beyond doubt the feasibility of what the law commands, they make visible that which the practical rule expresses more generally, but they can never authorize us to set aside the true original which lies in reason and to guide ourselves by examples.

If then there is no genuine supreme principle of morality but what must rest simply on pure reason, independent of all experience, I think it is not necessary even to put the question whether it is good to exhibit these concepts in their generality (in abstracto) as they are established a priori along with the principles belonging to them, if our knowledge is to be distinguished from the vulgar and to be called philosophical.

In our times indeed this might perhaps be necessary; for if we collected votes whether pure rational knowledge separated from everything empirical, that is to say, metaphysic of morals, or whether popular practical philosophy is to be preferred, it is easy to guess which side would preponderate.

This descending to popular notions is certainly very commendable, if the ascent to the principles of pure reason has first taken place and been satisfactorily accomplished. This implies that we first found ethics on metaphysics, and then, when it is firmly established, procure a hearing for it by giving it a popular character. But it is quite absurd to try to be popular in the first inquiry, on which the soundness of the principles depends. It is not only that this proceeding can never lay claim to the very rare merit of a true philosophical popularity, since there is no art in being intelligible if one renounces all thoroughness of insight; but also it produces a disgusting medley of compiled observations and half-reasoned principles. Shallow pates enjoy this because it can be used for every-day chat, but the sagacious find in it only confusion, and being unsatisfied and unable to help themselves, they turn away their eyes, while philosophers, who see quite well through this delusion, are little listened to when they call men off for a time from this pretended popularity, in order that they might be rightfully popular after they have attained a definite insight.

We need only look at the attempts of moralists in that favourite fashion, and we shall find at one time the special constitution of human nature (including, however, the idea of a rational nature generally), at one time perfection, at another happiness, here moral sense, there fear of God. a little of this, and a little of that, in marvellous mixture, without its occurring to them to ask whether the principles of morality are

to be sought in the knowledge of human nature at all (which we can have only from experience); or, if this is not so, if these principles are to be found altogether a priori, free from everything empirical, in pure rational concepts only and nowhere else, not even in the smallest degree; then rather to adopt the method of making this a separate inquiry, as pure practical philosophy, or (if one may use a name so decried) as metaphysic of morals, * to bring it by itself to completeness, and to require the public, which wishes for popular treatment, to await the issue of this undertaking.

* Just as pure mathematics are distinguished from applied, pure logic from applied, so if we choose we may also distinguish pure philosophy of morals (metaphysic) from applied (viz., applied to human nature). By this designation we are also at once reminded that moral principles are not based on properties of human nature, but must subsist a priori of themselves, while from such principles practical rules must be capable of being deduced for every rational nature, and accordingly for that of man.

Such a metaphysic of morals, completely isolated, not mixed with any anthropology, theology, physics, or hyperphysics, and still less with occult qualities (which we might call hypophysical), is not only an indispensable substratum of all sound theoretical knowledge of duties, but is at the same time a desideratum of the highest importance to the actual fulfilment of their precepts. For the pure conception of duty, unmixed with any foreign addition of empirical attractions, and, in a word, the conception of the moral law, exercises on the human heart, by way of reason alone (which first becomes aware with this that it can of itself be practical), an influence so much more powerful than all other springs * which may be derived from the field of experience, that, in the consciousness of its worth, it despises the latter, and can by degrees become their master; whereas a mixed ethics, compounded partly of motives drawn from feelings and inclinations, and partly also of conceptions of reason, must make the mind waver between motives which cannot be brought under any principle, which lead to good only by mere accident and very often also to evil.

* I have a letter from the late excellent Sulzer, in which he asks me what can be the reason that moral instruction, although containing much that is convincing for the reason, yet accomplishes so little? My answer was postponed in order that I might make it complete. But it is simply this: that the teachers themselves have not got their own notions clear, and when they endeavour to make up for this by raking up motives of moral goodness from every quarter, trying to make their physic right strong, they spoil it. For the commonest understanding shows that if we imagine, on the one hand, an act of honesty done with steadfast mind, apart from every view to advantage of any kind in this world or another, and even under the greatest temptations of necessity or allurement, and, on the other hand, a similar act which was affected, in however low a degree, by a foreign motive, the former leaves far behind and eclipses the second; it elevates the soul and inspires the wish to be able to act in like manner oneself. Even moderately young children feel this impression, ana one should never represent duties to them in any other light.

From what has been said, it is clear that all moral conceptions have their seat and origin completely a priori in the reason, and that, moreover, in the commonest reason just as truly as in that which is in the highest degree speculative; that they cannot be obtained by abstraction from any empirical, and therefore merely contingent, knowledge; that it is just this purity of their origin that makes them worthy to serve as our supreme practical principle, and that just in proportion as we add anything empirical, we detract from their genuine influence and from the absolute value of actions; that it is not only of the greatest necessity, in a purely speculative point of view, but is also of the greatest practical importance, to derive these notions and laws from pure reason, to present them pure and unmixed, and even to determine the compass of this practical or pure rational knowledge, i.e., to determine the whole faculty of pure practical reason; and, in doing so, we must not make its principles dependent on the particular nature of human reason, though in speculative philosophy this may be permitted, or may even at times be necessary; but since moral laws ought to hold good for every rational creature, we must derive them from the general concept

of a rational being. In this way, although for its application to man morality has need of anthropology, yet, in the first instance, we must treat it independently as pure philosophy, i.e., as metaphysic, complete in itself (a thing which in such distinct branches of science is easily done); knowing well that unless we are in possession of this, it would not only be vain to determine the moral element of duty in right actions for purposes of speculative criticism, but it would be impossible to base morals on their genuine principles, even for common practical purposes, especially of moral instruction, so as to produce pure moral dispositions, and to engraft them on men's minds to the promotion of the greatest possible good in the world.

But in order that in this study we may not merely advance by the natural steps from the common moral judgement (in this case very worthy of respect) to the philosophical, as has been already done, but also from a popular philosophy, which goes no further than it can reach by groping with the help of examples, to metaphysic (which does allow itself to be checked by anything empirical and, as it must measure the whole extent of this kind of rational knowledge, goes as far as ideal conceptions, where even examples fail us), we must follow and clearly describe the practical faculty of reason, from the general rules of its determination to the point where the notion of duty springs from it.

Everything in nature works according to laws. Rational beings alone have the faculty of acting according to the conception of laws, that is according to principles, i.e., have a will. Since the deduction of actions from principles requires reason, the will is nothing but practical reason. If reason infallibly determines the will, then the actions of such a being which are recognised as objectively necessary are subjectively necessary also, i.e., the will is a faculty to choose that only which reason independent of inclination recognises as practically necessary, i.e., as good. But if reason of itself does not sufficiently determine the will, if the latter is subject also to subjective conditions (particular impulses) which do not always coincide with the objective conditions; in a word, if the will does not in itself completely accord with reason (which is actually the case with men), then the actions which objectively are recognised as necessary are subjectively contingent, and the determination of such a will according to objective laws is obligation, that is to say, the relation of the objective laws to a will that is not thoroughly good is conceived as the determination of the will of a rational being by principles of reason, but which the will from its nature does not of necessity follow.

The conception of an objective principle, in so far as it is obligatory for a will, is called a command (of reason), and the formula of the command is called an imperative.

All imperatives are expressed by the word ought [or shall], and thereby indicate the relation of an objective law of reason to a will, which from its subjective constitution is not necessarily determined by it (an obligation). They say that something would be good to do or to forbear, but they say it to a will which does not always do a thing because it is conceived to be good to do it. That is practically good, however, which determines the will by means of the conceptions of reason, and consequently not from subjective causes, but objectively, that is on principles which are valid for every rational being as such. It is distinguished from the pleasant, as that which influences the will only by means of sensation from merely subjective causes, valid only for the sense of this or that one, and not as a principle of reason, which holds for every one. *

* The dependence of the desires on sensations is called inclination, and this accordingly always indicates a want. The dependence of a contingently determinable will on principles of reason is called an interest. This therefore, is found only in the case of a dependent will which does not always of itself conform to reason; in the Divine will we cannot conceive any interest. But the human will can also take an interest in a thing without therefore acting from interest. The former signifies the practical interest in the action, the latter the pathological in the object of the action. The former indicates only dependence of the will on principles of reason in themselves; the second, dependence on principles of reason for the sake of inclination, reason supplying only the practical rules how the requirement of the inclination may be

satisfied. In the first case the action interests me; in the second the object of the action (because it is pleasant to me). We have seen in the first section that in an action done from duty we must look not to the interest in the object, but only to that in the action itself, and in its rational principle (viz., the law).

A perfectly good will would therefore be equally subject to objective laws (viz., laws of good), but could not be conceived as obliged thereby to act lawfully, because of itself from its subjective constitution it can only be determined by the conception of good. Therefore no imperatives hold for the Divine will, or in general for a holy will; ought is here out of place, because the volition is already of itself necessarily in unison with the law. Therefore imperatives are only formulae to express the relation of objective laws of all volition to the subjective imperfection of the will of this or that rational being, e.g., the human will.

Now all imperatives command either hypothetically or categorically. The former represent the practical necessity of a possible action as means to something else that is willed (or at least which one might possibly will). The categorical imperative would be that which represented an action as necessary of itself without reference to another end, i.e., as objectively necessary.

Since every practical law represents a possible action as good and, on this account, for a subject who is practically determinable by reason, necessary, all imperatives are formulae determining an action which is necessary according to the principle of a will good in some respects. If now the action is good only as a means to something else, then the imperative is hypothetical; if it is conceived as good in itself and consequently as being necessarily the principle of a will which of itself conforms to reason, then it is categorical.

Thus the imperative declares what action possible by me would be good and presents the practical rule in relation to a will which does not forthwith perform an action simply because it is good, whether because the subject does not always know that it is good, or because, even if it know this, yet its maxims might be opposed to the objective principles of practical reason.

Accordingly the hypothetical imperative only says that the action is good for some purpose, possible or actual. In the first case it is a problematical, in the second an assertorial practical principle. The categorical imperative which declares an action to be objectively necessary in itself without reference to any purpose, i.e., without any other end, is valid as an apodeictic (practical) principle.

Whatever is possible only by the power of some rational being may also be conceived as a possible purpose of some will; and therefore the principles of action as regards the means necessary to attain some possible purpose are in fact infinitely numerous. All sciences have a practical part, consisting of problems expressing that some end is possible for us and of imperatives directing how it may be attained. These may, therefore, be called in general imperatives of skill. Here there is no question whether the end is rational and good, but only what one must do in order to attain it. The precepts for the physician to make his patient thoroughly healthy, and for a poisoner to ensure certain death, are of equal value in this respect, that each serves to effect its purpose perfectly. Since in early youth it cannot be known what ends are likely to occur to us in the course of life, parents seek to have their children taught a great many things, and provide for their skill in the use of means for all sorts of arbitrary ends, of none of which can they determine whether it may not perhaps hereafter be an object to their pupil, but which it is at all events possible that he might aim at; and this anxiety is so great that they commonly neglect to form and correct their judgement on the value of the things which may be chosen as ends.

There is one end, however, which may be assumed to be actually such to all rational beings (so far as imperatives apply to them, viz., as dependent beings), and, therefore, one purpose which they not merely may have, but which we may with certainty assume that they all actually have by a natural necessity, and this is happiness. The hypothetical imperative which expresses the practical necessity of an action as means to the advancement of happiness is assertorial. We are not to present it as necessary for an uncertain and merely possible purpose, but for a purpose which we may presuppose with certainty and a

priori in every man, because it belongs to his being. Now skill in the choice of means to his own greatest well-being may be called prudence, * in the narrowest sense. And thus the imperative which refers to the choice of means to one's own happiness, i.e., the precept of prudence, is still always hypothetical; the action is not commanded absolutely, but only as means to another purpose.

* The word prudence is taken in two senses: in the one it may bear the name of knowledge of the world, in the other that of private prudence. The former is a man's ability to influence others so as to use them for his own purposes. The latter is the sagacity to combine all these purposes for his own lasting benefit. This latter is properly that to which the value even of the former is reduced, and when a man is prudent in the former sense, but not in the latter, we might better say of him that he is clever and cunning, but, on the whole, imprudent.

Finally, there is an imperative which commands a certain conduct immediately, without having as its condition any other purpose to be attained by it. This imperative is categorical. It concerns not the matter of the action, or its intended result, but its form and the principle of which it is itself a result; and what is essentially good in it consists in the mental disposition, let the consequence be what it may. This imperative may be called that of morality.

There is a marked distinction also between the volitions on these three sorts of principles in the dissimilarity of the obligation of the will. In order to mark this difference more clearly, I think they would be most suitably named in their order if we said they are either rules of skill, or counsels of prudence, or commands (laws) of morality. For it is law only that involves the conception of an unconditional and objective necessity, which is consequently universally valid; and commands are laws which must be obeyed, that is, must be followed, even in opposition to inclination. Counsels, indeed, involve necessity, but one which can only hold under a contingent subjective condition, viz., they depend on whether this or that man reckons this or that as part of his happiness; the categorical imperative, on the contrary, is not limited by any condition, and as being absolutely, although practically, necessary, may be quite properly called a command. We might also call the first kind of imperatives technical (belonging to art), the second pragmatic * (to welfare), the third moral (belonging to free conduct generally, that is, to morals).

* It seems to me that the proper signification of the word pragmatic may be most accurately defined in this way. For sanctions are called pragmatic which flow properly not from the law of the states as necessary enactments, but from precaution for the general welfare. A history is composed pragmatically when it teaches prudence, i.e., instructs the world how it can provide for its interests better, or at least as well as, the men of former time.

Now arises the question, how are all these imperatives possible? This question does not seek to know how we can conceive the accomplishment of the action which the imperative ordains, but merely how we can conceive the obligation of the will which the imperative expresses. No special explanation is needed to show how an imperative of skill is possible. Whoever wills the end, wills also (so far as reason decides his conduct) the means in his power which are indispensably necessary thereto. This proposition is, as regards the volition, analytical; for, in willing an object as my effect, there is already thought the causality of myself as an acting cause, that is to say, the use of the means; and the imperative educes from the conception of volition of an end the conception of actions necessary to this end. Synthetical propositions must no doubt be employed in defining the means to a proposed end; but they do not concern the principle, the act of the will, but the object and its realization. E.g., that in order to bisect a line on an unerring principle I must draw from its extremities two intersecting arcs; this no doubt is taught by mathematics only in synthetical propositions; but if I know that it is only by this process that the intended operation can be performed, then to say that, if I fully will the operation, I also will the action required for it, is an analytical proposition; for it is one and the same thing to conceive something as an effect which I can produce in a certain way, and to conceive myself as acting in this way.

If it were only equally easy to give a definite conception of happiness, the imperatives of prudence

would correspond exactly with those of skill, and would likewise be analytical. For in this case as in that, it could be said: “Whoever wills the end, wills also (according to the dictate of reason necessarily) the indispensable means thereto which are in his power.” But, unfortunately, the notion of happiness is so indefinite that although every man wishes to attain it, yet he never can say definitely and consistently what it is that he really wishes and wills. The reason of this is that all the elements which belong to the notion of happiness are altogether empirical, i.e., they must be borrowed from experience, and nevertheless the idea of happiness requires an absolute whole, a maximum of welfare in my present and all future circumstances. Now it is impossible that the most clear-sighted and at the same time most powerful being (supposed finite) should frame to himself a definite conception of what he really wills in this. Does he will riches, how much anxiety, envy, and snares might he not thereby draw upon his shoulders? Does he will knowledge and discernment, perhaps it might prove to be only an eye so much the sharper to show him so much the more fearfully the evils that are now concealed from him, and that cannot be avoided, or to impose more wants on his desires, which already give him concern enough. Would he have long life? who guarantees to him that it would not be a long misery? would he at least have health? how often has uneasiness of the body restrained from excesses into which perfect health would have allowed one to fall? and so on. In short, he is unable, on any principle, to determine with certainty what would make him truly happy; because to do so he would need to be omniscient. We cannot therefore act on any definite principles to secure happiness, but only on empirical counsels, e.g. of regimen, frugality, courtesy, reserve, etc., which experience teaches do, on the average, most promote well-being. Hence it follows that the imperatives of prudence do not, strictly speaking, command at all, that is, they cannot present actions objectively as practically necessary; that they are rather to be regarded as counsels (consilia) than precepts precepts of reason, that the problem to determine certainly and universally what action would promote the happiness of a rational being is completely insoluble, and consequently no imperative respecting it is possible which should, in the strict sense, command to do what makes happy; because happiness is not an ideal of reason but of imagination, resting solely on empirical grounds, and it is vain to expect that these should define an action by which one could attain the totality of a series of consequences which is really endless. This imperative of prudence would however be an analytical proposition if we assume that the means to happiness could be certainly assigned; for it is distinguished from the imperative of skill only by this, that in the latter the end is merely possible, in the former it is given; as however both only ordain the means to that which we suppose to be willed as an end, it follows that the imperative which ordains the willing of the means to him who wills the end is in both cases analytical. Thus there is no difficulty in regard to the possibility of an imperative of this kind either.

On the other hand, the question how the imperative of morality is possible, is undoubtedly one, the only one, demanding a solution, as this is not at all hypothetical, and the objective necessity which it presents cannot rest on any hypothesis, as is the case with the hypothetical imperatives. Only here we must never leave out of consideration that we cannot make out by any example, in other words empirically, whether there is such an imperative at all, but it is rather to be feared that all those which seem to be categorical may yet be at bottom hypothetical. For instance, when the precept is: “Thou shalt not promise deceitfully”; and it is assumed that the necessity of this is not a mere counsel to avoid some other evil, so that it should mean: “Thou shalt not make a lying promise, lest if it become known thou shouldst destroy thy credit,” but that an action of this kind must be regarded as evil in itself, so that the imperative of the prohibition is categorical; then we cannot show with certainty in any example that the will was determined merely by the law, without any other spring of action, although it may appear to be so. For it is always possible that fear of disgrace, perhaps also obscure dread of other dangers, may have a secret influence on the will. Who can prove by experience the non-existence of a cause when all that experience tells us is that we do not perceive it? But in such a case the so-called moral imperative, which as such appears to be categorical and unconditional, would in reality be only a pragmatic precept, drawing our attention to our

own interests and merely teaching us to take these into consideration.

We shall therefore have to investigate a priori the possibility of a categorical imperative, as we have not in this case the advantage of its reality being given in experience, so that [the elucidation of] its possibility should be requisite only for its explanation, not for its establishment. In the meantime it may be discerned beforehand that the categorical imperative alone has the purport of a practical law; all the rest may indeed be called principles of the will but not laws, since whatever is only necessary for the attainment of some arbitrary purpose may be considered as in itself contingent, and we can at any time be free from the precept if we give up the purpose; on the contrary, the unconditional command leaves the will no liberty to choose the opposite; consequently it alone carries with it that necessity which we require in a law.

Secondly, in the case of this categorical imperative or law of morality, the difficulty (of discerning its possibility) is a very profound one. It is an a priori synthetical practical proposition; * and as there is so much difficulty in discerning the possibility of speculative propositions of this kind, it may readily be supposed that the difficulty will be no less with the practical.

* I connect the act with the will without presupposing any condition resulting from any inclination, but a priori, and therefore necessarily (though only objectively, i.e., assuming the idea of a reason possessing full power over all subjective motives). This is accordingly a practical proposition which does not deduce the willing of an action by mere analysis from another already presupposed (for we have not such a perfect will), but connects it immediately with the conception of the will of a rational being, as something not contained in it.

In this problem we will first inquire whether the mere conception of a categorical imperative may not perhaps supply us also with the formula of it, containing the proposition which alone can be a categorical imperative; for even if we know the tenor of such an absolute command, yet how it is possible will require further special and laborious study, which we postpone to the last section.

When I conceive a hypothetical imperative, in general I do not know beforehand what it will contain until I am given the condition. But when I conceive a categorical imperative, I know at once what it contains. For as the imperative contains besides the law only the necessity that the maxims * shall conform to this law, while the law contains no conditions restricting it, there remains nothing but the general statement that the maxim of the action should conform to a universal law, and it is this conformity alone that the imperative properly represents as necessary.

* A maxim is a subjective principle of action, and must be distinguished from the objective principle, namely, practical law. The former contains the practical rule set by reason according to the conditions of the subject (often its ignorance or its inclinations), so that it is the principle on which the subject acts; but the law is the objective principle valid for every rational being, and is the principle on which it ought to act that is an imperative.

There is therefore but one categorical imperative, namely, this: Act only on that maxim whereby thou canst at the same time will that it should become a universal law.

Now if all imperatives of duty can be deduced from this one imperative as from their principle, then, although it should remain undecided what is called duty is not merely a vain notion, yet at least we shall be able to show what we understand by it and what this notion means.

Since the universality of the law according to which effects are produced constitutes what is properly called nature in the most general sense (as to form), that is the existence of things so far as it is determined by general laws, the imperative of duty may be expressed thus: Act as if the maxim of thy action were to become by thy will a universal law of nature.

We will now enumerate a few duties, adopting the usual division of them into duties to ourselves and ourselves and to others, and into perfect and imperfect duties. *

* It must be noted here that I reserve the division of duties for a future metaphysic of morals; so that I

give it here only as an arbitrary one (in order to arrange my examples). For the rest, I understand by a perfect duty one that admits no exception in favour of inclination and then I have not merely external but also internal perfect duties. This is contrary to the use of the word adopted in the schools; but I do not intend to justify there, as it is all one for my purpose whether it is admitted or not.

1. A man reduced to despair by a series of misfortunes feels wearied of life, but is still so far in possession of his reason that he can ask himself whether it would not be contrary to his duty to himself to take his own life. Now he inquires whether the maxim of his action could become a universal law of nature. His maxim is: "From self-love I adopt it as a principle to shorten my life when its longer duration is likely to bring more evil than satisfaction." It is asked then simply whether this principle founded on self-love can become a universal law of nature. Now we see at once that a system of nature of which it should be a law to destroy life by means of the very feeling whose special nature it is to impel to the improvement of life would contradict itself and, therefore, could not exist as a system of nature; hence that maxim cannot possibly exist as a universal law of nature and, consequently, would be wholly inconsistent with the supreme principle of all duty.

2. Another finds himself forced by necessity to borrow money. He knows that he will not be able to repay it, but sees also that nothing will be lent to him unless he promises stoutly to repay it in a definite time. He desires to make this promise, but he has still so much conscience as to ask himself: "Is it not unlawful and inconsistent with duty to get out of a difficulty in this way?" Suppose however that he resolves to do so: then the maxim of his action would be expressed thus: "When I think myself in want of money, I will borrow money and promise to repay it, although I know that I never can do so." Now this principle of self-love or of one's own advantage may perhaps be consistent with my whole future welfare; but the question now is, "Is it right?" I change then the suggestion of self-love into a universal law, and state the question thus: "How would it be if my maxim were a universal law?" Then I see at once that it could never hold as a universal law of nature, but would necessarily contradict itself. For supposing it to be a universal law that everyone when he thinks himself in a difficulty should be able to promise whatever he pleases, with the purpose of not keeping his promise, the promise itself would become impossible, as well as the end that one might have in view in it, since no one would consider that anything was promised to him, but would ridicule all such statements as vain pretences.

3. A third finds in himself a talent which with the help of some culture might make him a useful man in many respects. But he finds himself in comfortable circumstances and prefers to indulge in pleasure rather than to take pains in enlarging and improving his happy natural capacities. He asks, however, whether his maxim of neglect of his natural gifts, besides agreeing with his inclination to indulgence, agrees also with what is called duty. He sees then that a system of nature could indeed subsist with such a universal law although men (like the South Sea islanders) should let their talents rest and resolve to devote their lives merely to idleness, amusement, and propagation of their species- in a word, to enjoyment; but he cannot possibly will that this should be a universal law of nature, or be implanted in us as such by a natural instinct. For, as a rational being, he necessarily wills that his faculties be developed, since they serve him and have been given him, for all sorts of possible purposes.

4. A fourth, who is in prosperity, while he sees that others have to contend with great wretchedness and that he could help them, thinks: "What concern is it of mine? Let everyone be as happy as Heaven pleases, or as he can make himself; I will take nothing from him nor even envy him, only I do not wish to contribute anything to his welfare or to his assistance in distress!" Now no doubt if such a mode of thinking were a universal law, the human race might very well subsist and doubtless even better than in a state in which everyone talks of sympathy and good-will, or even takes care occasionally to put it into practice, but, on the other side, also cheats when he can, betrays the rights of men, or otherwise violates them. But although it is possible that a universal law of nature might exist in accordance with that maxim, it is impossible to will that such a principle should have the universal validity of a law of nature. For a

will which resolved this would contradict itself, inasmuch as many cases might occur in which one would have need of the love and sympathy of others, and in which, by such a law of nature, sprung from his own will, he would deprive himself of all hope of the aid he desires.

These are a few of the many actual duties, or at least what we regard as such, which obviously fall into two classes on the one principle that we have laid down. We must be able to will that a maxim of our action should be a universal law. This is the canon of the moral appreciation of the action generally. Some actions are of such a character that their maxim cannot without contradiction be even conceived as a universal law of nature, far from it being possible that we should will that it should be so. In others this intrinsic impossibility is not found, but still it is impossible to will that their maxim should be raised to the universality of a law of nature, since such a will would contradict itself It is easily seen that the former violate strict or rigorous (inflexible) duty; the latter only laxer (meritorious) duty. Thus it has been completely shown how all duties depend as regards the nature of the obligation (not the object of the action) on the same principle.

If now we attend to ourselves on occasion of any transgression of duty, we shall find that we in fact do not will that our maxim should be a universal law, for that is impossible for us; on the contrary, we will that the opposite should remain a universal law, only we assume the liberty of making an exception in our own favour or (just for this time only) in favour of our inclination. Consequently if we considered all cases from one and the same point of view, namely, that of reason, we should find a contradiction in our own will, namely, that a certain principle should be objectively necessary as a universal law, and yet subjectively should not be universal, but admit of exceptions. As however we at one moment regard our action from the point of view of a will wholly conformed to reason, and then again look at the same action from the point of view of a will affected by inclination, there is not really any contradiction, but an antagonism of inclination to the precept of reason, whereby the universality of the principle is changed into a mere generality, so that the practical principle of reason shall meet the maxim half way. Now, although this cannot be justified in our own impartial judgement, yet it proves that we do really recognise the validity of the categorical imperative and (with all respect for it) only allow ourselves a few exceptions, which we think unimportant and forced from us.

We have thus established at least this much, that if duty is a conception which is to have any import and real legislative authority for our actions, it can only be expressed in categorical and not at all in hypothetical imperatives. We have also, which is of great importance, exhibited clearly and definitely for every practical application the content of the categorical imperative, which must contain the principle of all duty if there is such a thing at all. We have not yet, however, advanced so far as to prove a priori that there actually is such an imperative, that there is a practical law which commands absolutely of itself and without any other impulse, and that the following of this law is duty.

With the view of attaining to this, it is of extreme importance to remember that we must not allow ourselves to think of deducing the reality of this principle from the particular attributes of human nature. For duty is to be a practical, unconditional necessity of action; it must therefore hold for all rational beings (to whom an imperative can apply at all), and for this reason only be also a law for all human wills. On the contrary, whatever is deduced from the particular natural characteristics of humanity, from certain feelings and propensions, nay, even, if possible, from any particular tendency proper to human reason, and which need not necessarily hold for the will of every rational being; this may indeed supply us with a maxim, but not with a law; with a subjective principle on which we may have a propension and inclination to act, but not with an objective principle on which we should be enjoined to act, even though all our propensions, inclinations, and natural dispositions were opposed to it. In fact, the sublimity and intrinsic dignity of the command in duty are so much the more evident, the less the subjective impulses favour it and the more they oppose it, without being able in the slightest degree to weaken the obligation of the law or to diminish its validity.

Here then we see philosophy brought to a critical position, since it has to be firmly fixed, notwithstanding that it has nothing to support it in heaven or earth. Here it must show its purity as absolute director of its own laws, not the herald of those which are whispered to it by an implanted sense or who knows what tutelary nature. Although these may be better than nothing, yet they can never afford principles dictated by reason, which must have their source wholly a priori and thence their commanding authority, expecting everything from the supremacy of the law and the due respect for it, nothing from inclination, or else condemning the man to self-contempt and inward abhorrence.

Thus every empirical element is not only quite incapable of being an aid to the principle of morality, but is even highly prejudicial to the purity of morals, for the proper and inestimable worth of an absolutely good will consists just in this, that the principle of action is free from all influence of contingent grounds, which alone experience can furnish. We cannot too much or too often repeat our warning against this lax and even mean habit of thought which seeks for its principle amongst empirical motives and laws; for human reason in its weariness is glad to rest on this pillow, and in a dream of sweet illusions (in which, instead of Juno, it embraces a cloud) it substitutes for morality a bastard patched up from limbs of various derivation, which looks like anything one chooses to see in it, only not like virtue to one who has once beheld her in her true form. *

* To behold virtue in her proper form is nothing else but to contemplate morality stripped of all admixture of sensible things and of every spurious ornament of reward or self-love. How much she then eclipses everything else that appears charming to the affections, every one may readily perceive with the least exertion of his reason, if it be not wholly spoiled for abstraction.

The question then is this: “Is it a necessary law for all rational beings that they should always judge of their actions by maxims of which they can themselves will that they should serve as universal laws?” If it is so, then it must be connected (altogether a priori) with the very conception of the will of a rational being generally. But in order to discover this connexion we must, however reluctantly, take a step into metaphysic, although into a domain of it which is distinct from speculative philosophy, namely, the metaphysic of morals. In a practical philosophy, where it is not the reasons of what happens that we have to ascertain, but the laws of what ought to happen, even although it never does, i.e., objective practical laws, there it is not necessary to inquire into the reasons why anything pleases or displeases, how the pleasure of mere sensation differs from taste, and whether the latter is distinct from a general satisfaction of reason; on what the feeling of pleasure or pain rests, and how from it desires and inclinations arise, and from these again maxims by the co-operation of reason: for all this belongs to an empirical psychology, which would constitute the second part of physics, if we regard physics as the philosophy of nature, so far as it is based on empirical laws. But here we are concerned with objective practical laws and, consequently, with the relation of the will to itself so far as it is determined by reason alone, in which case whatever has reference to anything empirical is necessarily excluded; since if reason of itself alone determines the conduct (and it is the possibility of this that we are now investigating), it must necessarily do so a priori.

The will is conceived as a faculty of determining oneself to action in accordance with the conception of certain laws. And such a faculty can be found only in rational beings. Now that which serves the will as the objective ground of its self-determination is the end, and, if this is assigned by reason alone, it must hold for all rational beings. On the other hand, that which merely contains the ground of possibility of the action of which the effect is the end, this is called the means. The subjective ground of the desire is the spring, the objective ground of the volition is the motive; hence the distinction between subjective ends which rest on springs, and objective ends which depend on motives valid for every rational being. Practical principles are formal when they abstract from all subjective ends; they are material when they assume these, and therefore particular springs of action. The ends which a rational being proposes to himself at pleasure as effects of his actions (material ends) are all only relative, for it is only their

relation to the particular desires of the subject that gives them their worth, which therefore cannot furnish principles universal and necessary for all rational beings and for every volition, that is to say practical laws. Hence all these relative ends can give rise only to hypothetical imperatives.

Supposing, however, that there were something whose existence has in itself an absolute worth, something which, being an end in itself, could be a source of definite laws; then in this and this alone would lie the source of a possible categorical imperative, i.e., a practical law.

Now I say: man and generally any rational being exists as an end in himself, not merely as a means to be arbitrarily used by this or that will, but in all his actions, whether they concern himself or other rational beings, must be always regarded at the same time as an end. All objects of the inclinations have only a conditional worth, for if the inclinations and the wants founded on them did not exist, then their object would be without value. But the inclinations, themselves being sources of want, are so far from having an absolute worth for which they should be desired that on the contrary it must be the universal wish of every rational being to be wholly free from them. Thus the worth of any object which is to be acquired by our action is always conditional. Beings whose existence depends not on our will but on nature's, have nevertheless, if they are irrational beings, only a relative value as means, and are therefore called things; rational beings, on the contrary, are called persons, because their very nature points them out as ends in themselves, that is as something which must not be used merely as means, and so far therefore restricts freedom of action (and is an object of respect). These, therefore, are not merely subjective ends whose existence has a worth for us as an effect of our action, but objective ends, that is, things whose existence is an end in itself; an end moreover for which no other can be substituted, which they should subserve merely as means, for otherwise nothing whatever would possess absolute worth; but if all worth were conditioned and therefore contingent, then there would be no supreme practical principle of reason whatever.

If then there is a supreme practical principle or, in respect of the human will, a categorical imperative, it must be one which, being drawn from the conception of that which is necessarily an end for everyone because it is an end in itself, constitutes an objective principle of will, and can therefore serve as a universal practical law. The foundation of this principle is: rational nature exists as an end in itself. Man necessarily conceives his own existence as being so; so far then this is a subjective principle of human actions. But every other rational being regards its existence similarly, just on the same rational principle that holds for me: * so that it is at the same time an objective principle, from which as a supreme practical law all laws of the will must be capable of being deduced. Accordingly the practical imperative will be as follows: So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only. We will now inquire whether this can be practically carried out.

* This proposition is here stated as a postulate. The ground of it will be found in the concluding section.

To abide by the previous examples:

Firstly, under the head of necessary duty to oneself: He who contemplates suicide should ask himself whether his action can be consistent with the idea of humanity as an end in itself. If he destroys himself in order to escape from painful circumstances, he uses a person merely as a mean to maintain a tolerable condition up to the end of life. But a man is not a thing, that is to say, something which can be used merely as means, but must in all his actions be always considered as an end in himself. I cannot, therefore, dispose in any way of a man in my own person so as to mutilate him, to damage or kill him. (It belongs to ethics proper to define this principle more precisely, so as to avoid all misunderstanding, e. g., as to the amputation of the limbs in order to preserve myself, as to exposing my life to danger with a view to preserve it, etc. This question is therefore omitted here.)

Secondly, as regards necessary duties, or those of strict obligation, towards others: He who is thinking of making a lying promise to others will see at once that he would be using another man merely as a mean,

without the latter containing at the same time the end in himself. For he whom I propose by such a promise to use for my own purposes cannot possibly assent to my mode of acting towards him and, therefore, cannot himself contain the end of this action. This violation of the principle of humanity in other men is more obvious if we take in examples of attacks on the freedom and property of others. For then it is clear that he who transgresses the rights of men intends to use the person of others merely as a means, without considering that as rational beings they ought always to be esteemed also as ends, that is, as beings who must be capable of containing in themselves the end of the very same action. *

* Let it not be thought that the common "quod tibi non vis fieri, etc." could serve here as the rule or principle. For it is only a deduction from the former, though with several limitations; it cannot be a universal law, for it does not contain the principle of duties to oneself, nor of the duties of benevolence to others (for many a one would gladly consent that others should not benefit him, provided only that he might be excused from showing benevolence to them), nor finally that of duties of strict obligation to one another, for on this principle the criminal might argue against the judge who punishes him, and so on.

Thirdly, as regards contingent (meritorious) duties to oneself: It is not enough that the action does not violate humanity in our own person as an end in itself, it must also harmonize with it. Now there are in humanity capacities of greater perfection, which belong to the end that nature has in view in regard to humanity in ourselves as the subject: to neglect these might perhaps be consistent with the maintenance of humanity as an end in itself, but not with the advancement of this end.

Fourthly, as regards meritorious duties towards others: The natural end which all men have is their own happiness. Now humanity might indeed subsist, although no one should contribute anything to the happiness of others, provided he did not intentionally withdraw anything from it; but after all this would only harmonize negatively not positively with humanity as an end in itself, if every one does not also endeavour, as far as in him lies, to forward the ends of others. For the ends of any subject which is an end in himself ought as far as possible to be my ends also, if that conception is to have its full effect with me.

This principle, that humanity and generally every rational nature is an end in itself (which is the supreme limiting condition of every man's freedom of action), is not borrowed from experience, firstly, because it is universal, applying as it does to all rational beings whatever, and experience is not capable of determining anything about them; secondly, because it does not present humanity as an end to men (subjectively), that is as an object which men do of themselves actually adopt as an end; but as an objective end, which must as a law constitute the supreme limiting condition of all our subjective ends, let them be what we will; it must therefore spring from pure reason. In fact the objective principle of all practical legislation lies (according to the first principle) in the rule and its form of universality which makes it capable of being a law (say, e. g., a law of nature); but the subjective principle is in the end; now by the second principle the subject of all ends is each rational being, inasmuch as it is an end in itself. Hence follows the third practical principle of the will, which is the ultimate condition of its harmony with universal practical reason, viz.: the idea of the will of every rational being as a universally legislative will.

On this principle all maxims are rejected which are inconsistent with the will being itself universal legislator. Thus the will is not subject simply to the law, but so subject that it must be regarded as itself giving the law and, on this ground only, subject to the law (of which it can regard itself as the author).

In the previous imperatives, namely, that based on the conception of the conformity of actions to general laws, as in a physical system of nature, and that based on the universal prerogative of rational beings as ends in themselves- these imperatives, just because they were conceived as categorical, excluded from any share in their authority all admixture of any interest as a spring of action; they were, however, only assumed to be categorical, because such an assumption was necessary to explain the conception of duty. But we could not prove independently that there are practical propositions which command categorically, nor can it be proved in this section; one thing, however, could be done, namely, to indicate in the

imperative itself, by some determinate expression, that in the case of volition from duty all interest is renounced, which is the specific criterion of categorical as distinguished from hypothetical imperatives. This is done in the present (third) formula of the principle, namely, in the idea of the will of every rational being as a universally legislating will.

For although a will which is subject to laws may be attached to this law by means of an interest, yet a will which is itself a supreme lawgiver so far as it is such cannot possibly depend on any interest, since a will so dependent would itself still need another law restricting the interest of its self-love by the condition that it should be valid as universal law.

Thus the principle that every human will is a will which in all its maxims gives universal laws, * provided it be otherwise justified, would be very well adapted to be the categorical imperative, in this respect, namely, that just because of the idea of universal legislation it is not based on interest, and therefore it alone among all possible imperatives can be unconditional. Or still better, converting the proposition, if there is a categorical imperative (i.e., a law for the will of every rational being), it can only command that everything be done from maxims of one's will regarded as a will which could at the same time will that it should itself give universal laws, for in that case only the practical principle and the imperative which it obeys are unconditional, since they cannot be based on any interest.

* I may be excused from adducing examples to elucidate this principle, as those which have already been used to elucidate the categorical imperative and its formula would all serve for the like purpose here.

Looking back now on all previous attempts to discover the principle of morality, we need not wonder why they all failed. It was seen that man was bound to laws by duty, but it was not observed that the laws to which he is subject are only those of his own giving, though at the same time they are universal, and that he is only bound to act in conformity with his own will; a will, however, which is designed by nature to give universal laws. For when one has conceived man only as subject to a law (no matter what), then this law required some interest, either by way of attraction or constraint, since it did not originate as a law from his own will, but this will was according to a law obliged by something else to act in a certain manner. Now by this necessary consequence all the labour spent in finding a supreme principle of duty was irrevocably lost. For men never elicited duty, but only a necessity of acting from a certain interest. Whether this interest was private or otherwise, in any case the imperative must be conditional and could not by any means be capable of being a moral command. I will therefore call this the principle of autonomy of the will, in contrast with every other which I accordingly reckon as heteronomy.

The conception of the will of every rational being as one which must consider itself as giving in all the maxims of its will universal laws, so as to judge itself and its actions from this point of view- this conception leads to another which depends on it and is very fruitful, namely that of a kingdom of ends.

By a kingdom I understand the union of different rational beings in a system by common laws. Now since it is by laws that ends are determined as regards their universal validity, hence, if we abstract from the personal differences of rational beings and likewise from all the content of their private ends, we shall be able to conceive all ends combined in a systematic whole (including both rational beings as ends in themselves, and also the special ends which each may propose to himself), that is to say, we can conceive a kingdom of ends, which on the preceding principles is possible.

For all rational beings come under the law that each of them must treat itself and all others never merely as means, but in every case at the same time as ends in themselves. Hence results a systematic union of rational being by common objective laws, i.e., a kingdom which may be called a kingdom of ends, since what these laws have in view is just the relation of these beings to one another as ends and means. It is certainly only an ideal.

A rational being belongs as a member to the kingdom of ends when, although giving universal laws in it, he is also himself subject to these laws. He belongs to it as sovereign when, while giving laws, he is

not subject to the will of any other.

A rational being must always regard himself as giving laws either as member or as sovereign in a kingdom of ends which is rendered possible by the freedom of will. He cannot, however, maintain the latter position merely by the maxims of his will, but only in case he is a completely independent being without wants and with unrestricted power adequate to his will.

Morality consists then in the reference of all action to the legislation which alone can render a kingdom of ends possible. This legislation must be capable of existing in every rational being and of emanating from his will, so that the principle of this will is never to act on any maxim which could not without contradiction be also a universal law and, accordingly, always so to act that the will could at the same time regard itself as giving in its maxims universal laws. If now the maxims of rational beings are not by their own nature coincident with this objective principle, then the necessity of acting on it is called practical necessitation, i.e., duty. Duty does not apply to the sovereign in the kingdom of ends, but it does to every member of it and to all in the same degree.

The practical necessity of acting on this principle, i.e., duty, does not rest at all on feelings, impulses, or inclinations, but solely on the relation of rational beings to one another, a relation in which the will of a rational being must always be regarded as legislative, since otherwise it could not be conceived as an end in itself. Reason then refers every maxim of the will, regarding it as legislating universally, to every other will and also to every action towards oneself; and this not on account of any other practical motive or any future advantage, but from the idea of the dignity of a rational being, obeying no law but that which he himself also gives.

In the kingdom of ends everything has either value or dignity. Whatever has a value can be replaced by something else which is equivalent; whatever, on the other hand, is above all value, and therefore admits of no equivalent, has a dignity.

Whatever has reference to the general inclinations and wants of mankind has a market value; whatever, without presupposing a want, corresponds to a certain taste, that is to a satisfaction in the mere purposeless play of our faculties, has a fancy value; but that which constitutes the condition under which alone anything can be an end in itself, this has not merely a relative worth, i.e., value, but an intrinsic worth, that is, dignity.

Now morality is the condition under which alone a rational being can be an end in himself, since by this alone is it possible that he should be a legislating member in the kingdom of ends. Thus morality, and humanity as capable of it, is that which alone has dignity. Skill and diligence in labour have a market value; wit, lively imagination, and humour, have fancy value; on the other hand, fidelity to promises, benevolence from principle (not from instinct), have an intrinsic worth. Neither nature nor art contains anything which in default of these it could put in their place, for their worth consists not in the effects which spring from them, not in the use and advantage which they secure, but in the disposition of mind, that is, the maxims of the will which are ready to manifest themselves in such actions, even though they should not have the desired effect. These actions also need no recommendation from any subjective taste or sentiment, that they may be looked on with immediate favour and satisfaction: they need no immediate propension or feeling for them; they exhibit the will that performs them as an object of an immediate respect, and nothing but reason is required to impose them on the will; not to flatter it into them, which, in the case of duties, would be a contradiction. This estimation therefore shows that the worth of such a disposition is dignity, and places it infinitely above all value, with which it cannot for a moment be brought into comparison or competition without as it were violating its sanctity.

What then is it which justifies virtue or the morally good disposition, in making such lofty claims? It is nothing less than the privilege it secures to the rational being of participating in the giving of universal laws, by which it qualifies him to be a member of a possible kingdom of ends, a privilege to which he was already destined by his own nature as being an end in himself and, on that account, legislating in the

kingdom of ends; free as regards all laws of physical nature, and obeying those only which he himself gives, and by which his maxims can belong to a system of universal law, to which at the same time he submits himself. For nothing has any worth except what the law assigns it. Now the legislation itself which assigns the worth of everything must for that very reason possess dignity, that is an unconditional incomparable worth; and the word respect alone supplies a becoming expression for the esteem which a rational being must have for it. Autonomy then is the basis of the dignity of human and of every rational nature.

The three modes of presenting the principle of morality that have been adduced are at bottom only so many formulae of the very same law, and each of itself involves the other two. There is, however, a difference in them, but it is rather subjectively than objectively practical, intended namely to bring an idea of the reason nearer to intuition (by means of a certain analogy) and thereby nearer to feeling. All maxims, in fact, have:

1. A form, consisting in universality; and in this view the formula of the moral imperative is expressed thus, that the maxims must be so chosen as if they were to serve as universal laws of nature.

2. A matter, namely, an end, and here the formula says that the rational being, as it is an end by its own nature and therefore an end in itself, must in every maxim serve as the condition limiting all merely relative and arbitrary ends.

3. A complete characterization of all maxims by means of that formula, namely, that all maxims ought by their own legislation to harmonize with a possible kingdom of ends as with a kingdom of nature. * There is a progress here in the order of the categories of unity of the form of the will (its universality), plurality of the matter (the objects, i.e., the ends), and totality of the system of these. In forming our moral judgement of actions, it is better to proceed always on the strict method and start from the general formula of the categorical imperative: Act according to a maxim which can at the same time make itself a universal law. If, however, we wish to gain an entrance for the moral law, it is very useful to bring one and the same action under the three specified conceptions, and thereby as far as possible to bring it nearer to intuition.

* Teleology considers nature as a kingdom of ends; ethics regards a possible kingdom of ends as a kingdom nature. In the first case, the kingdom of ends is a theoretical idea, adopted to explain what actually is. In the latter it is a practical idea, adopted to bring about that which is not yet, but which can be realized by our conduct, namely, if it conforms to this idea.

We can now end where we started at the beginning, namely, with the conception of a will unconditionally good. That will is absolutely good which cannot be evil- in other words, whose maxim, if made a universal law, could never contradict itself. This principle, then, is its supreme law: “Act always on such a maxim as thou canst at the same time will to be a universal law”; this is the sole condition under which a will can never contradict itself; and such an imperative is categorical. Since the validity of the will as a universal law for possible actions is analogous to the universal connexion of the existence of things by general laws, which is the formal notion of nature in general, the categorical imperative can also be expressed thus: Act on maxims which can at the same time have for their object themselves as universal laws of nature. Such then is the formula of an absolutely good will.

Rational nature is distinguished from the rest of nature by this, that it sets before itself an end. This end would be the matter of every good will. But since in the idea of a will that is absolutely good without being limited by any condition (of attaining this or that end) we must abstract wholly from every end to be effected (since this would make every will only relatively good), it follows that in this case the end must be conceived, not as an end to be effected, but as an independently existing end. Consequently it is conceived only negatively, i.e., as that which we must never act against and which, therefore, must never be regarded merely as means, but must in every volition be esteemed as an end likewise. Now this end can be nothing but the subject of all possible ends, since this is also the subject of a possible absolutely

good will; for such a will cannot without contradiction be postponed to any other object. The principle: "So act in regard to every rational being (thyself and others), that he may always have place in thy maxim as an end in himself," is accordingly essentially identical with this other: "Act upon a maxim which, at the same time, involves its own universal validity for every rational being." For that in using means for every end I should limit my maxim by the condition of its holding good as a law for every subject, this comes to the same thing as that the fundamental principle of all maxims of action must be that the subject of all ends, i.e., the rational being himself, be never employed merely as means, but as the supreme condition restricting the use of all means, that is in every case as an end likewise.

It follows incontestably that, to whatever laws any rational being may be subject, he being an end in himself must be able to regard himself as also legislating universally in respect of these same laws, since it is just this fitness of his maxims for universal legislation that distinguishes him as an end in himself; also it follows that this implies his dignity (prerogative) above all mere physical beings, that he must always take his maxims from the point of view which regards himself and, likewise, every other rational being as law-giving beings (on which account they are called persons). In this way a world of rational beings (mundus intelligibilis) is possible as a kingdom of ends, and this by virtue of the legislation proper to all persons as members. Therefore every rational being must so act as if he were by his maxims in every case a legislating member in the universal kingdom of ends. The formal principle of these maxims is: "So act as if thy maxim were to serve likewise as the universal law (of all rational beings)." A kingdom of ends is thus only possible on the analogy of a kingdom of nature, the former however only by maxims, that is self-imposed rules, the latter only by the laws of efficient causes acting under necessitation from without. Nevertheless, although the system of nature is looked upon as a machine, yet so far as it has reference to rational beings as its ends, it is given on this account the name of a kingdom of nature. Now such a kingdom of ends would be actually realized by means of maxims conforming to the canon which the categorical imperative prescribes to all rational beings, if they were universally followed. But although a rational being, even if he punctually follows this maxim himself, cannot reckon upon all others being therefore true to the same, nor expect that the kingdom of nature and its orderly arrangements shall be in harmony with him as a fitting member, so as to form a kingdom of ends to which he himself contributes, that is to say, that it shall favour his expectation of happiness, still that law: "Act according to the maxims of a member of a merely possible kingdom of ends legislating in it universally," remains in its full force, inasmuch as it commands categorically. And it is just in this that the paradox lies; that the mere dignity of man as a rational creature, without any other end or advantage to be attained thereby, in other words, respect for a mere idea, should yet serve as an inflexible precept of the will, and that it is precisely in this independence of the maxim on all such springs of action that its sublimity consists; and it is this that makes every rational subject worthy to be a legislative member in the kingdom of ends: for otherwise he would have to be conceived only as subject to the physical law of his wants. And although we should suppose the kingdom of nature and the kingdom of ends to be united under one sovereign, so that the latter kingdom thereby ceased to be a mere idea and acquired true reality, then it would no doubt gain the accession of a strong spring, but by no means any increase of its intrinsic worth. For this sole absolute lawgiver must, notwithstanding this, be always conceived as estimating the worth of rational beings only by their disinterested behaviour, as prescribed to themselves from that idea [the dignity of man] alone. The essence of things is not altered by their external relations, and that which, abstracting from these, alone constitutes the absolute worth of man, is also that by which he must be judged, whoever the judge may be, and even by the Supreme Being. Morality, then, is the relation of actions to the relation of actions will, that is, to the autonomy of potential universal legislation by its maxims. An action that is consistent with the autonomy of the will is permitted; one that does not agree therewith is forbidden. A will whose maxims necessarily coincide with the laws of autonomy is a holy will, good absolutely. The dependence of a will not absolutely good on the principle of autonomy (moral

necessitation) is obligation. This, then, cannot be applied to a holy being. The objective necessity of actions from obligation is called duty.

From what has just been said, it is easy to see how it happens that, although the conception of duty implies subjection to the law, we yet ascribe a certain dignity and sublimity to the person who fulfils all his duties. There is not, indeed, any sublimity in him, so far as he is subject to the moral law; but inasmuch as in regard to that very law he is likewise a legislator, and on that account alone subject to it, he has sublimity. We have also shown above that neither fear nor inclination, but simply respect for the law, is the spring which can give actions a moral worth. Our own will, so far as we suppose it to act only under the condition that its maxims are potentially universal laws, this ideal will which is possible to us is the proper object of respect; and the dignity of humanity consists just in this capacity of being universally legislative, though with the condition that it is itself subject to this same legislation.

The Autonomy of the Will as the Supreme Principle of Morality

Autonomy of the will is that property of it by which it is a law to itself (independently of any property of the objects of volition). The principle of autonomy then is: "Always so to choose that the same volition shall comprehend the maxims of our choice as a universal law." We cannot prove that this practical rule is an imperative, i.e., that the will of every rational being is necessarily bound to it as a condition, by a mere analysis of the conceptions which occur in it, since it is a synthetical proposition; we must advance beyond the cognition of the objects to a critical examination of the subject, that is, of the pure practical reason, for this synthetic proposition which commands apodeictically must be capable of being cognized wholly a priori. This matter, however, does not belong to the present section. But that the principle of autonomy in question is the sole principle of morals can be readily shown by mere analysis of the conceptions of morality. For by this analysis we find that its principle must be a categorical imperative and that what this commands is neither more nor less than this very autonomy.

Heteronomy of the Will as the Source of all spurious Principles
of Morality

If the will seeks the law which is to determine it anywhere else than in the fitness of its maxims to be universal laws of its own dictation, consequently if it goes out of itself and seeks this law in the character of any of its objects, there always results heteronomy. The will in that case does not give itself the law, but it is given by the object through its relation to the will. This relation, whether it rests on inclination or on conceptions of reason, only admits of hypothetical imperatives: "I ought to do something because I wish for something else." On the contrary, the moral, and therefore categorical, imperative says: "I ought to do so and so, even though I should not wish for anything else." E.g., the former says: "I ought not to lie, if I would retain my reputation"; the latter says: "I ought not to lie, although it should not bring me the least discredit." The latter therefore must so far abstract from all objects that they shall have no influence on the will, in order that practical reason (will) may not be restricted to administering an interest not belonging to it, but may simply show its own commanding authority as the supreme legislation. Thus, e.g., I ought to endeavour to promote the happiness of others, not as if its realization involved any concern of mine (whether by immediate inclination or by any satisfaction indirectly gained through reason), but simply because a maxim which excludes it cannot be comprehended as a universal law in one and the same volition.

Classification of all Principles of Morality which can be
founded on the Conception of Heteronomy

Here as elsewhere human reason in its pure use, so long as it was not critically examined, has first tried all possible wrong ways before it succeeded in finding the one true way.

All principles which can be taken from this point of view are either empirical or rational. The former, drawn from the principle of happiness, are built on physical or moral feelings; the latter, drawn from the principle of perfection, are built either on the rational conception of perfection as a possible effect, or on

that of an independent perfection (the will of God) as the determining cause of our will.

Empirical principles are wholly incapable of serving as a foundation for moral laws. For the universality with which these should hold for all rational beings without distinction, the unconditional practical necessity which is thereby imposed on them, is lost when their foundation is taken from the particular constitution of human nature, or the accidental circumstances in which it is placed. The principle of private happiness, however, is the most objectionable, not merely because it is false, and experience contradicts the supposition that prosperity is always proportioned to good conduct, nor yet merely because it contributes nothing to the establishment of morality- since it is quite a different thing to make a prosperous man and a good man, or to make one prudent and sharp-sighted for his own interests and to make him virtuous- but because the springs it provides for morality are such as rather undermine it and destroy its sublimity, since they put the motives to virtue and to vice in the same class and only teach us to make a better calculation, the specific difference between virtue and vice being entirely extinguished. On the other hand, as to moral feeling, this supposed special sense, * the appeal to it is indeed superficial when those who cannot think believe that feeling will help them out, even in what concerns general laws: and besides, feelings, which naturally differ infinitely in degree, cannot furnish a uniform standard of good and evil, nor has anyone a right to form judgements for others by his own feelings: nevertheless this moral feeling is nearer to morality and its dignity in this respect, that it pays virtue the honour of ascribing to her immediately the satisfaction and esteem we have for her and does not, as it were, tell her to her face that we are not attached to her by her beauty but by profit.

* I class the principle of moral feeling under that of happiness, because every empirical interest promises to contribute to our well-being by the agreeableness that a thing affords, whether it be immediately and without a view to profit, or whether profit be regarded. We must likewise, with Hutcheson, class the principle of sympathy with the happiness of others under his assumed moral sense.

Amongst the rational principles of morality, the ontological conception of perfection, notwithstanding its defects, is better than the theological conception which derives morality from a Divine absolutely perfect will. The former is, no doubt, empty and indefinite and consequently useless for finding in the boundless field of possible reality the greatest amount suitable for us; moreover, in attempting to distinguish specifically the reality of which we are now speaking from every other, it inevitably tends to turn in a circle and cannot avoid tacitly presupposing the morality which it is to explain; it is nevertheless preferable to the theological view, first, because we have no intuition of the divine perfection and can only deduce it from our own conceptions, the most important of which is that of morality, and our explanation would thus be involved in a gross circle; and, in the next place, if we avoid this, the only notion of the Divine will remaining to us is a conception made up of the attributes of desire of glory and dominion, combined with the awful conceptions of might and vengeance, and any system of morals erected on this foundation would be directly opposed to morality.

However, if I had to choose between the notion of the moral sense and that of perfection in general (two systems which at least do not weaken morality, although they are totally incapable of serving as its foundation), then I should decide for the latter, because it at least withdraws the decision of the question from the sensibility and brings it to the court of pure reason; and although even here it decides nothing, it at all events preserves the indefinite idea (of a will good in itself free from corruption, until it shall be more precisely defined.

For the rest I think I may be excused here from a detailed refutation of all these doctrines; that would only be superfluous labour, since it is so easy, and is probably so well seen even by those whose office requires them to decide for one of these theories (because their hearers would not tolerate suspension of judgement). But what interests us more here is to know that the prime foundation of morality laid down by all these principles is nothing but heteronomy of the will, and for this reason they must necessarily miss their aim.

In every case where an object of the will has to be supposed, in order that the rule may be prescribed which is to determine the will, there the rule is simply heteronomy; the imperative is conditional, namely, if or because one wishes for this object, one should act so and so: hence it can never command morally, that is, categorically. Whether the object determines the will by means of inclination, as in the principle of private happiness, or by means of reason directed to objects of our possible volition generally, as in the principle of perfection, in either case the will never determines itself immediately by the conception of the action, but only by the influence which the foreseen effect of the action has on the will; I ought to do something, on this account, because I wish for something else; and here there must be yet another law assumed in me as its subject, by which I necessarily will this other thing, and this law again requires an imperative to restrict this maxim. For the influence which the conception of an object within the reach of our faculties can exercise on the will of the subject, in consequence of its natural properties, depends on the nature of the subject, either the sensibility (inclination and taste), or the understanding and reason, the employment of which is by the peculiar constitution of their nature attended with satisfaction. It follows that the law would be, properly speaking, given by nature, and, as such, it must be known and proved by experience and would consequently be contingent and therefore incapable of being an apodeictic practical rule, such as the moral rule must be. Not only so, but it is inevitably only heteronomy; the will does not give itself the law, but is given by a foreign impulse by means of a particular natural constitution of the subject adapted to receive it. An absolutely good will, then, the principle of which must be a categorical imperative, will be indeterminate as regards all objects and will contain merely the form of volition generally, and that as autonomy, that is to say, the capability of the maxims of every good will to make themselves a universal law, is itself the only law which the will of every rational being imposes on itself, without needing to assume any spring or interest as a foundation.

How such a synthetical practical a priori proposition is possible, and why it is necessary, is a problem whose solution does not lie within the bounds of the metaphysic of morals; and we have not here affirmed its truth, much less professed to have a proof of it in our power. We simply showed by the development of the universally received notion of morality that an autonomy of the will is inevitably connected with it, or rather is its foundation. Whoever then holds morality to be anything real, and not a chimerical idea without any truth, must likewise admit the principle of it that is here assigned. This section then, like the first, was merely analytical. Now to prove that morality is no creation of the brain, which it cannot be if the categorical imperative and with it the autonomy of the will is true, and as an a priori principle absolutely necessary, this supposes the possibility of a synthetic use of pure practical reason, which however we cannot venture on without first giving a critical examination of this faculty of reason. In the concluding section we shall give the principal outlines of this critical examination as far as is sufficient for our purpose.

THIRD SECTION

TRANSITION FROM THE METAPHYSIC OF MORALS TO THE

CRITIQUE OF PURE PRACTICAL REASON

The Concept of Freedom is the Key that explains the Autonomy of the Will

The will is a kind of causality belonging to living beings in so far as they are rational, and freedom would be this property of such causality that it can be efficient, independently of foreign causes determining it; just as physical necessity is the property that the causality of all irrational beings has of being determined to activity by the influence of foreign causes.

The preceding definition of freedom is negative and therefore unfruitful for the discovery of its essence, but it leads to a positive conception which is so much the more full and fruitful.

Since the conception of causality involves that of laws, according to which, by something that we call cause, something else, namely the effect, must be produced; hence, although freedom is not a property of the will depending on physical laws, yet it is not for that reason lawless; on the contrary it must be a causality acting according to immutable laws, but of a peculiar kind; otherwise a free will would be an absurdity. Physical necessity is a heteronomy of the efficient causes, for every effect is possible only according to this law, that something else determines the efficient cause to exert its causality. What else then can freedom of the will be but autonomy, that is, the property of the will to be a law to itself? But the proposition: “The will is in every action a law to itself,” only expresses the principle: “To act on no other maxim than that which can also have as an object itself as a universal law.” Now this is precisely the formula of the categorical imperative and is the principle of morality, so that a free will and a will subject to moral laws are one and the same.

On the hypothesis, then, of freedom of the will, morality together with its principle follows from it by mere analysis of the conception. However, the latter is a synthetic proposition; viz., an absolutely good will is that whose maxim can always include itself regarded as a universal law; for this property of its maxim can never be discovered by analysing the conception of an absolutely good will. Now such synthetic propositions are only possible in this way: that the two cognitions are connected together by their union with a third in which they are both to be found. The positive concept of freedom furnishes this third cognition, which cannot, as with physical causes, be the nature of the sensible world (in the concept of which we find conjoined the concept of something in relation as cause to something else as effect). We cannot now at once show what this third is to which freedom points us and of which we have an idea a priori, nor can we make intelligible how the concept of freedom is shown to be legitimate from principles of pure practical reason and with it the possibility of a categorical imperative; but some further preparation is required.

Freedom must be presupposed as a Property of the Will
of all Rational Beings

It is not enough to predicate freedom of our own will, from Whatever reason, if we have not sufficient grounds for predicating the same of all rational beings. For as morality serves as a law for us only because we are rational beings, it must also hold for all rational beings; and as it must be deduced simply from the property of freedom, it must be shown that freedom also is a property of all rational beings. It is not enough, then, to prove it from certain supposed experiences of human nature (which indeed is quite impossible, and it can only be shown a priori), but we must show that it belongs to the activity of all

rational beings endowed with a will. Now I say every being that cannot act except under the idea of freedom is just for that reason in a practical point of view really free, that is to say, all laws which are inseparably connected with freedom have the same force for him as if his will had been shown to be free in itself by a proof theoretically conclusive. * Now I affirm that we must attribute to every rational being which has a will that it has also the idea of freedom and acts entirely under this idea. For in such a being we conceive a reason that is practical, that is, has causality in reference to its objects. Now we cannot possibly conceive a reason consciously receiving a bias from any other quarter with respect to its judgements, for then the subject would ascribe the determination of its judgement not to its own reason, but to an impulse. It must regard itself as the author of its principles independent of foreign influences. Consequently as practical reason or as the will of a rational being it must regard itself as free, that is to say, the will of such a being cannot be a will of its own except under the idea of freedom. This idea must therefore in a practical point of view be ascribed to every rational being.

* I adopt this method of assuming freedom merely as an idea which rational beings suppose in their actions, in order to avoid the necessity of proving it in its theoretical aspect also. The former is sufficient for my purpose; for even though the speculative proof should not be made out, yet a being that cannot act except with the idea of freedom is bound by the same laws that would oblige a being who was actually free. Thus we can escape here from the onus which presses on the theory.

Of the Interest attaching to the Ideas of Morality

We have finally reduced the definite conception of morality to the idea of freedom. This latter, however, we could not prove to be actually a property of ourselves or of human nature; only we saw that it must be presupposed if we would conceive a being as rational and conscious of its causality in respect of its actions, i.e., as endowed with a will; and so we find that on just the same grounds we must ascribe to every being endowed with reason and will this attribute of determining itself to action under the idea of its freedom.

Now it resulted also from the presupposition of these ideas that we became aware of a law that the subjective principles of action, i.e., maxims, must always be so assumed that they can also hold as objective, that is, universal principles, and so serve as universal laws of our own dictation. But why then should I subject myself to this principle and that simply as a rational being, thus also subjecting to it all other being endowed with reason? I will allow that no interest urges me to this, for that would not give a categorical imperative, but I must take an interest in it and discern how this comes to pass; for this properly an “I ought” is properly an “I would,” valid for every rational being, provided only that reason determined his actions without any hindrance. But for beings that are in addition affected as we are by springs of a different kind, namely, sensibility, and in whose case that is not always done which reason alone would do, for these that necessity is expressed only as an “ought,” and the subjective necessity is different from the objective.

It seems then as if the moral law, that is, the principle of autonomy of the will, were properly speaking only presupposed in the idea of freedom, and as if we could not prove its reality and objective necessity independently. In that case we should still have gained something considerable by at least determining the true principle more exactly than had previously been done; but as regards its validity and the practical necessity of subjecting oneself to it, we should not have advanced a step. For if we were asked why the universal validity of our maxim as a law must be the condition restricting our actions, and on what we ground the worth which we assign to this manner of acting- a worth so great that there cannot be any higher interest; and if we were asked further how it happens that it is by this alone a man believes he feels his own personal worth, in comparison with which that of an agreeable or disagreeable condition is to be regarded as nothing, to these questions we could give no satisfactory answer.

We find indeed sometimes that we can take an interest in a personal quality which does not involve any interest of external condition, provided this quality makes us capable of participating in the condition in

case reason were to effect the allotment; that is to say, the mere being worthy of happiness can interest of itself even without the motive of participating in this happiness. This judgement, however, is in fact only the effect of the importance of the moral law which we before presupposed (when by the idea of freedom we detach ourselves from every empirical interest); but that we ought to detach ourselves from these interests, i.e., to consider ourselves as free in action and yet as subject to certain laws, so as to find a worth simply in our own person which can compensate us for the loss of everything that gives worth to our condition; this we are not yet able to discern in this way, nor do we see how it is possible so to act- in other words, whence the moral law derives its obligation.

It must be freely admitted that there is a sort of circle here from which it seems impossible to escape. In the order of efficient causes we assume ourselves free, in order that in the order of ends we may conceive ourselves as subject to moral laws: and we afterwards conceive ourselves as subject to these laws, because we have attributed to ourselves freedom of will: for freedom and self-legislation of will are both autonomy and, therefore, are reciprocal conceptions, and for this very reason one must not be used to explain the other or give the reason of it, but at most only logical purposes to reduce apparently different notions of the same object to one single concept (as we reduce different fractions of the same value to the lowest terms).

One resource remains to us, namely, to inquire whether we do not occupy different points of view when by means of freedom we think ourselves as causes efficient a priori, and when we form our conception of ourselves from our actions as effects which we see before our eyes.

It is a remark which needs no subtle reflection to make, but which we may assume that even the commonest understanding can make, although it be after its fashion by an obscure discernment of judgement which it calls feeling, that all the “ideas” that come to us involuntarily (as those of the senses) do not enable us to know objects otherwise than as they affect us; so that what they may be in themselves remains unknown to us, and consequently that as regards “ideas” of this kind even with the closest attention and clearness that the understanding can apply to them, we can by them only attain to the knowledge of appearances, never to that of things in themselves. As soon as this distinction has once been made (perhaps merely in consequence of the difference observed between the ideas given us from without, and in which we are passive, and those that we produce simply from ourselves, and in which we show our own activity), then it follows of itself that we must admit and assume behind the appearance something else that is not an appearance, namely, the things in themselves; although we must admit that as they can never be known to us except as they affect us, we can come no nearer to them, nor can we ever know what they are in themselves. This must furnish a distinction, however crude, between a world of sense and the world of understanding, of which the former may be different according to the difference of the sensuous impressions in various observers, while the second which is its basis always remains the same, Even as to himself, a man cannot pretend to know what he is in himself from the knowledge he has by internal sensation. For as he does not as it were create himself, and does not come by the conception of himself a priori but empirically, it naturally follows that he can obtain his knowledge even of himself only by the inner sense and, consequently, only through the appearances of his nature and the way in which his consciousness is affected. At the same time beyond these characteristics of his own subject, made up of mere appearances, he must necessarily suppose something else as their basis, namely, his ego, whatever its characteristics in itself may be. Thus in respect to mere perception and receptivity of sensations he must reckon himself as belonging to the world of sense; but in respect of whatever there may be of pure activity in him (that which reaches consciousness immediately and not through affecting the senses), he must reckon himself as belonging to the intellectual world, of which, however, he has no further knowledge. To such a conclusion the reflecting man must come with respect to all the things which can be presented to him: it is probably to be met with even in persons of the commonest understanding, who, as is well known, are very much inclined to suppose behind the objects of the senses something else

invisible and acting of itself. They spoil it, however, by presently sensualizing this invisible again; that is to say, wanting to make it an object of intuition, so that they do not become a whit the wiser.

Now man really finds in himself a faculty by which he distinguishes himself from everything else, even from himself as affected by objects, and that is reason. This being pure spontaneity is even elevated above the understanding. For although the latter is a spontaneity and does not, like sense, merely contain intuitions that arise when we are affected by things (and are therefore passive), yet it cannot produce from its activity any other conceptions than those which merely serve to bring the intuitions of sense under rules and, thereby, to unite them in one consciousness, and without this use of the sensibility it could not think at all; whereas, on the contrary, reason shows so pure a spontaneity in the case of what I call ideas [ideal conceptions] that it thereby far transcends everything that the sensibility can give it, and exhibits its most important function in distinguishing the world of sense from that of understanding, and thereby prescribing the limits of the understanding itself.

For this reason a rational being must regard himself qua intelligence (not from the side of his lower faculties) as belonging not to the world of sense, but to that of understanding; hence he has two points of view from which he can regard himself, and recognise laws of the exercise of his faculties, and consequently of all his actions: first, so far as he belongs to the world of sense, he finds himself subject to laws of nature (heteronomy); secondly, as belonging to the intelligible world, under laws which being independent of nature have their foundation not in experience but in reason alone.

As a rational being, and consequently belonging to the intelligible world, man can never conceive the causality of his own will otherwise than on condition of the idea of freedom, for independence of the determinate causes of the sensible world (an independence which reason must always ascribe to itself) is freedom. Now the idea of freedom is inseparably connected with the conception of autonomy, and this again with the universal principle of morality which is ideally the foundation of all actions of rational beings, just as the law of nature is of all phenomena.

Now the suspicion is removed which we raised above, that there was a latent circle involved in our reasoning from freedom to autonomy, and from this to the moral law, viz.: that we laid down the idea of freedom because of the moral law only that we might afterwards in turn infer the latter from freedom, and that consequently we could assign no reason at all for this law, but could only [present] it as a petitio principii which well disposed minds would gladly concede to us, but which we could never put forward as a provable proposition. For now we see that, when we conceive ourselves as free, we transfer ourselves into the world of understanding as members of it and recognise the autonomy of the will with its consequence, morality; whereas, if we conceive ourselves as under obligation, we consider ourselves as belonging to the world of sense and at the same time to the world of understanding.

How is a Categorical Imperative Possible?

Every rational being reckons himself qua intelligence as belonging to the world of understanding, and it is simply as an efficient cause belonging to that world that he calls his causality a will. On the other side he is also conscious of himself as a part of the world of sense in which his actions, which are mere appearances [phenomena] of that causality, are displayed; we cannot, however, discern how they are possible from this causality which we do not know; but instead of that, these actions as belonging to the sensible world must be viewed as determined by other phenomena, namely, desires and inclinations. If therefore I were only a member of the world of understanding, then all my actions would perfectly conform to the principle of autonomy of the pure will; if I were only a part of the world of sense, they would necessarily be assumed to conform wholly to the natural law of desires and inclinations, in other words, to the heteronomy of nature. (The former would rest on morality as the supreme principle, the latter on happiness.) Since, however, the world of understanding contains the foundation of the world of sense, and consequently of its laws also, and accordingly gives the law to my will (which belongs wholly to the world of understanding) directly, and must be conceived as doing so, it follows that, although on the

one side I must regard myself as a being belonging to the world of sense, yet on the other side I must recognize myself as subject as an intelligence to the law of the world of understanding, i.e., to reason, which contains this law in the idea of freedom, and therefore as subject to the autonomy of the will: consequently I must regard the laws of the world of understanding as imperatives for me and the actions which conform to them as duties.

And thus what makes categorical imperatives possible is this, that the idea of freedom makes me a member of an intelligible world, in consequence of which, if I were nothing else, all my actions would always conform to the autonomy of the will; but as I at the same time intuite myself as a member of the world of sense, they ought so to conform, and this categorical "ought" implies a synthetic a priori proposition, inasmuch as besides my will as affected by sensible desires there is added further the idea of the same will but as belonging to the world of the understanding, pure and practical of itself, which contains the supreme condition according to reason of the former will; precisely as to the intuitions of sense there are added concepts of the understanding which of themselves signify nothing but regular form in general and in this way synthetic a priori propositions become possible, on which all knowledge of physical nature rests.

The practical use of common human reason confirms this reasoning. There is no one, not even the most consummate villain, provided only that he is otherwise accustomed to the use of reason, who, when we set before him examples of honesty of purpose, of steadfastness in following good maxims, of sympathy and general benevolence (even combined with great sacrifices of advantages and comfort), does not wish that he might also possess these qualities. Only on account of his inclinations and impulses he cannot attain this in himself, but at the same time he wishes to be free from such inclinations which are burdensome to himself. He proves by this that he transfers himself in thought with a will free from the impulses of the sensibility into an order of things wholly different from that of his desires in the field of the sensibility; since he cannot expect to obtain by that wish any gratification of his desires, nor any position which would satisfy any of his actual or supposable inclinations (for this would destroy the pre-eminence of the very idea which wrests that wish from him): he can only expect a greater intrinsic worth of his own person. This better person, however, he imagines himself to be when be transfers himself to the point of view of a member of the world of the understanding, to which he is involuntarily forced by the idea of freedom, i.e., of independence on determining causes of the world of sense; and from this point of view he is conscious of a good will, which by his own confession constitutes the law for the bad will that he possesses as a member of the world of sense- a law whose authority he recognizes while transgressing it. What he morally "ought" is then what he necessarily "would," as a member of the world of the understanding, and is conceived by him as an "ought" only inasmuch as he likewise considers himself as a member of the world of sense.

Of the Extreme Limits of all Practical Philosophy.

All men attribute to themselves freedom of will. Hence come all judgements upon actions as being such as ought to have been done, although they have not been done. However, this freedom is not a conception of experience, nor can it be so, since it still remains, even though experience shows the contrary of what on supposition of freedom are conceived as its necessary consequences. On the other side it is equally necessary that everything that takes place should be fixedly determined according to laws of nature. This necessity of nature is likewise not an empirical conception, just for this reason, that it involves the motion of necessity and consequently of a priori cognition. But this conception of a system of nature is confirmed by experience; and it must even be inevitably presupposed if experience itself is to be possible, that is, a connected knowledge of the objects of sense resting on general laws. Therefore freedom is only an idea of reason, and its objective reality in itself is doubtful; while nature is a concept of the understanding which proves, and must necessarily prove, its reality in examples of experience.

There arises from this a dialectic of reason, since the freedom attributed to the will appears to

contradict the necessity of nature, and placed between these two ways reason for speculative purposes finds the road of physical necessity much more beaten and more appropriate than that of freedom; yet for practical purposes the narrow footpath of freedom is the only one on which it is possible to make use of reason in our conduct; hence it is just as impossible for the subtlest philosophy as for the commonest reason of men to argue away freedom. Philosophy must then assume that no real contradiction will be found between freedom and physical necessity of the same human actions, for it cannot give up the conception of nature any more than that of freedom.

Nevertheless, even though we should never be able to comprehend how freedom is possible, we must at least remove this apparent contradiction in a convincing manner. For if the thought of freedom contradicts either itself or nature, which is equally necessary, it must in competition with physical necessity be entirely given up.

It would, however, be impossible to escape this contradiction if the thinking subject, which seems to itself free, conceived itself in the same sense or in the very same relation when it calls itself free as when in respect of the same action it assumes itself to be subject to the law of nature. Hence it is an indispensable problem of speculative philosophy to show that its illusion respecting the contradiction rests on this, that we think of man in a different sense and relation when we call him free and when we regard him as subject to the laws of nature as being part and parcel of nature. It must therefore show that not only can both these very well co-exist, but that both must be thought as necessarily united in the same subject, since otherwise no reason could be given why we should burden reason with an idea which, though it may possibly without contradiction be reconciled with another that is sufficiently established, yet entangles us in a perplexity which sorely embarrasses reason in its theoretic employment. This duty, however, belongs only to speculative philosophy. The philosopher then has no option whether he will remove the apparent contradiction or leave it untouched; for in the latter case the theory respecting this would be bonum vacans, into the possession of which the fatalist would have a right to enter and chase all morality out of its supposed domain as occupying it without title.

We cannot however as yet say that we are touching the bounds of practical philosophy. For the settlement of that controversy does not belong to it; it only demands from speculative reason that it should put an end to the discord in which it entangles itself in theoretical questions, so that practical reason may have rest and security from external attacks which might make the ground debatable on which it desires to build.

The claims to freedom of will made even by common reason are founded on the consciousness and the admitted supposition that reason is independent of merely subjectively determined causes which together constitute what belongs to sensation only and which consequently come under the general designation of sensibility. Man considering himself in this way as an intelligence places himself thereby in a different order of things and in a relation to determining grounds of a wholly different kind when on the one hand he thinks of himself as an intelligence endowed with a will, and consequently with causality, and when on the other he perceives himself as a phenomenon in the world of sense (as he really is also), and affirms that his causality is subject to external determination according to laws of nature. Now he soon becomes aware that both can hold good, nay, must hold good at the same time. For there is not the smallest contradiction in saying that a thing in appearance (belonging to the world of sense) is subject to certain laws, of which the very same as a thing or being in itself is independent, and that he must conceive and think of himself in this twofold way, rests as to the first on the consciousness of himself as an object affected through the senses, and as to the second on the consciousness of himself as an intelligence, i.e., as independent on sensible impressions in the employment of his reason (in other words as belonging to the world of understanding).

Hence it comes to pass that man claims the possession of a will which takes no account of anything that comes under the head of desires and inclinations and, on the contrary, conceives actions as possible to

him, nay, even as necessary which can only be done by disregarding all desires and sensible inclinations. The causality of such actions lies in him as an intelligence and in the laws of effects and actions [which depend] on the principles of an intelligible world, of which indeed he knows nothing more than that in it pure reason alone independent of sensibility gives the law; moreover since it is only in that world, as an intelligence, that he is his proper self (being as man only the appearance of himself), those laws apply to him directly and categorically, so that the incitements of inclinations and appetites (in other words the whole nature of the world of sense) cannot impair the laws of his volition as an intelligence. Nay, he does not even hold himself responsible for the former or ascribe them to his proper self, i.e., his will: he only ascribes to his will any indulgence which he might yield them if he allowed them to influence his maxims to the prejudice of the rational laws of the will.

When practical reason thinks itself into a world of understanding, it does not thereby transcend its own limits, as it would if it tried to enter it by intuition or sensation. The former is only a negative thought in respect of the world of sense, which does not give any laws to reason in determining the will and is positive only in this single point that this freedom as a negative characteristic is at the same time conjoined with a (positive) faculty and even with a causality of reason, which we designate a will, namely a faculty of so acting that the principle of the actions shall conform to the essential character of a rational motive, i.e., the condition that the maxim have universal validity as a law. But were it to borrow an object of will, that is, a motive, from the world of understanding, then it would overstep its bounds and pretend to be acquainted with something of which it knows nothing. The conception of a world of the understanding is then only a point of view which reason finds itself compelled to take outside the appearances in order to conceive itself as practical, which would not be possible if the influences of the sensibility had a determining power on man, but which is necessary unless he is to be denied the consciousness of himself as an intelligence and, consequently, as a rational cause, energizing by reason, that is, operating freely. This thought certainly involves the idea of an order and a system of laws different from that of the mechanism of nature which belongs to the sensible world; and it makes the conception of an intelligible world necessary (that is to say, the whole system of rational beings as things in themselves). But it does not in the least authorize us to think of it further than as to its formal condition only, that is, the universality of the maxims of the will as laws, and consequently the autonomy of the latter, which alone is consistent with its freedom; whereas, on the contrary, all laws that refer to a definite object give heteronomy, which only belongs to laws of nature and can only apply to the sensible world.

But reason would overstep all its bounds if it undertook to explain how pure reason can be practical, which would be exactly the same problem as to explain how freedom is possible.

For we can explain nothing but that which we can reduce to laws, the object of which can be given in some possible experience. But freedom is a mere idea, the objective reality of which can in no wise be shown according to laws of nature, and consequently not in any possible experience; and for this reason it can never be comprehended or understood, because we cannot support it by any sort of example or analogy. It holds good only as a necessary hypothesis of reason in a being that believes itself conscious of a will, that is, of a faculty distinct from mere desire (namely, a faculty of determining itself to action as an intelligence, in other words, by laws of reason independently on natural instincts). Now where determination according to laws of nature ceases, there all explanation ceases also, and nothing remains but defence, i.e., the removal of the objections of those who pretend to have seen deeper into the nature of things, and thereupon boldly declare freedom impossible. We can only point out to them that the supposed contradiction that they have discovered in it arises only from this, that in order to be able to apply the law of nature to human actions, they must necessarily consider man as an appearance: then when we demand of them that they should also think of him qua intelligence as a thing in itself, they still persist in considering him in this respect also as an appearance. In this view it would no doubt be a contradiction to suppose the causality of the same subject (that is, his will) to be withdrawn from all the natural laws of

the sensible world. But this contradiction disappears, if they would only bethink themselves and admit, as is reasonable, that behind the appearances there must also lie at their root (although hidden) the things in themselves, and that we cannot expect the laws of these to be the same as those that govern their appearances.

The subjective impossibility of explaining the freedom of the will is identical with the impossibility of discovering and explaining an interest * which man can take in the moral law. Nevertheless he does actually take an interest in it, the basis of which in us we call the moral feeling, which some have falsely assigned as the standard of our moral judgement, whereas it must rather be viewed as the subjective effect that the law exercises on the will, the objective principle of which is furnished by reason alone.

* Interest is that by which reason becomes practical, i.e., a cause determining the will. Hence we say of rational beings only that they take an interest in a thing; irrational beings only feel sensual appetites. Reason takes a direct interest in action then only when the universal validity of its maxims is alone sufficient to determine the will. Such an interest alone is pure. But if it can determine the will only by means of another object of desire or on the suggestion of a particular feeling of the subject, then reason takes only an indirect interest in the action, and, as reason by itself without experience cannot discover either objects of the will or a special feeling actuating it, this latter interest would only be empirical and not a pure rational interest. The logical interest of reason (namely, to extend its insight) is never direct, but presupposes purposes for which reason is employed.

In order indeed that a rational being who is also affected through the senses should will what reason alone directs such beings that they ought to will, it is no doubt requisite that reason should have a power to infuse a feeling of pleasure or satisfaction in the fulfilment of duty, that is to say, that it should have a causality by which it determines the sensibility according to its own principles. But it is quite impossible to discern, i.e., to make it intelligible a priori, how a mere thought, which itself contains nothing sensible, can itself produce a sensation of pleasure or pain; for this is a particular kind of causality of which as of every other causality we can determine nothing whatever a priori; we must only consult experience about it. But as this cannot supply us with any relation of cause and effect except between two objects of experience, whereas in this case, although indeed the effect produced lies within experience, yet the cause is supposed to be pure reason acting through mere ideas which offer no object to experience, it follows that for us men it is quite impossible to explain how and why the universality of the maxim as a law, that is, morality, interests. This only is certain, that it is not because it interests us that it has validity for us (for that would be heteronomy and dependence of practical reason on sensibility, namely, on a feeling as its principle, in which case it could never give moral laws), but that it interests us because it is valid for us as men, inasmuch as it had its source in our will as intelligences, in other words, in our proper self, and what belongs to mere appearance is necessarily subordinated by reason to the nature of the thing in itself.

The question then, “How a categorical imperative is possible,” can be answered to this extent, that we can assign the only hypothesis on which it is possible, namely, the idea of freedom; and we can also discern the necessity of this hypothesis, and this is sufficient for the practical exercise of reason, that is, for the conviction of the validity of this imperative, and hence of the moral law; but how this hypothesis itself is possible can never be discerned by any human reason. On the hypothesis, however, that the will of an intelligence is free, its autonomy, as the essential formal condition of its determination, is a necessary consequence. Moreover, this freedom of will is not merely quite possible as a hypothesis (not involving any contradiction to the principle of physical necessity in the connexion of the phenomena of the sensible world) as speculative philosophy can show: but further, a rational being who is conscious of causality through reason, that is to say, of a will (distinct from desires), must of necessity make it practically, that is, in idea, the condition of all his voluntary actions. But to explain how pure reason can be of itself practical without the aid of any spring of action that could be derived from any other source,

i.e., how the mere principle of the universal validity of all its maxims as laws (which would certainly be the form of a pure practical reason) can of itself supply a spring, without any matter (object) of the will in which one could antecedently take any interest; and how it can produce an interest which would be called purely moral; or in other words, how pure reason can be practical- to explain this is beyond the power of human reason, and all the labour and pains of seeking an explanation of it are lost.

It is just the same as if I sought to find out how freedom itself is possible as the causality of a will. For then I quit the ground of philosophical explanation, and I have no other to go upon. I might indeed revel in the world of intelligences which still remains to me, but although I have an idea of it which is well founded, yet I have not the least knowledge of it, nor an I ever attain to such knowledge with all the efforts of my natural faculty of reason. It signifies only a something that remains over when I have eliminated everything belonging to the world of sense from the actuating principles of my will, serving merely to keep in bounds the principle of motives taken from the field of sensibility; fixing its limits and showing that it does not contain all in all within itself, but that there is more beyond it; but this something more I know no further. Of pure reason which frames this ideal, there remains after the abstraction of all matter, i.e., knowledge of objects, nothing but the form, namely, the practical law of the universality of the maxims, and in conformity with this conception of reason in reference to a pure world of understanding as a possible efficient cause, that is a cause determining the will. There must here be a total absence of springs; unless this idea of an intelligible world is itself the spring, or that in which reason primarily takes an interest; but to make this intelligible is precisely the problem that we cannot solve.

Here now is the extreme limit of all moral inquiry, and it is of great importance to determine it even on this account, in order that reason may not on the one band, to the prejudice of morals, seek about in the world of sense for the supreme motive and an interest comprehensible but empirical; and on the other hand, that it may not impotently flap its wings without being able to move in the (for it) empty space of transcendent concepts which we call the intelligible world, and so lose itself amidst chimeras. For the rest, the idea of a pure world of understanding as a system of all intelligences, and to which we ourselves as rational beings belong (although we are likewise on the other side members of the sensible world), this remains always a useful and legitimate idea for the purposes of rational belief, although all knowledge stops at its threshold, useful, namely, to produce in us a lively interest in the moral law by means of the noble ideal of a universal kingdom of ends in themselves (rational beings), to which we can belong as members then only when we carefully conduct ourselves according to the maxims of freedom as if they were laws of nature.

Concluding Remark

The speculative employment of reason with respect to nature leads to the absolute necessity of some supreme cause of the world: the practical employment of reason with a view to freedom leads also to absolute necessity, but only of the laws of the actions of a rational being as such. Now it is an essential principle of reason, however employed, to push its knowledge to a consciousness of its necessity (without which it would not be rational knowledge). It is, however, an equally essential restriction of the same reason that it can neither discern the necessity of what is or what happens, nor of what ought to happen, unless a condition is supposed on which it is or happens or ought to happen. In this way, however, by the constant inquiry for the condition, the satisfaction of reason is only further and further postponed. Hence it unceasingly seeks the unconditionally necessary and finds itself forced to assume it, although without any means of making it comprehensible to itself, happy enough if only it can discover a conception which agrees with this assumption. It is therefore no fault in our deduction of the supreme principle of morality, but an objection that should be made to human reason in general, that it cannot enable us to conceive the absolute necessity of an unconditional practical law (such as the categorical imperative must be). It cannot be blamed for refusing to explain this necessity by a condition, that is to say, by means of some interest assumed as a basis, since the law would then cease to be a supreme law of reason. And thus

while we do not comprehend the practical unconditional necessity of the moral imperative, we yet comprehend its incomprehensibility, and this is all that can be fairly demanded of a philosophy which strives to carry its principles up to the very limit of human reason.

THE END

METAPHYSICAL FOUNDATIONS OF NATURAL SCIENCE

Translated by Ernest Belfort Bax

Divided into four chapters, this 1786 book concerns the metaphysical foundations of phoronomy (now known as *kinematics*), dynamics, mechanics and phenomenology. *Metaphysical Foundations of Natural Science* was a basic influence on the rise of science departments of the universities in the German-speaking countries in the nineteenth century and was a great influence on the work of Kurt Gödel, who studied the text in detail when he was a member of the Vienna Circle.

Kurt Friedrich Gödel (1906-1978) was an Austrian, and later American, logician, mathematician and philosopher.

CONTENTS

PREFACE.
FIRST DIVISION.: METAPHYSICAL FOUNDATIONS OF PHORONOMY.
SECOND DIVISION.: METAPHYSICAL FOUNDATIONS OF DYNAMICS.
THIRD DIVISION.: METAPHYSICAL FOUNDATIONS OF MECHANICS.
FOURTH DIVISION.: METAPHYSICAL FOUNDATIONS OF PHENOMENOLOGY.

PREFACE.

If the word Nature be merely taken in its formal signification, there may be as many natural sciences as there are specifically different things (for each must contain the inner principle special to the determinations pertaining to its existence), inasmuch as it [Nature] signifies the primal inner principle of all that belongs to the existence of a thing. But Nature, regarded in its material significance, means not a quality, but the sumtotal of all things, in so far as they can be objects of our senses, and therefore of experience; in short, the totality of all phenomena — the sense-world, exclusive of all nonsensuous objects. Now Nature, in this sense of the word, has two main divisions, in accordance with the main distinction of our sensibility, one of which comprises the objects of the outer, the other the object of the inner sense; thus rendering possible a two-fold doctrine of Nature, the doctrine of body and the doctrine of soul, the first dealing with extended, and the second with thinking, Nature.

Every doctrine constituting a system, namely, a whole of cognition, is termed a science; and as its principles may be either axioms of the empirical or rational connection of cognitions in a whole, so natural science, whether it be doctrine of body or doctrine of soul, would have to be divided into historical and rational natural science, were it not that the word nature (as implying the deduction of the manifold pertaining to the existence of things, from its inner principle) necessitates a knowledge through reason of its system, if it is to deserve the name natural science. Hence, doctrine of nature may be better divided into historical doctrine of nature, comprising nothing but systematically-ordered facts respecting natural things (which again would consist of description of nature as a system of classes according to resemblances, and history of nature as a systematic presentation of the same at different times and in different places), and natural science. Natural science, once more, would be either natural science properly or improperly so-called, of which the first would treat its subject wholly according to principles à priori, and the second according to laws derived from experience.

That only can be called science (wissenschaft) proper whose certainty is apodictic: cognition that can merely contain empirical certainty is only improperly called science. A whole of cognition which is systematic is for this reason called science, and, when the connection of cognition in this system is a system of causes and effects, rational science. But when the grounds or principles it contains are in the last resort merely empirical, as, for instance, in chemistry, and the laws from which the reason explains the given facts are merely empirical laws, they then carry no consciousness of their necessity with them (they are not apodictically certain), and thus the whole does not in strictness deserve the name of science; chemistry indeed should be rather termed systematic art than science.

A rational doctrine of nature deserves the name of natural science only when the natural laws at its foundation are cognised à priori, and are not mere laws of experience. A natural cognition of the first kind is called pure, that of the second applied, rational cognition. As the word nature itself carries with it the conception of law, and this again the conception of the necessity of all the determinations of a thing appertaining to its existence, it is easily seen why natural science must deduce the legitimacy of its designation only from a pure part of it, [a part] namely, which contains the principles à priori of all remaining natural explanations, and why only by virtue of this portion it is properly science, in such wise, that, according to the demands of the reason, all natural knowledge must at last turn on natural science and there find its conclusion. This is because the above necessity of law inseparably attaches to the conception of nature, and hence must be thoroughly comprehended. For this reason the most complete explanation of particular phenomena upon chemical principles, invariably leaves an unsatisfactoriness behind it, because from these accidental laws, learnt by mere experience, no grounds à priori can be adduced.

Thus all natural science proper requires a pure portion, upon which the apodictic certainty required of it by the reason can be based; and inasmuch as this is in its principles wholly heterogeneous from those which are merely empirical, it is at once a matter of the utmost importance, indeed in the nature of the case, as regards method of indispensable duty, to expound this part separately and unmixed with the other, and as far as possible in its completeness; in order that we may be able to determine precisely what the reason can accomplish for itself, and where its capacity begins to require the assistance of empirical principles. Pure cognition of the reason from mere conceptions is called pure philosophy or metaphysics, while that which only bases its cognition on the construction of conceptions, by means of the presentation of the object in an à priori intuition, is termed mathematics.

What may be called natural science proper presupposes metaphysics of nature; for laws, i.e. principles of the necessity of that which belongs to the existence of a thing, are occupied with a conception which does not admit of construction, because its existence cannot be presented in any à priori intuition; natural science proper, therefore, presupposes metaphysics. Now this must indeed always contain exclusively principles of a non-empirical origin (for, for this reason it bears the name of metaphysics); but it may be either without reference to any definite object of experience, and therefore undetermined as regards the nature of this or that thing of the sense-world, and treat of the laws rendering possible the conception of nature in general, in which case it is the transcendental portion of the metaphysics of nature; or it may occupy itself with the particular nature of this or that kind of thing, of which an empirical conception is given, in such wise, that except what lies in this conception, no other empirical principle will be required for its cognition. For instance: it lays the empirical conception of a matter, or of a thinking entity, at its foundation, and searches the range of the cognition of which the reason is à priori capable respecting these objects; and thus, though such a science must always be termed a metaphysic of nature (namely, of corporeal or thinking nature), it is then not a universal but a particular metaphysical natural science (physics and psychology), in which the above transcendental principles are applied to the two species of sense-objects. But I maintain that in every special natural doctrine only so much science proper is to be met with as mathematics; for, in accordance with the foregoing, science proper, especially [science] of nature, requires a pure portion, lying at the foundation of the empirical, and based upon an à priori knowledge of natural things. Now to cognise anything à priori is to cognise it from its mere possibility; but the possibility of determinate natural things cannot be known from mere conceptions; for from these the possibility of the thought (that it does not contradict itself) can indeed be known, but not of the object, as natural thing which can be given (as existent) outside the thought. Hence, to the possibility of a determinate natural thing, and therefore to cognise it à priori, is further requisite that the intuition corresponding à priori to the conception should be given; in other words, that the conception should be constructed. But cognition of the reason through construction of conceptions is mathematical. A pure philosophy of nature in general, namely, one that only investigates what constitutes a nature in general, may thus be possible without mathematics; but a pure doctrine of nature respecting determinate natural things (corporeal doctrine and mental doctrine), is only possible by means of mathematics; and as in every natural doctrine only so much science proper is to be met with therein as there is cognition à priori, a doctrine of nature can only contain so much science proper as there is in it of applied mathematics.

So long, therefore as no conception is discovered for the chemical effects of substances on one another, which admits of being constructed, that is, no law of the approach or retreat of the parts can be stated in accordance with which (as, for instance, in proportion to their densities) their motions, together with the consequences of these, can be intuited and presented à priori (a demand that will scarcely ever be fulfilled), chemistry will be nothing more than a systematic art or experimental doctrine, but never science proper, its principles being merely empirical and not admitting of any presentation à priori; as a consequence, the principles of chemical phenomena cannot make their possibility in the least degree conceivable, being incapable of the application of mathematics.

But still farther even than chemistry must empirical psychology be removed from the rank of what may be termed a natural science proper; firstly, because mathematics is inapplicable to the phenomena of the internal sense and its laws, unless indeed we consider merely the law of permanence in the flow of its internal changes; but this would be an extension of cognition, bearing much the same relation to that procured by the mathematics of corporeal knowledge, as the doctrine of the properties of the straight line does to the whole of geometry; for the pure internal intuition in which psychical phenomena are constructed is time, which has only one dimension. But not even as a systematic art of analysis, or experimental doctrine, can it ever approach chemistry, because in it the manifold of internal observation is only separated in thought, but cannot be kept separate and be connected again at pleasure; still less is another thinking subject amenable to investigations of this kind, and even the observation itself, alters and distorts the state of the object observed. It can never therefore be anything more than an historical, and as such, as far as possible systematic natural doctrine of the internal sense, i.e. a natural description of the soul, but not a science of the soul, nor even a psychological experimental doctrine. This is the reason why, in the title of this work, which, properly speaking, contains the axioms of corporeal doctrine, we have employed, in accordance with the usual custom, the general name of natural science, because this designation in the strict sense is applicable to it alone, and hence occasions no ambiguity.

But to render possible the application of mathematics to the doctrine of body, by which alone it can become natural science, principles of the construction of conceptions belonging to the possibility of matter in general must precede. Hence a complete analysis of the conception of a matter in general must be laid at its foundation; this is the business of pure philosophy, which for the purpose makes use of no special experiences, but only of those which it meets with in separate (although in themselves empirical) conceptions, with reference to pure intuitions in space and time (according to laws, essentially depending on the conception of nature in general), thus constituting it a real metaphysic of corporeal nature.

All natural philosophers, who wished to proceed mathematically in their work, have hence invariably (although unknown to themselves) made use of metaphysical principles, and must make use of such, it matters not how energetically they may otherwise repudiate any claim of metaphysics on their science. Without doubt by the latter they understood the illusion of manufacturing possibilities at pleasure, and playing with conceptions, perhaps quite incapable of being presented in intuition, and possessing no other guarantee of their objective reality than that they do not stand in contradiction with themselves. But all true metaphysics is taken from the essential nature of the thinking faculty itself, and therefore in nowise invented, since it is not borrowed from experience, but contains the pure operations of thought, that is, conceptions and principles à priori, which the manifold of empirical presentations first of all brings into legitimate connection, by which it can become empirical knowledge, i.e. experience. These mathematical physicists were thus quite unable to dispense with such metaphysical principles, and amongst them, not even with that which makes the conception of their own special subject, namely, matter, available à priori, in its application to external experience (as the conception of motion, of the filling of space, of inertia, etc.). But to allow merely empirical principles to obtain in such a question, they rightly held as quite unsuited to the apodictic certainty they desired to give to their natural laws, and hence they preferred to postulate such, without investigating their sources à priori.

But it is of the utmost importance in the progress of the sciences, to sever heterogeneous principles from one another, to bring each into a special system, so that it may constitute a science of its own kind, and thereby to avoid the uncertainty springing from their confusion, owing to our not being able to distinguish to which of the two, on the one hand the limitations, and on the other the mistakes occurring in their use, are to be attributed. For this reason I have regarded it as necessary to present in one system the first principles of the pure portion of natural science (physica generalis) where mathematical constructions traverse one another, and at the same time the principles of the construction of these conceptions; in short, the possibility of a mathematical doctrine of nature itself. This separation, besides

the uses already mentioned, has the special charm, which the unity of knowledge brings with it, if we take care that the boundaries of the sciences do not run into one another, but occupy properly their subdivided fields.

It may serve as a second ground for gauging this procedure, that in all that is called metaphysics the absolute completeness of the sciences may be hoped for, in such a manner as can be promised by no other species of knowledge, and therefore, just as in the metaphysics of nature generally, so here also, the completeness of corporeal nature may be confidently expected; the reason being, that in metaphysics the object is considered merely according to the universal laws of thought, but in other sciences as it must be presented according to data of intuition (empirical as well as pure). Hence the former, because the object must be invariably compared with all the necessary laws of thought, must furnish a definite number of cognitions, which can be fully exhausted; but the latter, because it offers an endless multiplicity of intuitions (pure or empirical), and therefore of objects of thought, can never attain to absolute completeness, but can be extended to infinity, as in pure mathematics and empirical natural knowledge. This metaphysical corporeal doctrine I believe myself to have, as far as it reaches, completely exhausted, but do not affect thereby to have achieved any great work.

The scheme for the completeness of a metaphysical system, whether of nature in general, or of corporeal nature in particular, is the table of the categories. For there are not any more pure conceptions of the Understanding, which concern the nature of things. Under the four classes of Quantity, Quality, Relation, and finally Modality, all the determinations of the universal conception of a matter in general, and, therefore, of all that can be thought à priori respecting it, that can be presented in mathematical construction, or given in experience as its definite object, must be capable of being brought. There is no more to do in the way of discovery or addition, although certainly, should there be anything lacking in clearness or thoroughness, it may be made better.

Hence the conception of matter had to be carried out through all the four functions of the conceptions of the the understanding (in four divisions), in each of which a new determination of the same was added. The fundamental determination of a something that is to be an object of the external sense, must be motion, for thereby only can this sense be affected. The understanding leads all other predicates pertaining to the nature of matter back to this, and thus natural science is throughout either a pure or an applied doctrine of motion. The metaphysical foundations of natural science may thus be brought under four main divisions, of which the first — motion considered as pure quantum, according to its composition, without any quality of the movable, may be termed Phoronomy; the second, which regards it as belonging to the quality of the matter, under the name of an original moving force, may be called Dynamics; and the third, where matter with this quality is conceived as by its own reciprocal motion in relation, appears under the name of Mechanics; and the fourth, where its motion or rest [is conceived], merely in reference to the mode of presentation or modality, in other words as determined as phenomenon of the external sense, is called Phenomenology.

But besides the above internal necessity, whereby the metaphysical foundations of the doctrine of body are not only to be distinguished from physics, which employs empirical principles, but even from the rational premises of the latter, in which the employment of mathematics is to be met with, there is an external, and, though only accidental, at the same time an important reason, for separating its thorough working-out from the general system of metaphysics, and for presenting it systematically as a special whole. For if it be permissible to indicate the boundaries of a science, not merely according to the construction of its object, and its specific kind of cognition, but also according to the aim that is kept in view as a further use of the science itself, and it is found that metaphysics has engaged so many heads, and will continue to engage them, not in order to extend natural knowledge (which could be done much more easily and certainly by observation, experiment, and the application of mathematics to external phenomena), but in order to attain to a knowledge of that which lies wholly beyond all the boundaries of

experience, of God, Freedom, and Immortality; [in this case] one gains in the promotion of this object, if one liberates it from a shoot springing indeed from its own stem, but only detrimental to its regular growth, and plants this [shoot] apart, without thereby mistaking its origination, or ignoring its entire growth from the system of general metaphysics. This does not affect the completeness of the latter, but it facilitates the uniform progress of this science towards its goal, if in all cases where the universal doctrine of body is required, one can call to aid the separate system of such a science, without encumbering it with the larger system [viz. of metaphysics in general]. It is indeed very remarkable (though it cannot here be thoroughly entered into), that universal metaphysics, in all cases where it requires instances (intuitions) to procure significance for its pure conceptions of the understanding, must always take them from the universal doctrine of body; in other words, from the form and principle of external intuition; and if these are not found to hand in their entirety, it gropes uncertainly and tremblingly amid mere empty conceptions. Hence the wellknown disputes, or at least the obscurity in questions, as to the possibility of an opposition of realities, of intensive quantity, &c., by which the understanding is only taught, through instances from corporeal nature, what the conditions are under which the above conceptions can alone have objective reality, that is, significance and truth. And thus a separate metaphysics of corporeal nature does excellent and indispensable service to the universal [metaphysics], in that it procures instances (cases in concreto) in which to realise the conceptions and doctrines of the latter (properly the transcendental philosophy), that is, to give to a mere form of thought sense and meaning.

I have in this treatise followed the mathematical method, if not with all strictness (for which more time would have been necessary than I had to devote to it), at least imitatively, not in order, by a display of profundity, to procure a better reception for it, but because I believe such a system to be quite capable of it, and that perfection may in time be obtained by a cleverer hand, if stimulated by this sketch, mathematical investigators of nature should find it not unimportant to treat the metaphysical portion, which anyway cannot be got rid of, as a special fundamental department of general physics, and to bring it into unison with the mathematical doctrine of motion.

Newton, in the preface to his mathematical principles of natural science (after having remarked that geometry only requires two of the mechanical actions which it postulates, namely, to describe a straight line and a circle) says: geometry is proud of being able to achieve so much while taking so little from extraneous sources. One might say of metaphysics, on the other hand: it stands astonished, that with so much offered it by pure mathematics it can effect so little. In the meantime, this little is something which mathematics indispensably requires in its application to natural science, which, inasmuch as it must here necessarily borrow from metaphysics, need not be ashamed to allow itself to be seen in company with the latter.

FIRST DIVISION.: METAPHYSICAL FOUNDATIONS OF PHORONOMY.

Explanation I.

Matter is the movable in space; space, which is itself movable, is termed material or relative space; that in which all motion must in the last resort be conceived (which is therefore itself absolutely immovable), is termed pure or absolute space.

Observation 1.

As in Phoronomy nothing is to be discussed but motion, its subject, namely matter, has here no other quality attributed to it than movability. It can therefore itself be valid for one point so far, and in Phoronomy we abstract from all internal construction, hence also, from the quantity of the movable, and concern ourselves only with motion, and what can be regarded as quantity therein (velocity and direction). If the expression body is sometimes used here, it occurs only to anticipate in a measure the application of the principles of Phoronomy to the following more definite conceptions of matter, in order that the exposition may be less abstract and more comprehensible.

Observation 2.

If I am to explain the conception of matter not by a predicate, applying to it as object, but only by the relation to the faculty of knowledge, in which the presentation can be primarily given me, matter is every object of the external sense, and this would be its mere metaphysical explanation. But space would be simply the form of all external sensuous intuition (whether this accrued to the external object we call matter in itself, or remained merely in the construction of our sense, a point which does not enter into the present question). Matter, in contradistinction to form, would be that which in external intuition, is an object of feeling, and consequently the properly empirical of sensible and outward intuition, because it cannot be given at all à priori. In all experience something must be felt, and this is the real of sensuous intuition. In consequence, space, in which we are to institute experience respecting motions, must be capable of being felt, that is, of being indicated by that which can be felt, and this, as the sum-total of all objects of experience, and itself an object of the same, is called empirical space. Now this, as material, is itself movable; but a movable space, if its movement is to be able to be perceived, presupposes again an enlarged material space in which it is movable, and this again another, and so on to infinity.

Thus all motion that is an object of experience is merely relative; the space in which it is perceived is a relative space, which again moves itself perhaps in an opposite direction, in a space further enlarged, and therefore the matter moved in reference to the first may be termed at rest in relation to the second; and these alterations of the conception of motion go forward with the alteration of the relative space to infinity. To assume an absolute space, that is, one which, because it is not material, can be no object of experience as given for itself, means assuming something which, neither in itself nor in its consequences (motion in absolute space), can be perceived, for the sake of the possibility of experience, which nevertheless must always exist without it. Absolute space is in itself nothing and no object at all, but signifies merely every other relative space that I can at any time conceive outside the given space, and that I can extend beyond each given space to infinity; one that includes the [given space], and in which I can assume it as moved. But since I have the enlarged, although still material, space only in thought,

nothing is known to me of the matter indicating it. I abstract from this, and it is conceived, therefore, as a pure, non-empirical and absolute space, with which I can compare, and in which I can conceive as movable, each empirical space, and therefore, which is itself always regarded as immovable. To constitute it a real thing means confounding the logical universality of any space, with which I can compare each empirical [space] as being included in it with a physical universality of real compass, and misunderstanding the reason in its idea.

I may observe in conclusion that as the movability of an object in space cannot be known à priori and without the teaching of experience, it could not for the same reason be counted in the Critique of pure Reason amongst the pure conceptions of the understanding, and this conception as empirical could only find a place in a natural science, as applied metaphysics, which occupies itself with a conception given through experience, although according to principles à priori.

Explanation II.

Motion of a thing is the change of the external relations of the same to a given space.

Observation 1.

I have already laid the conception of matter at the basis of the conception of motion; but, as I wished to determine the latter independently of the conception of extension, and thus could consider matter only in one point, I had to admit the use of the common explanation of motion as change of place. Now that the conception of matter is to be explained universally, and therefore as applicable to moved bodies, this definition is inadequate, for the place of every body is a point. If one wishes to determine the distance of the moon from the earth, one wishes to know the distance of their places, and to this end one does not measure from any point of the surface, or of the interior of the earth, to any point of the moon at pleasure, but takes the shortest line from the central point of the one to the central point of the other, and therefore, in each of these bodies there is only one point that constitutes its place. Now a body may move without changing its place, as the earth in turning on its axis; but its relation to external space changes notwithstanding, for it presents for instance its different sides to the moon in the course of the twenty-four hours, from which all kinds of transformative effects result on the earth. Only of a movable, i.e., physical point can one say: motion is always a change of place. It might be objected against this explanation that internal motion (e.g., fermentation) is not included therein; but the thing which one speaks of as in motion must so far be regarded as unity. That matter, as, for instance, a cask of beer, is in motion signifies something different to the beer in the cask being in motion. The motion of a thing is not one and the same with motion in this thing; but the question is here only of the former. The application of this conception to the latter case is afterwards easy.

Observation 2.

Motions may be circular (without change of place) or progressive, and these again may either enlarge the space or be motions limited to a given space. Of the first kind are rectilinear, or even non-rectilinear, [motions] that do not return in upon themselves. Of the second are those that return in upon themselves. The latter are again either circular or oscillating motions. The first cover the same space always in the same direction; the second alternatingly in an opposite direction, like a swaying pendulum. To both belong trembling (motus tremulus), which, though not a progressive motion of a body, is nevertheless a reciprecative motion of a matter, which does not change its place on the whole thereby, as the vibrations of a bell that has been struck, or the tremblings of air set in motion by sound. I merely make mention of these different kinds of motion in a Phoronomy, because with all that are not progressive the word

velocity is generally used in another sense than with the progressive, as the following observation shows.

Observation 3.

In every motioa direction and velocity are the two momenta for consideration, when one abstracts from all other qualities of the movable. I presuppose here the ordinary definition of both; but that of direction has sundry limitations. A body moved in a circle changes its direction continuously, so that, until its return to the point from which it started, all is comprised in a surface of merely possible directions, and yet one says it moves itself always in the same direction, as, for instance, the planet from evening to morning.

But what is the side, in this case, towards which the motion is directed? A question related to the one: Upon what does the internal distinction of spirals, otherwise similar and even equal, rest, but of which one species winds to the right, and the other to the left; or the winding of the kidney-bean, and of the hop, of which the one runs round its pole like a corkscrew, or as sailors express it against the sun, and the other with the sun? This is a conception that allows itself to be constructed indeed, but as conception does not admit of being made plain by universal marks in the discursive mode of cognition. In the things themselves (e.g., in those rare cases of the human subject where on dis ection all the parts agree according to physiological rules with other human subjects, only that all the viscera are found displaced, either to the right or the left, against the usual order) there can be no imaginable difference in the internal consequences, and yet there is a real mathematical and indeed internal difference, whereby two circular movements, differing in direction but in all other respects alike, notwithstanding their not being completely identical, nevertheless correspond. I have elsewhere shown that as this difference, though it must be given in intuition, does not admit of being brought to clear conceptions, and therefore intelligibly explained (dari, non intelligi), it affords a good substantiating ground of proof for the proposition: that space generally, belongs, not to the qualities or relations of the things in themselves, for this would necessarily have to admit of reduction to objective conceptions, but merely to the subjective form of our sensible intuition of things or relations, which, as to what they may be in themselves, must remain wholly unknown. But this is a deviation from our present business, in which we must necessarily treat space as a quality of the things we have in consideration, namely, corporeal entities, because these themselves are merely phenomena of the external sense, and only require to be explained as such in this place. As concerns the conception of velocity, this expression acquires in use a variable meaning. We say: the earth moves more rapidly on its axis than the sun, because it does so in a shorter time, although the motion of the latter is much more rapid. The circulation of the blood of a small bird is much more rapid than that of a man, although the streaming motion in the former has, without doubt less velocity; and so with the vibrations of elastic matters. The shortness of the time of return, whether of a circulating or oscillating motion, constitutes the ground of this employment, in which, if otherwise misunderstanding be avoided, there is no harm done. For the mere increase in the hurry of return, without increase of spacial velocity, has special and very important effects in nature, of which, in the circulation of the juices of animals, perhaps not enough notice has been taken. In Phoronomy we use the word velocity merely in a spacial signification: $C = S/T$.

Explanation III.

Rest is the permanent present (præsentia perdurabilis) in the same place; permanent is that which exists throughout a time, i.e. lasts.

Observation.

A body, which is in motion, is in every point of the line it passes over — a moment. The question remains,

whether it rests therein, or moves. Without doubt the latter, one will say; for, only in so far as it moves is it present in this point. But let us assume the motion in this way:

that the body describes the line A B forwards and backwards, from B to A, with uniform velocity in suchwise that, since the moment it is in B is common to both motions, the motion from A to B is described in half a second, that from B to A also in half a second, but both together in a whole second, so that not the smallest portion of time has been expended on the presence of the body in B; in this way, without the least increase of these motions, the latter, which took place in the direction B A, can be changed into that in the direction B a, which lies in a straight line with A B, and hence the body, while it is in B, must be regarded not as at rest, but as moved. It would have therefore also to be considered as moved in the first motion, returning in upon itself in the point B, which is impossible; because, in accordance with what has been assumed, it is only a moment that belongs to the motion A B, and at the same time to the equal motion B A, which is opposed to the former one and conjoined with it in one and the same moment of complete lack of motion; consequently if this constitutes the conception of rest, in the uniform motion A a, rest of the body must also be proved in every point (e.g., in B), which contradicts the above assertion. Again, let the line A B be represented as over the point A perpendicularly, so that a body rising from A to B, after having lost its motion through gravity in the point B, would fall back again from B to A. Now I ask whether the body in B is to be considered as moved or at rest? Without doubt, it will be said, at rest; because all previous motion has been taken from it, after it has reached this point, and a uniform motion back is as yet to follow, consequently is not present, and the lack of motion, it will be added, is rest. In the first case, however, of an assumed uniform motion, the motion B A could not commence otherwise, than by the motion A B having previously ceased, and that from B to A being non-existent, and consequently there being in B a lack of all motion, whereby, according to the usual explanation, rest would have to be assumed; but we may not assume it, because at a given velocity, no body may be conceived as at rest in any point of its uniform motion. Upon what, then, is the assumption of rest based in the second case, since this rising and falling is only separated by a moment? The ground lies in the latter motion not being conceived as uniform with the given velocity, but as being at first uniformly delayed, and afterwards uniformly accelerated, in suchwise that the velocity in point B is not delayed wholly, but only up to a certain degree, smaller than any velocity that can be given, by which, if instead of falling back, the line of its fall B A were placed in the direction B a; in other words, the body were conceived as still rising, it would, as with a mere moment of velocity (the resistance of gravity being set aside), pass over, in any given time, however great, a space smaller than any space that could be given, and therefore its place (for any possible experience) would not change to all eternity. In consequence of this, it assumes a state of lasting presence in the same place, that is, of rest, although owing to the continuous action of gravity, that is, of the change of this state, the latter is immediately abolished. To be in a permanent state and to persist therein (if nothing else shifts it) are two distinct conceptions, of which one does no violence to the other. Thus rest cannot be explained through the lack of motion, which, as = o, does not admit of being constructed at all, but must be explained by permanent presence in the same place, and as this conception is constructed by the presentation of a motion with infinitely small velocity, throughout a finite time, it can be used for the subsequent application of mathematics to natural science.

Explanation IV.

To Construct the conception of a composite motion means to present à priori in intuition a motion so far as it arises from two or more given [motions] united in one movable.

Observation.

For the construction of conceptions, it is requisite that the condition of their presentation should not be borrowed from experience, and thus that they should not presuppose certain forces, the existence of which can only be deduced from experience, or, in short, that the condition of the construction should not be itself a conception incapable of being given à priori in intuition; as for instance, that of cause and effect, action and resistance, &c. It is here especially to be observed that Phoronomy is throughout, primarily construction of motions in general as quantities, and that, as it has for its subject, matter merely as something movable, and of which no quantity therefore comes into consideration, it has to determine these motions alone as quantities (as concerns their velocity as well as their direction, and indeed their combination) à priori. For thus much must be established entirely à priori and intuitionally, for the sake of applied mathematics. For the rules of the connection of motions through physical causes, that is forces, never admit of being fundamentally expounded before the principles of their composition generally are previously laid down mathematically as a foundation.

Principle 1.

Every motion, as object of a possible experience, may be viewed, at pleasure, as motion of a body in a space that is at rest, or as rest of the body, and motion of the space in the opposite direction with equal velocity.

Observation.

In order to make an experience of the motion of a body it is requisite that not only the body but also the space in which it moves should be objects of external experience, or in other words, material. An absolute motion, therefore, that is, in reference to a non-material space, is unsuited to any experience whatever, and hence for use, nothing (even if one were willing to admit absolute space to be something in itself). But even in all relative motion the space itself, because it is assumed as material, may again be conceived as resting or moved. The first happens when, beyond the space in reference to which I regard a body as moved, there is no more extended space given, that includes it (as when in the cabin of a ship I see a ball moved on the table); the second, when, outside this space there is another space given, that includes it (as, in the case mentioned, the bank of the river), since I can view the nearest space (the cabin) with respect to the latter as moved and the body itself as at rest. As thus it is absolutely impossible to determine of an empirically given space, it matters not how extended it may be, whether, with respect to a still greater space enclosing it, it be itself moved or not, it must be wholly the same for all experience, and for every consequence drawn from experience, whether I choose to regard a body as moved or at rest, and the space as moved in the opposite direction with an equal velocity. Once more: as absolute space is nothing for any possible experience, the conceptions are the same whether I say a body moves with respect to this given space, in this direction, with this velocity, or whether I conceive it as at rest, and ascribe all this [motion] to the space, but in an opposite direction. For every conception is wholly of the same kind as the latter, of whose distinction from the former no instance is possible, and only with reference to the connection we wish to give it in the understanding is it different.

We are, moreover, not in a position to postulate a fixed point, in any experience, in reference to which it could be defined what motion and rest mean absolutely; for everything given us in this way is material, and hence movable, and (as we know of no extreme boundary of possible experience in space) it may be really moved without our being able to perceive this motion. Of this motion of a body in empirical space I can assign one portion of the given velocity to the body, the other to the space, but in the opposite

direction, and the whole possible experience as concerns the consequences of these two combined motions is wholly the same whether conceived of the body alone as moved with the whole velocity or (conceiving it) as at rest, and the space as moved with the same velocity in the opposite direction. I assume here all motions as rectilinear. For as concerns the non-rectilinear it is not in all respects the same, whether I am at liberty to regard the body as moved (e.g., the earth in its daily rotation), and the surrounding space (the starry heaven) as resting, or the latter as moved and the former as resting; but we shall treat of this more particularly in the sequel. Thus in Phoronomy, where I consider the motion of a body only in relation to the space (on the rest or motion of which it has no influence at all), it is quite undetermined and arbitrary whether any or all, or how much, of the velocity of the given motion I attribute to the one or to the other.

Farther on in mechanics where a moved body is to be considered in real relation to other bodies, in the space of its motion, this will not be any longer so entirely indifferent, as will be demonstrated in its proper place.

Explanation V.

The composition of motion is the presentation of the motion of a point as bound together in one with two or more motions of the same.

Observation.

In Phoronomy, as I can cognise the matter by no other property but that of movability, and can consider it itself therefore only as a point, the motion can only be viewed as description of a space, yet so that I do not, merely pay attention to the space described, as in geometry, but also to the time [involved] therein; in other words, to the velocity with which a point describes the space. Phoronomy is thus the pure doctrine of the quantity (mathesis) of motions. The definite conception of a quantity is the conception of the generation of the presentation of an object through the composition of the homogeneous. Now, as motion is nothing homogeneous, but again motion Phoronomy is a doctrine of the composition of the motions of the same point according to its direction and velocity i.e., the presentation of a single motion as one that comprises within it two or perhaps several motions in one, at the same time, in the same point, so far as they together constitute one, that is, are one with this motion, but not in so far as they produce the latter as causes produce their effects. In order to find the motion arising from the composition of several — as many as one likes — one has only, as with the production of all quantities, first to seek out those that are compounded under given conditions, of two; and thereupon combine this with a third, etc. In consequence the doctrine of the composition of all motions is reducible to that of two. But two motions of one and the same point that are present at the same point may be distinguished in a double manner, and as such be combined in a triple way therein. Firstly, they occur at the same time either in one and the same line, or in different lines; the latter are motions enclosing an angle. Those that occur in one and the same line are either contrary to one another in direction or maintain the same direction. As all these motions are contemplated as taking place alone, there results immediately from the relation of the lines, that is, of the spaces of motion described in equal time, the relation of velocity. Thus there are three cases: — 1. As two motions (it matters not whether of equal or unequal velocities) combined in one body in the same direction, are to constitute a resultant compound motion; 2. As Two motions of the same point (of equal or unequal velocity), combined in contrary directions, are, through their composition, to constitute a third motion in the same line; 3. Two motions of a point, with equal or unequal velocities, but in different lines, enclosing an angle, are considered as compounded.

Proposition 1.

The composition of two motions of one and the same point, can only be conceived by one of them being presented in absolute space, but, instead of the other, a motion of an equal velocity in the contrary direction of the relative space [being presented] as identical with it.

Demonstration.

First Case. — Two motions in the same line and direction arrive at the same time in one and the same point.

Let two velocities, AB and ab, be presented as contained in one velocity of the motion. Let these velocities be assumed, for the time, as equal, AB = ab; in this case I assert they cannot be presented at once in the same point, in one and the same space (whether absolute or relative). For, because the lines AB and ab, denoting the velocities, are properly spaces, passed over in equal times, the composition of these spaces AB and ab = BC, and, therefore, the line AC, as the sum of the spaces, cannot but express the sum of both velocities. But the parts AB and BC do not, individually, present the velocity = ab; for they are not passed over in the same time as ab. Thus, the double line AC, which is traversed in the same time as the line ab, does not represent the double velocity of the latter, as was required. Hence the composition of two velocities in one direction in the same space does not admit of being sensuously presented.

On the contrary, if the body A be presented as moved in absolute space with the velocity AB, and I give to the relative space, a velocity ab = AB in addition, in the contrary direction ba = CB; this is the same as though I distributed the latter velocity to the body in the direction AB (axiom 1). But the body moves itself, in this case, in the same time through the sum of the lines AB and BC = 2 ab, in which it would have traversed the line ab = AB only, and yet its velocity is conceived as the sum of the two equal velocities AB and ab, which is what was required.

Second Case. — Two motions in exactly contrary directions are united in one and the same point.

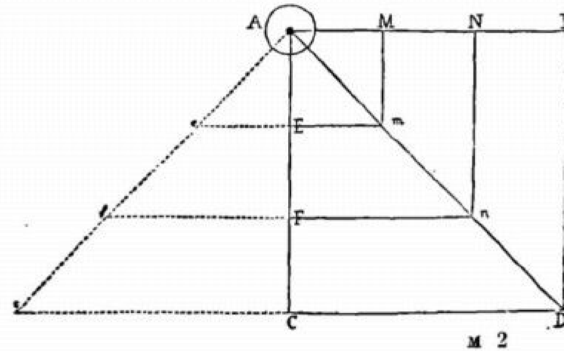
Let AB be one of these motions, and AC the other in the opposite direction, the velocity of which we assume here to be equal to that of the first; in this case the very idea of representing two such motions, at the same time, in one and the same space, and in one and the same point, in short, the case of such a composition of motions would itself be impossible, which is contrary to the assumption.

On the other hand, let the motion AB be conceived as in absolute space, and instead of the motion AC in the same absolute space, let the contrary motion CA of the relative space [be conceived] with the same velocity, which (according to axiom 1) is equal to the motion AC, and may thus be entirely substituted for it; in this case two exactly opposite and equal motions of the same point, at the same time, may be very well presented. Now, as the relative space is moved with the same velocity CA = AB in the same direction with the point A, this point, or the body, present therein, does not change its place in respect of the relative space; i.e., a body moved in two exactly contrary directions with equal velocity, rests, or generally expressed, its motion is equal to the difference of the velocities in the direction of the greater (which admits of being easily deduced from what has already been demonstrated).

Third Case. — Two motions of the same point are presented as combined according to directions that enclose an angle.

The two given motions are AB and AC, whose velocity and directions are expressed by these lines, but the angle, enclosed by the latter, by BAC (it matters not whether it be a right angle, as in this case, or any

other angle). If these two motions are to occur, at the same time, in the directions AB and AC, and indeed in the same space, they would not be able to occur, at the same time, in both these lines AB and AC, but only in lines running parallel to these. It would have, therefore, to be assumed, that one of these motions effected a change in the other (namely, the deviation from the given course), although the directions remained the same on either side. But this is contrary to the assumption of the proposition, which indicates by the word composition, that both the given motions are contained in a third, and must therefore be one with this, and not that, by one changing the other, a third is produced.



On the other hand, let the motion AC be taken as proceeding in absolute space, but instead of the motion AB, the motion of the relative space in the opposite direction. Let the line AC be divided into three equal parts, AE, EF, FG. Now, while the body A in absolute space passes over the line AE, the relative space, and therewith the point E, passes over the space Ee = MA; while the body passes over the two parts together = AF, the relative space and therewith the point F, describes the line Ff = NA; while, finally, the body passes over the whole line AC, the relative space, and therewith the point C describes the line Cc = BA. All this is the same as though the body A had passed over in these three divisions of time, the lines Em, Fn and CD = AM, AN, AB, and in the whole time in which it passes over AC, had passed over the line CD = AB. It is therefore at the last moment in the point D, and in the whole time gradually in all points of the diagonal line AD, which expresses the direction as well as the velocity of the compound motion.

Observation 1.

Geometrical construction demands that one quantity should be identical with the other, or two quantities in composition, with a third, not that they should produce the third as causes, which would be mechanical construction. Complete similarity and equality, in so far as they can only be cognised in intuition, is congruity. All geometrical construction of complete identity rests on congruity. This congruity of two motions combined with a third (in short, the motu composito itself) can never take place, when the two former are presented in one and the same space, i.e. relative [space]. Hence all attempts to demonstrate the above proposition in its three cases, have always been mechanical solutions only, inasmuch, namely, as though moving causes by which a given motion was combined with another, were made to produce a third, the proofs that the former were the same as the latter, and as such, admitted of being presented in pure intuition à priori [were not given].

Observation 2.

When, for instance, a velocity AB is termed double, nothing else can be understood thereby, but that it consists of two simple and equal [velocities] AB and BC, (see Fig. 1). But if a double velocity be explained by saying that it is a motion by which a doubly great space is passed over in the same time, something is here assumed which is not necessarily implied, namely, that two equal velocities may be combined in the same way as two equal spaces, for it is not in itself obvious that a given velocity consists

of smaller [velocities]; and in the same way that a rapidity consists of slownesses as a space does of smaller [spaces]. For the parts of the velocity are not outside one another, as the parts of the space; and if the former are to be considered as quantity, the conception of their quantity, as it is intensive, must be constructed in a different manner to that of the extensive quantity of space. But this construction is possible in no other way than by the mediate composition of two equal motions, one of which is that of the body, the other that of the relative space in the contrary direction, but which, for this reason, is completely identical with an equal motion of the body in the previous direction. For in the same direction two equal velocities would not admit of being compounded in one body, except through external moving causes; for instance, a ship carrying the body with one of these velocities, while another movable force, immovably bound up with the ship, impresses upon the body the second velocity, which is equal to the previous one. In this it must always be presupposed that the body maintains itself in free motion with the first velocity when the second enters; but this is a natural law of moving forces, which cannot come into consideration when the question is simply how the conception of velocity is constructed as a quantity; so much as to the addition of velocities to one another. But when the question is of the subtraction of one from the other, this latter is easily conceivable, if the possibility of a velocity, as quantity by addition, has once been admitted; yet this conception cannot be so easily constructed, for to this end two contrary motions must be combined in one body; and how is this to happen? Immediately, namely, in respect of the same resting space, it is impossible to conceive of two equal motions in contrary directions in the same body; but the idea of the impossibility of these two motions in one body is not the conception of its rest, but of the impossibility of the construction of this composition of contrary motions, which is nevertheless assumed in the proposition as possible. Now this construction is not otherwise possible, than by the combination of the motion of the body with the motion of the space as has been demonstrated. Finally, as concerns the composition of two motions, whose direction encloses an angle, they do not admit of being conceived in a body, in reference to one and the same space, if one of them be not affected by an external continuous inflowing force (for instance, a vessel bearing the body onward), while the other maintains itself unaltered, or generally [expressed]: one must have as a basis, moving forces, and the production of a third movement from two combined forces, but this, although the mechanical carrying out of that which contains a conception, is not its mathematical construction, which has only to render intuitable what the object is (as quantum), not, how it may be transformed by nature or art, by means of sundry implements and forces. The composition of motions, in order to determine their relation to others as quantity, must take place according to the rules of congruity, which is only possible, in all three cases, by means of the motion of the space that is congruous with one of the two given motions, whereby both are congruous with the compound [motion].

Observation 3.

Thus Phoronomy, not as pure doctrine of motion, but as pure doctrine of the quantity of motion, in which matter is conceived by no other quality but that of mere movability, contains nothing but this single proposition, carried out in the three cases adduced, of the composition of motion, and indeed of the possibility of rectilinear motion alone, not of curvilinear; for, because in the latter the motion is continuously changed in direction, a cause of this motion, which cannot be merely space, must be brought to bear. That only the single case in which the directions of the same enclose an angle, is usually understood by the designation compound motion, does some detriment to the principle of the division of a pure philosophical science generally, although not to physics: for, as concerns the latter, all the three cases treated in the above proposition admit of being adequately prsented in the third alone. For when the angle enclosing the two given motions is conceived as infinitely small, it contains the first [case]; but if it be conceived as only divided in an infinitely small degree from a single straight line, it contains the

second case; so that, in the proposition alrady stated respecting composite motion, all three cases mentioned by us, are capable of being given as in a universal formula. But in this way one could not learn to comprehend the qualitative doctrine of motion in its parts à priori, which in many respects is also useful.

If any one cares to connect the three parts in question of the universal Phoronomic proposition with the scheme of the subdivision of all pure conceptions of the understanding, here, especially with that of the conception of quantity, he will observe: that, as the conception of a quantity always contains that of the composition of the homogeneous, the doctrine of the composition of motions is at the same time the pure doctrine of quantity therein; and indeed that in all three momenta furnished by space, the unity of line and direction, the plurality of directions in one and the same line, and finally the totality of directions as well as of lines, according to which the motion can take place, it contains the determination of all possible motion as quantum, although its quantity (in a movable point) consists merely in velocity. This observation only has its uses in transcendental philosophy.

SECOND DIVISION.: METAPHYSICAL FOUNDATIONS OF DYNAMICS.

Explanation I.

Matter is the movable, in so far as it fills a space. To fill a space means to resist everything movable, which endeavours by its motion to press into a certain space. A space that is not filled is an empty space.

Observation.

This is the dynamical explanation of the conception of matter. It presupposes the Phoronomic, but adds thereto a property that is related as cause to an effect, namely, the capacity of resisting a motion within a certain space. This could not come into consideration in the foregoing science, even when we had to do with the motions of one and the same point in opposite directions. This filling of space keeps a certain space free from the intrusion of any other movable when the motion of the latter is directed to any place within this space. On what the resistance of matter on all sides rests, and what it is, now remains to be investigated. But it may be already seen from the above explanation, that matter is not here considered as resisting when it is driven from its place, and thus as itself moved (this case will hereafter come into consideration as mechanical resistance), but only when the mere space of its own extension is to be diminished. The expression is used to occupy space, namely, to be immediately present in all its points, in order to indicate thereby the extension of a thing in space. But inasmuch as it is not defined in this conception, what effect, or whether any effect at all, arises from this presence, whether in resisting others that are attempting to press into it, or whether it signifies merely a space without matter, in so far as it is a sumtotal of several spaces, just as one may say of every geometrical figure, “it occupies a space” (it is extended); or even whether there be something in space necessitating another movable to penetrate deeper into the same (attracting others); because, I say, by the conception of the occupying of a space, all this is undetermined; so, to fill a space is a closer definition of the conception to occupy a space.

Proposition 1.

Matter fills a space, not by its mere existence, but by a special moving force.

Demonstration.

The penetration into a space (in the moment of commencement this is called the endeavour to penetrate) is a motion. The resistance to motion is the cause of its diminution, and also its change into rest. Now nothing can be connected with any motion, as lessening or destroying it but another motion of the same movable in the opposite direction (phoronomic proposition). Thus the resistance offered by a matter in the space which it fills, to all impression of another [matter], is a cause of the motion of the latter in the opposite direction; but the cause of a motion is called moving force. Thus matter fills its space by moving force and not by its mere existence.

Observation.

Lambert and others called the property of matter, by which it fills a space, solidity (a rather ambiguous

expression), and maintained that we must assume it in everything which exists (substance), at least in the outer world of sense. According to their notions, the presence of something real in space, must carry with it this resistance by its very conception, in other words according to the principle of contradiction; and must exclude the coexistence of anything else, in the space of its presence. But the principle of contradiction does not preclude any matter from advancing, in order to penetrate into a space in which another [matter] exists. Only when I attribute to that which occupies a space, a power of repelling everything externally movable which approaches it, do I understand how it involves a contradiction, that in the space which a thing occupies, another [thing] of the same kind should penetrate. Here the mathematician has assumed something as a first datum of the construction of the conception of a matter, which itself does not admit of being further constructed. Now he can begin his construction of a conception from any datum he pleases, without committing himself again to the further explanation of this datum; but he is nevertheless not thereby permitted to explain the former as something wholly incapable of any mathematical construction, in order by this means to prevent a return to the first principles of natural science.

Explanation II.

Attractive force is that moving force whereby a matter may be the cause of the approach of others to itself (or, which is the same thing, whereby it opposes the retreat of others from itself).

Repulsive force is that whereby a matter can be the cause of repelling others from itself (or, which is the same thing, whereby it resists the approach of others to itself). The latter we shall also sometimes term driving, and the former, drawing force.

Note.

These are the only two moving forces of matter admiting of being conceived. For all motion which one matter can impress upon another, as in this respect each of them is only considered as a point, must always be regarded as distributed in the straight line between two points. But in this straight line only two kinds of motion are possible, one, by which the above points recede from one another, and a second by which they approach one another. But the force which is the cause of the first motion is called repulsive force, and that of the second attractive force. Thus, only these two kinds of forces, as such, to which all the forces of motion in material nature must be reduced, are capable of being conceived.

Proposition 2.

Matter fills its spaces by the repulsive forces of all its parts, i.e., by its own force of extension, which has a definite degree, beyond which smaller or larger [degrees] can be conceived to infinity.

Demonstration.

Matter fills a space only by moving force (proposition 1), this being such as to resist the impression, that is, the approach of others. Now this is a repulsive force (explanation II.). Thus matter fills its space, and indeed all the parts thereof, by repulsive forces only, because otherwise a part of its space would not be filled (against the assumption), but would only be enclosed. But the force of an extended by virtue of the repulsion of all its parts is a force of extension (expansive). Thus matter fills its space by its own force of extension; which was the first point. Beyond every given force a greater must be conceived, for that beyond which there is no greater possible would be one, whereby, in a finite time, an infinite space would be passed over (which is impossible). Further, beyond every given moving force a smaller must be able

to be conceived (for the smallest would be that, by the infinite addition of which to itself, throughout any given time, no finite velocity could be generated, but this signifies the lack of all moving force). Thus below every given degree of a moving force, a smaller must always be able to be given; which is the second [point]. The force of extension, therefore, whereby all matter fills its space, has its degree, which is never the greatest or smallest; but beyond which, greater as well as smaller, may be found to infinity.

Note 1.

The expansive force of a matter is termed elasticity. Now as the former is the basis on which the filling of space, as an essential property of all matter, rests, this elasticity must be termed original; seeing that it cannot be derived from any other property of matter. All matter is accordingly originally elastic.

Note 2.

Because beyond every extending force a greater moving force can be found, which might work against it, and would thus diminish the space it is seeking to extend; in which case the latter would be termed a compressive force; so for every matter a compressive force must be able to be found, capable of driving it from every space it fills into a narrower space.

Explanation III.

A matter penetrates another in its motion when it completely abolishes the space of its extension by compression.

Observation.

When, in the sucker of an air-pump that is filled with air, the piston is driven nearer the bottom, the air-matter is compressed. Now if this compression could be carried so far that the piston completely touched the bottom (without the least amount of air escaping), the air-matter would be penetrated; for the matters, between which it is, leaving no superfluous room for it, it would exist between the bottom and the piston, without occupying a space. This penetrability of matter by external compressive forces, if one were willing to assume, or even conceive, such, would be termed mechanical. I have reasons for distinguishing by such a limitation, this penetrability of matter from another [kind], the conception of which is perhaps just as impossible as that of the present, and of which I may hereafter have occasion to make some mention.

Proposition 3.

Matter can be compressed to infinity, but it can never be penetrated, by a matter, it does not signify how great its pressing force.

Demonstration.

An original force, by which a matter seeks to extend itself on all sides over a given space occupied by it, must, enclosed in a smaller space, be greater, and compressed into an infinitely small space, be infinite. Now, for any given extensive force of matter, a greater compressive force may be found that compels it into a smaller space, and so on to infinity; which was the first [point]. But for the penetration of a matter, a

compression into an infinitely small space, and therefore an infinitely compressive force, is required, which is impossible. Hence, a matter cannot be penetrated by the compression of any other [matter]; which is the second [point].

Observation.

I have, at the commencement of this demonstration, assumed that an extending force, the more it is narrowed, must operate so much the more strongly in the opposite [direction]. Now this would not apply to all kinds of elastic forces, [including those] that are merely derivative: but with matter possessing essential elasticity, in so far as it is matter in general, filling a space, it may be postulated. For expansive force exercised from all points towards all sides, constitutes its very conception. But the same quantum of expanding forces, brought into a narrower space, must, in every point of the latter, repel so much the more strongly, in inverse proportion to the smallness of the space in which a given quantum of force diffuses its activity.

Explanation IV.

The impenetrability of matter, resting on resistance, which increases proportionately to the degree of the compression, I term relative; but that which rests on the assumption that matter, as such, is capable of no compression at all, is termed absolute impenetrability. The filling of space with absolute impenetrability may be termed mathematical; that with merely relative [impenetrability] dynamical filling of space.

Observation 1.

According to the mere mathematical conception of impenetrability (which assumes no moving force as originally inherent in the matter), no matter is capable of compression, except in so far as it contains within itself empty spaces. Matter, therefore, as matter, resists all impression unconditionally and by absolute necessity. But according to our explanation of this property, impenetrability rests on a physical basis; for the extensive force renders it primarily possible, as an extended that fills its space. But as this force has a degree that overpowers, and hence diminishes the space of extension, that is, can be impressed upon the same up to a certain degree, by a given compressive force, but only in such wise that the entire penetration, inasmuch as it would require an endless compressive force, is impossible; [therefore] the filling of space must be regarded only as relative impenetrability.

Observation 2.

Absolute impenetrability is, indeed, neither more nor less than a qualitas occulta For we ask the cause, why matters in their motion cannot penetrate one another; and receive the answer: because they are impenetrable. The appeal to repulsive force is free from this objection. For although this likewise cannot be explained further, according to its possibility, and hence must be admitted as a fundamental force, it nevertheless gives a conception of an active cause and its laws, in accordance with which the effect, namely, the resistance in the filled space, may be estimated according to its degrees.

Explanation V.

Material substance is that in space, which for itself, namely, separated from all else existing outside it in space, is movable. The motion of a part of matter whereby it ceases to be a part, is separation. The

separation of the parts of a matter is physical division.

Observation.

The conception of a substance signifies the ultimate subject of existence, namely, that which does not itself belong, as mere predicate to the existence of another. Now matter is the subject of all that, in space, which can be counted [as belonging] to the existence of things; for outside it, no subject would be able to be conceived, but space itself; and this is not a conception containing anything existent, but merely the necessary conditions of the external relation of possible objects to our sense. Matter then, as the movable in space, is substance therein. But just in the same way are all its parts substances, in so far as one can say of them that they are subjects, and not merely predicates of other matters; and hence must again themselves be termed matter. But they are themselves subjects, if they are something movable existing in space, and hence not in combination with other adjacent parts. The independent motion of matter, then, or any of its parts, is a demonstration at once, that this movable, and every movable part of it, is substance.

Proposition 4.

Matter is divisable to infinity into parts, of which each is again matter.

Demonstration.

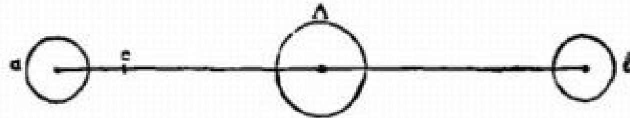
Matter is impenetrable by its own original force of extension (proposition 3); but this is only the result of the repulsive forces of each point in a space filled with matter. Now the space that is filled by matter is mathematically divisible to infinity; that is, its parts can be distinguished to infinity, although they cannot be moved, and consequently cannot be separated (according to demonstrations of geometry). But in a space filled with matter, every part contains the same repulsive force, to counteract all other forces, on all sides; in other words, to drive them back, and in the same way to be driven back by them, that is, to be moved to a distance from them. Hence, every part of a space filled with matter is, movable in itself, and consequently separable from those remaining, as material substance, by physical division. So far, then, as the mathematical divisibility of space filled by a matter reaches, thus far does the possibility of the physical division of the substance that fills it, reach. But the mathematical division extends to infinity, and consequently also the physical; that is, all matter, is divisible to infinity, and indeed to parts, of which each is itself again material substance.

Observation 1.

By the demonstration of the infinite divisibility of space, that of matter has not, by a long way, been proved, if it has not previously been established, that in every part of space material substance exists, that is, that parts in themselves movable are to be met with. For if a monadologist wished to assume that matter consisted of physical points, each of which (for this reason) had no movable parts, but nevertheless, filled a space by mere repulsive force, he would still be able to admit that this space, although not the substance acting in it (in other words, the sphere of the latter’s activity, though not the acting movable subject itself), could be divided by the division of its spaces. He would thus compound matter of physical by indivisible parts, and yet allow it to occupy space in a dynamical manner.

But by the above demonstration, the monadologist is entirely deprived of this resort. For, thereby it is clear, that in a filled space there can be no point that does not itself resist repulsion on all sides in the same way as it is repelled; in other words, as a reacting subject, in itself movable, existing outside every other repulsive point; and hence that the hypothesis of a point filling a space by its mere driving force,

and not by means of other equal repulsive forces, is impossible. In order to make this, and thereby also the demonstration of the previous proposition apparent, one must assume that A is the place of a monad in space, that ab is the diameter of the sphere of its repulsive force, and therefore that aA is its semi-diameter; so between a, where the impression of an external monad in space, occupying the sphere in question, is understood, and the central point of the latter [viz., the sphere], A, a point c is possible to be indicated (in accordance with the infinite divisibility of space). Now, if A resist that which seeks to impress itself on a, c must resist both the points A and a. For if this were not so, they would approach one another with impunity; consequently A and a would meet in the point c, i.e. the space would be penetrated. Something must thus exist in c that resists the impression of A and a, and thus repels the monad A as much as it is repelled by it. As now, repulsion is a movement, c is something movable in space; in other words, matter, and the space between A and a, could not be filled by the sphere of the activity of a single monad, neither could the space between c and A, and so on to infinity.



When mathematicians conceive the repulsive forces of the parts of elastic matters in their greater or lesser compression, as increasing or diminishing in a certain proportion to their distances from one another (for instance, that the smallest parts of the air repel each other in inverse proportion to their distances from one another, because their elasticity stands in inverse proportion to the spaces in which they are compressed), one would wholly mistake their meaning and misapply their language were one to attribute to the conception in the object itself, what [nevertheless] necessarily belongs to the process of the construction of a conception. For, according to the above, all contact can be conceived as an infinitely small distance, which, moreover, must necessarily happen in distance where a larger or smaller space is to be conceived as entirely filled by the same quantity of matter, that is, by an identical quantum of repulsive forces. By an infinitely divisible [thing], therefore, no real distance of parts, which, with all extension of the space of the whole, always constitute a continuum, may be assumed, although the possibility of this extension can only be made comprehensible under the idea of an infinitely small distance.

Observation 2.

Mathematics can indeed, in its internal employment, be quite indifferent to the chicane of a mistaken metaphysics, and rest in the certain possession of its evident assertions of the infinite divisibility of space, no matter what objections a sophistry, clinging to mere conceptions, may throw in its way; but in the application of its propositions, which apply to space, to substance, which fills it, it must rely on a test according to mere conceptions; in other words, on metaphysics. The above proposition is itself a proof of this. For it does not follow necessarily that matter is physically divisible to infinity, although it is so in a mathematical connection, every part of space being again a space, and hence always including within itself parts external to one another; but this cannot prove that in every possible part of this filled space, there is substance, which, consequently, separated from all the rest, exists as in itself, movable; something has been wanting then hitherto, to the mathematical demonstration, without which it can have no certain application to Natural Science, and this defect has been obviated in the proposition above given. But as concerns the remaining attacks of metaphysics on the at present physical proposition, of the infinite divisibility of matter, the mathematician must entirely resign himself to the philosopher, who, apart from this, through these objections, betakes himself into a labyrinth, out of which it is difficult for him to find his way, even in questions immediately concerning him, and hence has enough to do on his own account, without the mathematician mixing himself up in the business. If, namely, matter be infinitely divisible, then

(concludes the dogmatic metaphysician), it consists of an infinite number of parts; for a whole must originally contain within itself all the parts into which it can be divided, in their entirety. But the latter proposition is also indubitably certain of every whole as a thing in itself, and, therefore, although one cannot admit matter, or even space, to consist of infinitely many parts (inasmuch as it is a contradiction to think of an infinite number, the conception of which itself implies that it can never be conceived as fully ended), one must resolve either to defy the geometrician by saying space is not infinitely divisible, or to irritate the metaphysician [by saying], space is no property of a thing in itself, and hence, matter is no thing in itself, but the mere phenomenon of our external sense generally, just as space is its essential form.

The philosopher now finds himself in a strait between the horns of a dangerous dilemma. To deny the first proposition, that space is divisible to infinity, is a vain undertaking, for mathematics does not admit of being reasoned away; but yet to regard matter as a thing in itself, in other words, space as property of the thing in itself, and to deny the above proposition, is one and the same thing. He sees himself thus necessitated to depart from this assertion, however common and suited to the common understanding it may be; but of course only under the condition, that in the event of his reducing matter and space to the phenomenon (hence the latter [viz. space] to the form of our external sensuous intuition, and so [constituting] both, not things in themselves, but only subjective modes of the presentation to us, of objects in themselves unknown), he should be helped out of the difficulty as to the infinite divisibility of matter, while it yet does not consist of infinitely many parts. This latter easily admits of being conceived by the Reason, although impossible to construct and render intuitable. For of that which is only real by its being given in presentation, there is not more given than is met with in the presentation, that is, so far as the progressus of presentations reaches. Thus we can only say of phenomena, the division of which goes on to infinity, that there exist so many of the parts of the phenomenon, as we give of them, that is, as far as we can ever subdivide. For the parts, as belonging to the existence of a phenomenon exist only in thought, namely, in their division itself. Now though the division proceeds to infinity, it is never given as infinite, and hence it does not follow that the divisible contains an infinite number of parts in itself and outside our presentation merely because its division is infinite. For it is not the thing, but only its presentation, whose division could be continued to infinity, and in the object that is unknown in itself, which has also a cause, and yet can be never completed and consequently fully given, it proves no real infinite number, for this would be an express contradiction. A great man who has perhaps contributed more than any one else to maintain the reputation of mathematics in Germany, has more than once turned aside metaphysical claims to upset the propositions of geometry relative to the infinite divisibility of space with the well-grounded observation, that space only belongs to the phenomenon of external things; but he has not been understood. The proposition was taken as though he meant: space appears to us, otherwise it is a thing or relation of things in themselves, but the mathematician considers it only as it appears. Instead of this he ought to have been understood [as meaning] that space is no quality appertaining to anything outside our senses, but only to the subjective form of our sensibility, under which objects of our external sense, unknown to us as to their construction in themselves, appear to us, this appearance being termed matter. By the foregoing misunderstanding, space was always conceived as a quality [existing] independently, outside our faculty of presentation, but which the mathematician only thought of according to common conceptions, that is, confusedly (for so appearance [phenomenon] is commonly explained); it ascribed the mathematical proposition of the infinite divisibility of matter, a proposition presupposing the highest clearness in the conception of space, to a confused presentation of space, which the geometrician laid at his foundation. In this way, it remained open to the metaphysician to compound space of points, and matter of simple parts, and thus in his opinion to bring clearness into the conception. The ground of the confusion lies in a misunderstood monadology, which does not belong to the explanation of natural phenomena, but is a platonic conception of the world, carried out by Leibnitz. This is correct in itself, in so far as it [the world] is regarded, not as object of sense, but as thing in itself; but is nevertheless a mere object of the

understanding, though it lies at the foundation of the phenomena of sense. The composite of things in themselves must consist in the simple; for the parts must here be given before all composition. But the composite in the phenomenon consists not of the simple, because in the phenomenon, which can never be given otherwise than as composite (extended), the parts can only be given through division, and thus not before the composite, but in it. Hence Leibnitz's opinion, so far as I understand, [did not consist] in explaining space by the arrangement of simple entities side by side, but rather in [regarding it] as corresponding to a merely intelligible, for us unknown, world by its side, and maintained nothing more than what has elsewhere been shown, namely, that space, together with matter of which it is the form, comprises, not the world of things in themselves, but only the phenomenon of this [world], and is itself only the form of our sensuous intuition.

Proposition 5.

The possibility of matter requires a force of attraction, as its second essential fundamental force.

Demonstration.

Impenetrability, as the fundamental quality of matter, whereby it first reveals itself as something real in the space of our external senses, is nothing but the capacity of extension in matter (proposition). Now an essentially moving force, by which parts of matter recede from one another, cannot, firstly, be limited by itself, because matter is rather impelled thereby to extend the space it fills continuously; secondly, it cannot be fixed by space alone, at a certain boundary of extension — for though space may contain the ground of [the fact] that with the increase of the volume of a matter extending itself, the extending force will become weaker in inverse proportion — yet, inasmuch as smaller degrees of every moving force are possible to infinity, it cannot contain the ground for their ever ceasing. Matter then, by its repulsive force alone (which contains the ground of its impenetrability), and if no other opposing force contradicted this, would be held within no boundaries of extension, that is, would dissipate itself to infinity, and no assignable quantity of matter would be met with in any assignable space. With merely repulsive forces of matter, all spaces would consequently be empty, in other words no matter would properly speaking exist at all. To the existence of all matters, forces opposed to the extending [forces], in other words, compressive forces, are requisite. But these again cannot be sought for originally, in the opposition of another matter, for it requires, in order that it may be matter, itself a compressive force. An original force of matter, working in an opposite direction to the repulsive, in other words [a force] of approach, that is, an attractive force must be assumed. Now as this attractive force belongs to the possibility of a matter, as matter generally, consequently precedes all distinctions of the same, it must not be ascribed merely to a special species [of matter], but to every matter generally and originally. An original attraction then belongs to all matter as a fundamental force pertaining to its essence.

Observation.

With this transition from one property of matter to another specifically different from it, which yet equally belongs to the conception of matter, although it is not contained therein, the attitude of our understanding must be more closely considered. If attractive force be itself originally requisite to the possibility of matter, why do we not equally make use of it with impenetrability as the primary sign of a matter? why is the last immediately given with the conception of a matter, while the first is not thought in the conception, but only attributed to it, by inference? That our senses do not allow us to perceive attraction so immediately as repulsion and the resistance of impenetrability, does not sufficiently solve the difficulty. For if we had such a faculty, it is easy to comprehend that our understanding would none the less choose

the filling of space, in order to indicate thereby the substance in space, namely, matter, just as in this filling, or, as it is otherwise called, solidity, the characteristic of matter as a thing distinct from space, is posited. Attraction, it matters not how well we might feel it, could never reveal to us a matter of definite volume and figure, nor anything beyond the endeavour of our organ to approach a point outside us (the central point of the attracting body). For the attractive force of all parts of the earth can affect us, neither more nor otherwise, than if it were wholly concentrated in its central point, and it were this alone that influenced our sense; similarly with the attraction of a mountain, and of every stone, &c. We should acquire thereby no definite conception of any object in space, as neither figure nor size, nor even the place where it exists, could fall within our senses. The mere direction of the attraction would be able to be perceived as in weight; the attracting point would be unknown, and I do not see how it could be arrived at, through conclusions, without the perception of matter, in so far as it fills space. It is hence clear, that the first application of our conceptions of quantity to matter, by which it is primarily possible for us to transform our external perceptions into the experiential conception of a matter as object generally, is only founded on its property of filling space, which by means of the sense of feeling, procures for us the size and figure of an extended, and therewith a conception of a definite object in space which must be laid at the foundation of all else that one can predicate of any [particular] thing. This is undoubtedly the reason why, with what are the clearest proofs otherwise, that attraction must belong to the fundamental forces of matter, equally as much as repulsion, one is so unwilling to admit it, or to concede any other moving forces but those of impact and pressure (both by means of impenetrability). For that whereby space is filled is substance, it is said, and this is correct enough. But as substance only reveals its existence to us by sense, whereby we perceive its impenetrability, namely by feeling — and therefore only in reference to contact, whose beginning (in the approach of one matter to another) is termed impact, but its continuation pressure — it seems as though the immediate effect of one matter on another could never be anything else but pressure or impact, the only two influences we can immediately feel; while on the other hand attraction, which can give us either no feeling at all, or at least no definite object of it, becomes difficult for us to conceive as fundamental force.

Proposition 6.

By mere attraction, without repulsion, no matter is possible.

Demonstration.

Attractive force is the moving force of matter, whereby it compels another [matter] to approach it; consequently, when it is met with, between all parts of matter, the matter seeks by means of it to diminish the distance of its parts from one another, and therefore the space that they together occupy. Now nothing can hinder the effect of a moving force, except another moving force opposed thereto, but this [force] that is opposed to it is repulsive force. Thus, without repulsive forces, and by mere approach, all parts of matter would approach one another without hindrance and diminish the space that they occupy. As now, in the case assumed, there is no distance of parts, in which a greater approach through attraction is rendered impossible by a repulsive force, they would move towards one another until no distance existed between them; that is, they would coalesce in a mathematical point, and the space would be empty; in other words, without any matter. Matter is accordingly impossible by mere attractive forces, without repulsive.

Note.

That property, on which the inner possibility of a thing rests as its condition, is an essential element therein. Hence repulsive force belongs just as much to the essence of matter as attractive force; and the

one cannot be separated from the other in the conception of matter.

Observation.

As no more than two moving forces in space, repulsion and attraction, can ever be conceived, it was previously necessary — to prove the union of both in the conception of a matter generally à priori — that each should be considered separately, in order to see what taken singly they could achieve in the presentation of a matter. It is evident now that as well when we lay neither of them at the basis, as when we assume merely one of them, space always remains empty, and no matter exists therein.

Explanation 6.

Contact in the physical sense is the immediate action and reaction of impenetrability. The action of one matter upon another outside contact is action at a distance (actio in distans). This action at a distance, which is also possible without a medium between matters lying within oneanother, is called immediate action at a distance, or the action of matter on another [matter] through empty space.

Observation.

Contact, in a mathematical signification, is a common boundary of two spaces, and is hence neither within the one nor the other space. Straight lines therefore cannot touch one another, but when they have a point in common, it belongs as much within the one as the other of these lines, when they are produced, that is, cut one another. But circle and straight line, circle and circle, touch each other in a point, surfaces in a line, and bodies in surfaces. Mathematical contact therefore is laid at the basis of the physical, but does not alone constitute it; in order that the latter may arise, a dynamical relation must be superadded in thought, and that, not of the attractive, but of the repulsive forces, namely, those of impenetrability. Hence physical contact is the reciprocal action of repulsive forces in the common boundary of two matters.

Proposition 7.

The attraction essential to all matter is an immediate effect of it on other matter, through empty space.

Demonstration.

The original attractive force itself contains the ground of the possibility of matter as that thing which fills a space in a definite degree, in other words of the very possibility of a physical contact. Hence, it must precede this, and its effect must consequently be independent of the condition of the contact. Now, the effect of a moving force is independent of all contact — independent even of the filling of space between the moving and the moved, that is, it must take place without the space between them being filled up, and, therefore, as an effect through empty space. The original and essential attraction of all matter is then an immediate effect of the same upon another [matter] through empty space.

Observation 1.

That the possibility of fundamental forces should be made conceivable is a quite impossible demand: for they are called fundamental forces, precisely because they cannot be deduced from any other, that is,

cannot be conceived. But the original attractive force is not one whit more inconceivable than the original repulsion. It does not so immediately obtrude itself on the senses as impenetrability, in affording us conceptions of definite objects in space. Hence, while it is not felt, but only to be inferred, it has the appearance of a deduced force, just as though it were only a hidden play of moving forces [produced by] repulsion. More closely considered, [however,] we see that it cannot be further deduced from any source, least of all from the moving force of matters, through their impenetrability, as its effect is precisely the opposite of the latter. The commonest objection to immediate effect at a distance is, that a matter cannot directly operate where it is not. If the earth directly influences the moon to approach it, the earth acts upon a thing many thousand miles removed from it, and nevertheless [acts] immediately, even though the space between it and the moon were regarded as entirely empty. For, although matter may exist between two bodies, this does not affect the attraction. It acts, therefore, directly, in a place where it is not; something, to all appearance, contradictory. But it is so far from being contradictory, that one might rather say: everything in space acts on another [thing] in a place where the acting [thing] is not. For if it acted in the place where it was itself, the thing on which it acted would not be outside it; for outside signifies presence in a place, where the other is not. If earth and moon touched one another, the point of contact would be a place where neither earth nor moon existed, for they would be removed from one another by the sum of their diameters. In the point of contact, moreover, no portion, either of the earth or of the moon would exist, for this point lies at the boundary of either filled space, which constitutes no portion either of the one or of the other. Thus, that matters cannot act upon each other at a distance is as much as to say they cannot act immediately upon one another, without the intervention of the forces of impenetrability. Now this would be as much as though I were to assert, that the repulsive forces were the only ones by means of which matters could be operative, or they were at least the necessary conditions under which alone matters could act upon one another, which would declare the force of attraction either wholly impossible or always dependent on the action of repulsive forces; but both are assertions without any foundation. The confusion of the mathematical contact of spaces and physical [contact] through repulsive forces constitutes the ground of this misunderstanding. To attract immediately outside contact, means to approach one another according to a constant law, without the force of repulsion containing the condition thereto, which must admit of being conceived just as well as directly to repel one another, that is to fly from one another according to a constant law, without the attractive force having any share therein. For the two moving forces are wholly different in kind, and there is not the least reason for making one dependent on the other, or denying its possibility without the intervention of the other.

Observation 2.

Except from attraction, no motion can arise on contact, for contact is the reciprocal action of impenetrability, which restrains all motion. Some immediate attraction must thus be found apart from contact, in other words, at a distance: for otherwise, even the pressing and impulsive forces, which produce the effort to approach, as they act in an opposite manner to the repulsive force of matter, could have no cause at least originally inherent in the nature of matter. That attraction which takes place without the intervention of repulsive forces may be termed the true attraction, that which proceeds in the other manner the apparent. For properly, the body which another is striving to approach, exercises no attractive force whatever on the latter, because this has been driven towards it from elsewhere by impact. But even these apparent attractions must, at last, have a true one at their basis, because matter made up only of pressure or impact, instead of attraction, would not even be matter without attractive forces (proposition 5), and consequently the mode of explaining all phenomena of approach by merely apparent attraction moves in a circle. It is commonly held that Newton did not find it necessary to his system to assume an immediate attraction of matters, but with the strictest abstinence of pure mathematics, left the physicists

perfect freedom, in this particular, to explain its possibility as they might find good, without mixing up his propositions with their play of hypotheses. But how could he base the proposition that the universal attraction of bodies, exercised by them equidistantly on every side is proportioned to the quantity of their matter, if he did not assume that all matter exercised this force of motion simply as matter, and by its essential property? For although, indeed, between two bodies, whether homogeneous or not, as to matter, if one draws the other, the mutual approach (according to the law of the equality of reciprocal action) must always occur in inverse proportion to the quantity of the matter, this law only constitutes a principle of mechanics, but not of dynamics, i.e., it is a law of motions, following from attractive forces, not the proportion of attractive forces themselves, and applying generally, to all moving forces. If, therefore, a magnet be attracted by another similar magnet, and again by the same magnet enclosed in a wooden box double its weight, in the latter case this will impart more relative motion to the first [magnet] than in the former, although the wood, which increases the quantity of its matter, adds nothing to its attractive power, and proves no magnetic attraction of the box. Newton says (cor. 2, pro, lib. III., Princip. Phil. Nat.): “If the æther or any other body existed without weight, it would, inasmuch as it differs from any other matter in nothing but in form, be capable of being transformed little by little through a gradual change of this form into a matter of the same kind as that which has the greatest weight; and conversely, this latter, by a gradual change of its form, might lose all its weight, which is contrary to experience,” etc. Thus he did not even exclude the æther (much less other matters) from the law of attraction. What kind of matter, then, could remain for him, by the mere impact of which the approach of bodies to one another could be regarded as merely apparent attraction? One cannot, therefore, adduce the great founder of the theory of attraction as our precursor, if one takes the liberty of substituting for the true attraction which he maintained, a false one, and for assuming the necessity of an impulse through impact, in order to explain the phenomena of approach. He justly made abstraction of all hypotheses, in solving the problem, as to the cause of the universal attraction of matter; for this problem is physical or metaphysical, but not mathematical, and although in the preface to the second edition of his Optics, he says: ne quis gravitatem inter essentiales corporum proprietates me habere existimet, quæstionem unam de ejus causa investiganda subjeci, one can easily see that the dislike his contemporaries, and perhaps he himself, had to the conception of an original attraction, made him at issue with himself. For he could not say, unconditionally, that the attractive forces of two planets — for instance, Jupiter and Saturn — which they show in the equal distances of their satellites (whose mass is unknown), is proportioned to the quantity of the matter of these heavenly bodies, if he did not assume that they attracted other matter merely as matter — in other words, according to a universal property of the same.

Explanation 7.

A moving force, by which matters can directly act upon one another only in the common surface of contact, I call a superficial force; but that whereby one matter can directly act on the parts of the other beyond the surface of contact, a penetrative force.

Note.

The repulsive force, by means of which matter fills a space, is a merely superficial force. For the parts touching each other mutually limit each other’s sphere of action, and the repulsive force cannot move any more distant part, except by means of those lying between, and an immediate effect of a matter, passing straight through these, on another, by means of the forces of extension, is impossible. An attractive force, on the contrary, by means of which a matter occupies a space, without filling it, by which therefore it acts on other distant [matters] through empty space, and whose action thus posits no matter intervening [would

have] no limits. Now it is thus that the original attraction which makes matter itself possible, must be conceived, and which is hence a penetrative force, and for this reason alone always proportioned to the quantity of the matter.

Proposition 8.

The original attractive force, on which the possibility of matter itself as such rests, extends itself directly throughout the universe to infinity, from every part of the same to every other part.

Demonstration.

Because the original attractive force pertains to the essence of matter, it belongs to every part of the same, to act directly at a distance. Now let it be granted, there is a distance beyond which it does not extend, this limitation of the sphere of its activity would rest either on the matter lying within this sphere, or merely on the size of the space, in which the influence was extended. The first does not take place; for this attraction is a penetrative force, and acts directly at a distance, in spite of all intervening matters, through each space as an empty space. The second, in the same way, does not take place. For inasmuch as every attraction is a moving force, having a cause, beyond which smaller can be conceived to infinity; so, in the greater distance, a cause would indeed lie, for diminishing the degree of attraction in inverse proportion, to the amount of the diffusion of the force but never for completely destroying it. As then there is nothing that anywhere limits the sphere of the activity of the original attraction of any part of matter, it extends itself beyond all assignable limits to every other matter, in other words, [extends itself] throughout the universe, to infinity.

Note 1.

From this original attractive force, as a penetrative [force] exercised by all matter upon all other matter — and therefore in proportion to the quantity of the same, extending to all possible regions of its activity — in combination with its opposite, namely, repulsive force, the limitation of the latter, in other words, the possibility of a space filled in a definite degree, can be deduced; and thus the dynamic conception of matter as the movable, filling its space can (in a definite degree) be constructed. But to this, one requires a law of relation, as well of the original attraction as of repulsion at different distances of matter, and of its parts from one another, which, as it rests simply on the difference of direction of these two forces (since a point is driven either to approach others or to recede from them), and on the size of the space, in which these forces diffuse themselves at different distances, is a task belonging to pure mathematics, and with which metaphysics is no longer concerned, not even as regards the responsibility of constructing the conception of matter in this way, in the event of its non-success. For it is responsible only for the correctness of the elements of construction vouchsafed to our cognition of pure Reason, but for the inadequacy and the limits of our Reason, in its working out, it is not responsible.

Note 2.

As all given matter must fill its space with a definite degree of repulsive force, in order to constitute a definite material thing, only an original attraction in conflict with the original repulsion can make a definite degree of the filling of space, in other words, matter, possible. This is so, whether the former results from the proper attraction of the parts of the compressed matter amongst each other, or from their union with the attraction of all matter.

The original attraction is proportional to the quantity of the matter, and extends to infinity. Thus the filling of a space by matter, definite as to amount, can in the end only be effected by the infinitely extending attraction of the same, and every matter [must be] distributed according to the amount of its repulsive force.

The effect of the universal attraction, which all matter exercises directly upon all [matter] and at all distances, is termed gravitation; the endeavour to move itself in the direction of the greater gravitation is weight. The effect of the thorough-going repulsive force of the parts of each given matter is termed its original elasticity. This and weight therefore, constitute the only discoverable à priori universal characteristics of matter, the former in internal, the latter in external relations; for on their mutual bases the possibility of matter itself, rests; cohesion (zusammenhang), when explained as the reciprocal attraction of matter, limited simply to the condition of contact, does not belong to the possibility of matter in general, and cannot therefore be cognised as bound up with it à priori. This characteristic would hence not be metaphysical but physical, and thus would not belong to the present subject of consideration.

Observation 1.

I cannot forbear adding a small preliminary observation, for the sake of any attempt that may perhaps be made toward such a possible construction.

1. It may be said of every force, immediately working at different distances, and which is limited in respect of the degree whereby it exercises moving force, on every given point at a certain distance, only by the size of the space over which it has to diffuse itself in order to act upon this point; that in all spaces over which it is diffused, however small or great they may be, it always constitutes an equal quantum; but that the degree of its effect on the particular point in this space always stands in inverse proportion to the space in which it has had to diffuse itself, in order to act upon it [viz. the point]. So, for instance, light diffuses itself from a luminous point on all sides, in discs that increase with the square of the distance, and the quantum of the luminosity is in all these infinitely increasing discs on the whole the same; whence follows, that an equal part assumed in these discs, must be, in point of degree, so much the less luminous as the surface diffusion of the same quantity of light is greater; and so with all other forces, according to the laws of which they must diffuse themselves either in superficial or corporeal space, in order to act according to their nature on distant objects. It is better to represent the diffusion of a moving force from one point at all distances in the ordinary way, [not?] for instance [as?] in optics, by rays diverging in a circle from a central point. For as lines drawn in this way can never fill the space through which they pass, nor therefore the surface which they touch, it matters not how many of them may be drawn or supposed — this being the inevitable consequence of their divergence — they give occasion to troublesome inferences, and these to hypotheses, which can easily be avoided if merely the size of the whole disc be taken into consideration, as uniformly illumined by the same quantity of light, and of course the degree of its luminosity, in every place, as assuming an inverse proportion to the size of the whole; and similarly with every other diffusion of a force, through spaces of different sizes.

2. If the force be an immediate attraction at a distance, the direction of the attraction must still less be represented as rays going out from the attracting point, but rather as coalescing from all points of the surrounding disc (the diameter of which is the given distance) at the attracting point. For the line of direction of the movement to this point, which is its cause and goal, assigns the terminus a quo, whence the lines must begin, namely from all points of the surface, from which they take their direction to the attracting middle-point, and not conversely; for the size of the surface alone determines the number of lines; the middle point leaves them undetermined.

3 If the force be an immediate repulsion, so that a point (in merely mathematical presentation) fills a space dynamically, and the question is, according to what law of infinitely small distances (here

equivalent to contact) an original repulsive force (the limitation of which consequently rests merely with the space in which it is diffused) acts at different distances, this force can still less he rendered apparent by divergent repulsive rays from the assumed repellant points, although the direction of the motion has it for a terminus a quo, because the space in which the force must be diffused, in order to act at a distance, is a corporeal space, which is to be conceived as filled. The manner in which this is done, how, namely a point can fill a space corporeally by moving force, that is dynamically, is certainly capable of no further mathematical demonstration, but, it is impossible for rays diverging from a point to render conceivable the repelling force of a corporeally filled space. The repulsion, at various infinitely small distances, of these mutually repelling points, we could simply estimate in inverse proportion to the corporeal spaces which fill each of these points dynamically; in other words, as the cube of their distances from one another, without our being able to construct them.

4. Thus the original attraction of matter would act in inverse proportion to the square of the distance at all distances, the original repulsion in inverse proportion to the cube at infinitely small distances, and by such an action and reaction of both fundamental forces, matter as a definite degree of the filling of space would be possible; for, insomuch as the repulsion increases in greater degree with approach of the parts than the attraction, the limits of approach beyond which by given attraction no greater is possible, in other words the degree of compression which constitutes the amount of the intensive filling of space, is also determined.

Observation 2.

I readily see the difficulty of this mode of explaining the possibility of a matter in general, which consists in that, if a point cannot directly drive another by its repulsive force, without at the same time filling the whole corporeal space, up to the given distance by its force, this, as it seems to follow, must contain several repulsive points, which contradicts the assumption, and was above refuted (proposition 4) under the name of a sphere of repulsion of the simple in space. But there is a distinction to be made between the conception of a real space, that can be given, and the mere idea of a space, simply conceived for the determination of the relations of given spaces, but which is in reality no space. In the case cited of a supposed physical monadology, there ought to be real spaces, to be filled from a point dynamically, namely, by repulsion, for they [the monads] existed as points, before any possible generation of matter from them, and defined by the proper sphere of their activity, the portion of the space to be filled, which could belong to them. In the hypothesis in question, therefore, the matter cannot be regarded as infinitely divisible and as quantum continuum; for the parts, directly repelling one another, have notwithstanding a determinate distance from one another (the sum of the diameter of the sphere of their repulsion) [while] on the contrary, when we, as really happens, think of matter as continuous quantity, no distance whatever of the directly repelling parts obtains, and consequently, no increasing or diminishing sphere of its immediate activity. Matters however can be expanded or compressed (like the air), and in this case we conceive a distance of their nearest parts as capable of increasing or diminishing. But because the nearest parts of a continuous matter touch one another, whether they are farther expanded or compressed, the distances from one another are conceived as infinitely small, and this infinitely small space, as filled in a greater or less degree by its force of repulsion. The infinitely small mediate space is not however distinguishable from contact, and thus it is only the idea of space, which serves to render intuitable the expansion of matter as continuous quality, but whether it is really thus cannot be conceived. When, therefore, it is said: the repulsive forces of the parts of matter immediately driving one another, stand in inverse proportion to the cube of their distances, this only signifies that they stand in inverse proportion to the corporeal spaces that are conceived between parts immediately touching one another notwithstanding, and where distance must for this reason be termed infinitely small, in order that it may be distinguished

from all real distance. Hence we must not from the difficulties of the construction of a conception, or rather, from its misapplication, cast any slur on the conception itself; for in that case it would touch the mathematical presentation of the proportion, with which the attraction occurs at different distances, no less than that whereby each point in an expanding or compressed whole of matter, directly repels the other. The universal law of dynamics would in either case be this: the effect of the moving force, exercised from one point upon every other outside it, is in inverse proportion to the space in which the same quantity of moving force has had to expand itself, in order to act directly upon this point at the determinate distance.

From the law that the parts of matter originally repel one another in inverse cubic proportion to their infinitely small distances, a quite different law of their extension and compression must necessarily follow to that of Mariotte [in respect] of the air; for this proves repulsive forces of its nearest parts, which stand in inverse proportion to their distances, as Newton demonstrates. (Princ. Phil. Lat., Lib. II., Propos. 23, Schol.) But the expansive force of the latter also cannot be regarded as the effect of originally repulsive forces, but rests on heat, which compels the proper constituents [viz. the molecules] of the air (to which moreover real distances from each other may be conceded) to fly from one another, not as a matter interpenetrating them, but, to all appearance through their vibrations. But that these vibrations of the parts nearest one another must communicate a repulsive force, standing in inverse proportion to their distances, may be made readily comprehensible by the laws of the communication of motion through the vibration of elastic matters.

I may explain that I do not wish the present exposition of the law of an original repulsion to be regarded as necessarily belonging to the object of my metaphysical treatment of matter, nor the latter (for which it is enough, to have presented the filling of space as dynamic property) to be mixed up with the disputes and doubts which might affect the former.

General Note to the Dynamics.

If we review all [our] discussions on the above, we shall observe that the following things have been taken into consideration: Firstly, the real in space (otherwise called the solid) in its filling through the force of repulsion; Secondly, what, in respect of the first, as the proper object of our external perception, is negative, namely, the force of attraction, by which, so far as may be, all space is penetrated, [or], in other words, the solid, is wholly abolished; Thirdly, the limitation of the first force by the second, and the thence resulting determination of the degree of a filling of space; [we shall observe] therefore that the quality of matter has been thoroughly dealt with, under the heads of reality, negation, and limitation, in so far as they belong to a metaphysical dynamics.

General Observation on Dynamics.

The universal principle of the Dynamics of material nature, that all [that is] real in the objects of our external sense, that, namely, which is not mere determination of space (place, extension and figure), must be regarded as moving force; by which, therefore, the so-called solid, or absolute impenetrability, is banished from natural science as an empty conception, and in its stead a repulsive force is posited; while the true and immediate attraction is defended against all the sophistries of a metaphysics that misunderstands itself, and is explained as a fundamental force necessary even to the possibility of the conception of matter. Now from this the consequence arises, that space, should it be found necessary, could be assumed as throughout, and at the same time in different degrees, filled even without distributing empty mediate spaces within the matter. For according to the originally varying degree of the repulsive

forces on which is founded the first property of matter, namely, that of filling a space, its relation to the original attraction (whether of each matter for itself, or to the united attraction of all matter in the universe) is conceived as infinitely diverse, inasmuch as attraction rests on the mass of matter in a given space while its expansive force [rests] on the degree in which it fills it [viz., the space], which can be specifically very different (as for instance the same quantity of air, in the same volume, exhibits greater or less elasticity, according to its higher or lower temperature). The general ground of this is that by true attraction all parts of matter act directly on all parts of other matter, but through expansive force only those on the surface of contact, owing to which it is the same, whether behind this, much or little of the matter exists. From the above, however, a great advantage for Natural Science arises, by its being relieved of the burden of having to manufacture a world from fullness and emptiness, merely according to fancy, and being able rather to conceive all spaces as full, and yet as filled in varying amount, by which empty space at least loses its necessity, and is relegated to the rank of an hypothesis; whereas otherwise, under the pretext of being a necessary condition to the explanation of the varying degree of the filling of space, it might lay claim to the title of a principle.

With all this the advantage of a methodically-employed metaphysic to the detriment of equally metaphysical principles, but such as have not been subjected to the test of criticism, is apparently only negative. But indirectly, notwithstanding, the field of the investigator of Nature is extended, since the conditions, by which it previously limited itself, and whereby all original forces of motion were philosophised away, now lose their validity. But one must guard against going beyond what the universal conception of a matter in general renders possible, and seeking to explain its particular or specific definition and variety à priori. The conception of matter is reduced to mere moving forces, and this could not be expected to be otherwise, seeing that in space no activity — no change — can be thought of, except as motion. But who can comprehend the possibility of fundamental forces? They can only be assumed, if they inevitably belong to a conception of which it is demonstrable that it is a fundamental conception which cannot be deduced from any other (as that of the filling of space), and of this [nature] is the force of repulsion, and the opposing force of attraction, [considered] generally. We can indeed judge of this, their connection and consequences well enough à priori, whatever their relations among each other may be conceived to be, provided they do not contradict themselves; but [must] not lay claim to assume either of them as real, because to the admissibility of constructing an hypothesis, it is indispensably requisite that the possibility of what is assumed be quite certain, while with fundamental forces, their possibility can never be comprehended. And in this, the mathematico-mechanical mode of explanation has an advantage over the metaphysico-dynamical, which cannot be taken from it — namely, that from a completely homogeneous material, through the manifold form of the parts, by means of empty mediate spaces interspersed, it can accomplish a great specific multiplicity of matters, in density no less than in mode of action (if foreign forces be superadded). For the possibility of the forces, as wel as of the empty mediate spaces, admit of demonstration with mathematical evidence; on the other hand, if the matter itself be transformed into fundamental forces (to define the laws of which, à priori, we are not in a position, and still less to indicate confidently a multiplicity of the same, sufficient for the explanation of the specific variety of matter), all means are wanting for the construction of this conception of matter, and for presenting as possible, in intuition, what we conceived in general. But a mere mathematical physics, pays for the foregoing advantage doubly on the other side, in that it first of all lays at its foundation an empty conception (that is, absolute impenetrability), and secondly that it must give up all the proper forces of matter, in addition to its original configuration of the fundamental matter and interspersion of empty spaces, and, after having called forth the need for explanation, must concede more freedom to the imaginative faculty in the field of philosophy — [and concede it] indeed as legitimate claim — than is consistent with the caution of the latter.

Instead of an adequate explanation of the possibility of matter and its specific variety, from the

fundamental forces, which I am unable to furnish, I shall, as I hope, present the momenta to which its specific variety must admit of being reduced, completely in its totality à priori (although [I cannot] conceive its possibility in the same way). The observations inserted between the definitions will explain their application.

1. A body in a physical signification, is a matter between definite boundaries (which therefore has a figure). The space between these boundaries considered as to its size, is the content of space (volume). The degree of the filling of a space of definite content is termed density. Otherwise the expression dense is used absolutely, for that which is not hollow (bladdery, perforated). In this sense there is an absolute density in the system of absolute impenetrability, if a matter contains no empty mediate spaces. According to this conception of the filling of space comparisons are instituted, and one matter containing less emptiness within itself is called denser than another, till at last, that in which no part of the space is empty is termed perfectly dense. The latter expression can only be made use of, on the mere mathematical conception of matter, for in the dynamical system of a simply relative impenetrability there is no maximum or minimum of density, and any matter however thin can equally be termed fully dense if it wholly fill its space, without containing empty mediate spaces; in other words, if it be a continuum and not an interruptum; but it is in comparison with another [matter], less dense in a dynamical sense, if, although it fill its space wholly, it does not do so in an equal degree. Yet even in the latter system, it is awkward to conceive a relation of matters according to their density, unless they are represented as specifically homogeneous among one another, so that one can be generated from the other merely by mutual pressure. As now, the latter does not appear to be absolutely requisite to the nature of all matter in itself, no comparison can properly be made between heterogeneous matters in respect of their density, as for instance, between water and quicksilver, although this is commonly done.

II. Attraction, in so far as it is merely conceived as active in contact, is called cohesion [zusammenhang]. It is demonstrated by very good experiments, that the same force, called cohesion in contact, is found active at a very small distance; but attraction is only called cohesion, in so far as I think of it only in contact, in accordance with common experience by which it is hardly perceived at small distances. Cohesion is commonly assumed as an altogether universal property of matter, not because we are led to it through the mere conception of a matter, but because experience presents it everywhere. But this universality must not be understood collectively, as though every matter, through this kind of attraction, acted at the same time on every other [matter] in the universe — in the same way as gravitation — but merely disjunctively, namely on one or the other, it does not signify what kind of matters they may be, that come in contact with it. For this reason, and since this attraction, as is demonstrable on various grounds, is not a penetrating but only a superficial force, inasmuch as it is not itself regulated on all sides according to the density — since to complete strength of cohesion a preceding state of fluidity of the matters and their subsequent solidification is requisite, and the closest contact of broken but hard matters in the same surfaces, with which they previously firmly cohered (as for instance a looking-glass where there is a crack), do not any longer admit the degree of attraction which they received on solidifying after their fluid [state — for this reason] I hold this attraction in contact to be no fundamental force of matter, but only a derivative one; of which more hereafter. A matter whose parts, notwithstanding their strong cohesion among one another, can be impelled by every moving force — be it never so small — past one another, is fluid. But parts of a matter are impelled past one another, if, without diminishing the quantum of contact, they are obliged to change [places] among one another. Parts, in other words, matters, are separated if their contact is not merely changed with others but destroyed, or its quantum diminished. A firm — better a solid — body (corpus rigidum) is that whose parts cannot be impelled past one another by every force, and which consequently resist impulsion with a certain degree of force.

The obstacle to the impulsion of matters past one another is friction.

The resistance to separation of matters in contact is cohesion. Fluid matters, therefore, suffer no friction

in their division; but where this is met with, the matters are assumed as solid, in greater or less degree, of which the smallest is termed adhesiveness (viscositas), at least in its lesser parts. The solid body is brittle, if its parts cannot be impelled past one another without breaking, in other words when its cohesion cannot be changed without being at the same time destroyed. The distinction between fluid and solid matters is very incorrectly placed in the different degree of the cohesion of their parts. For to call a body fluid does not depend on the degree of its resistance to rupture, but only on [its resistance] to the impulsion of its parts past one another. The former may be as great as one chooses, but the latter is always in a fluid matter = 0. Let us contemplate a drop of water. If a molecule within the same be drawn on one side, by never so great an attraction of the neighbouring parts, touching it, it will be drawn exactly as much toward the opposite side, and as the attractions reciprocally abolish their effects, the molecule is just as easily movable as if it existed in empty space. The force namely, which is to move it, has no cohesion to overcome, but only the so-called inertia which it would have to overcome with all matter, even if it did not cohere at all. A small microscopical animalcule would therefore move itself as easily within this drop as if there were no cohesion to overcome. For in reality it has not any cohesion of the water to abolish, nor to diminish its contact within itself, but only to change it. But conceive this animalcule as wanting to work its way through the outer surface of the drop; it is then first to be observed, that the reciprocal attraction of the parts of this drop of water cause them to move themselves, until they have attained the greatest contact among one another, in other words, the smallest contact with empty space, that is, have constituted a globular form. If now, the said insect be endeavouring to work its way beyond the surface of the drop, it must change this globular form, and consequently effect more contact of the water with the empty space and hence less contact of the parts among one another, that is, diminish its cohesion; and now for the first time the water resists it through its cohesion, though [even now] not within the drop, for here the contact of the parts among one another is in no way lessened, but only changed in their contact with other parts, in other words, not separated, but only shifted. One may therefore, and indeed for similar reasons, apply to this microscopical animalcule, what Newton says of the lightray; that it cannot be repelled through dense matter, but only through empty space. It is thus clear that the increase of the cohesion of the parts of a matter does not in the least affect its fluidity. Water coheres in its parts much more strongly than is commonly believed, when an experiment with a metal plate drawn off from the surface of the water is relied upon, which decides nothing, because the water does not split in the whole surface of the original contact, but from a much smaller surface resulting from the shifting of its parts, just as a stick of soft wax when a weight is suspended at the end, becomes gradually thinner, and is then torn off from a much smaller surface than the original one. What, however, is quite decisive with respect to our conception of fluidity is this, that fluid matters can be explained as those of which every point seeks to move itself in all directions with the same force, with which it is impressed towards any one [in particular]; a property, upon which the first law of hydro-dynamics rests, but which can never be attributed to an aggregation of smooth and at the same time solid particles, as a very slight removal of its pressure according to the laws of composite motion will show, and thereby prove the originality of the property of fluidity. If now the fluid matter should suffer the least hindrance to impulsion, in other words the smallest friction, this would grow with the strength of the pressure with which the parts were pressed against one another, and finally a pressure would obtain, by which the parts of this matter would not admit of impulsion past one another, by every small force. For instance, in a bent tube, [composed] of two pieces, of which the one may be as wide as one chooses, the other as narrow as one chooses, provided it is not a mere hair-tube — if one supposes both pieces to be some hundred feet high, the fluid matter in the narrow one would stand just as high as that in the wide, according to the laws of hydrostatics. But because the pressure on the bottom of the tubes, and hence on the part uniting both these tubes (which stand in communication), can be conceived as in proportion to the heights increasingly greater to infinity, so, if the least friction between the parts of the fluid took place, a height of the tubes must be able to be

found, by which a small quantity of water, poured into the narrow one, would not move that in the wide one out of its place, in short, [by which] the column of water in the latter would come to stand higher than that in the former, inasmuch as the lower parts, with such great pressure against one another, would not any longer admit of impulsion, by so small a moving force as the added weight of water — [a cohesion] which is opposed to experience, and even to the conception of the fluid. The same may be said if, instead of pressure by weight, the cohesion of the parts be posited, it matters not how great it may be. The second definition of fluidity cited, upon which the fundamental law of hydrostatics rests, namely, that it is the property of a matter by which every part of the same endeavours to move itself towards all sides with the same force with which it is impressed in a given direction, follows from the first definition, if the fundamental principle of universal dynamics be combined with it, that all matter is originally elastic, since it must endeavour to extend itself — that is (if the parts of a matter admit of being impelled past one another by every force without hindrance, as is actually [the case] with fluids), to move itself — towards all sides of the space in which it is compressed, with the same force with which the pressure in any [given] direction, whichever it may be, is exercised. There are therefore properly only the solid matters (the possibility of which requires another ground of explanation beside the cohesion of the parts), to which friction can be attributed, and the friction already presupposes the property of solidity. But why certain matters, although possessing not a larger, it may be even a smaller, force of cohesion, than fluid [matters], resist notwithstanding so powerfully the shifting of their parts, as not to admit of separation otherwise than by the abolition of the cohesion of all parts at once in a given surface, whereby the appearance of a pre-eminent cohesion is afforded — in short, how rigid bodies are possible — is still an unsolved problem, in spite of the ease with which ordinary natural science believes itself to dispose of it.

3. Elasticity (spring-force) is the capacity of a matter, to reassume its size or shape [which has been] altered by another moving force, on the cessation of the latter. It is either expansive or attractive elasticity; the former in order after compression to assume the previously greater [volume], the latter in order after expansion [to assume] the previously smaller volume. The attractive elasticity, as the expression itself shows, is obviously derived. An iron wire stretched by weights appended, springs, if the connection is cut, back into its [original] volume. By virtue of this attraction, which is the cause of its cohesion (or with fluid matters, [as?] when the heat is suddenly withdrawn from quicksilver), their matter hastens to assume again the previous smaller volume. The elasticity which consists in rehabilitation of the previous figure, is always attractive, as in a bent sword-blade, where the parts on the convex side which are forced back, seek to recover their former proximity, and in the same way a small drop of quicksilver may be called elastic. But the expansive elasticity may be original or it may be derivative. Thus the air has a derivative elasticity, by means of the matter of heat which is most intimately united with it, and the elasticity of which is perhaps original. On the other hand, the fundamental material of the fluid which we term air, must nevertheless as matter generally already have elasticity in itself, which may be called original. Of what kind a perceived elasticity may be, is not possible to decide with certainty in cases as they arise.

4. The effect of moved bodies on one another through the communication of their motion is termed mechanical; but that of matters, in so far as they change the combination of their parts reciprocally by their own forces while at rest, is termed chemical. This chemical influence is termed solution [auflosung] in so far as it has for its effect the separation of the parts of a matter; (mechanical division, as for instance a wedge driven between the parts of a matter, is thus, since the wedge does not act by its own force, entirely different from chemical [division]); but that which has for its effect the severance of two matters resolved by one another, is [chemical] analysis. The solution of specifically distinct matters by one another, in which no part of the one is met with, that is not united with a part of the other specifically distinct from it in the same proportion as the whole, is absolute solution, and may also be termed chemical penetration. Whether the resolving forces really discoverable in nature, are capable of effecting

a complete solution may remain undiscussed. Here the question is only whether such admit of being conceived. Now it is obvious that so long as the parts of a resolved matter are still particles (moleculœ), a solution of them is not less possible than of the larger, indeed that this must really proceed, if the resolving force continue, until there is no part left, that is not compounded of the medium of solution and the matter to be resolved in the proportion in which they each stand to one another in the whole. As, then in such a case, there can be no part of the volume of the solution, not containing a part of the resolving medium, this must also, as a continuum, completely fill the volume. In the same way, as there can be no part of this volume of solution, that does not contain a proportional part of resolved matter, this must also, as a continuum, fill the whole space, constituting the volume of the mixture. But when two matters, each of them, entirely fill one and the same place, they penetrate one another; hence a perfect chemical solution would be a penetration of the matter, which nevertheless would be wholly distinguished from the mechanical, inasmuch as by the latter it would be conceivable that with the greater approach of moved matters, the repulsive force of the one might entirely counterbalance that of the other, and one or both reduce its extension to nothing. On the contrary, here, the extension remains, only that the matters [are] not outside, but within one another, i.e. occupy by intersusception (as it is usually termed) together a space equal to the sum of their densities. Against the possibility of this perfect solution, and hence of chemical penetration, it is difficult to allege anything, although it involves a complete division to infinity, for this in the present case contains no contradiction, as the solution takes place continuously throughout time; in other words, through an infinite series of moments, with acceleration; by the division moreover, the sums of the outer surfaces of the matters yet to be divided, grow, and as the resolving force acts continuously, the whole solution may be completed in an assignable time. The incomprehensibility of such a chemical penetration of two matters is to be ascribed to the score of the incomprehensible [nature] of the divisibility to infinity of every continuum, generally. If we depart from this complete solution we must assume it to extend only to certain small particles of the matter to be resolved, which swim in the medium of solution at fixed distances from each other, without our being able to assign the least ground why these particles, as they are still divisible matters, may not in the same way be resolved. For that the medium of solution does not act farther, may always, in nature, so far as experience teaches be true enough; but the question here is of the possibility of a resolving force, which may resolve this particle, and every other that remains over, till the solution is completed. The volume occupied by the solution may be equal to the sum of the spaces occupied by the mutually resolving matters before the mixture, or [it may be] smaller or larger, according to the relation in which the attractive forces stand to the repulsions. They constitute in solution, each for itself and both combined, an elastic medium. This alone, will afford a sufficient reason why the resolved matter does not by its weight separate itself again from the resolving medium. For the attraction of the latter, as it occurs with equal strength toward all sides, abolishes its resistance, and to assume any adhesiveness in the fluid, does not harmonise with the great force exercised by such resolved matters, as for instance, acids diluted with water, on metallic bodies, on which they do not merely rest, as must happen if they simply swam in their medium, but which separate themselves from each other with great attractive force, and diffuse themselves in the whole space of the vehicle. Admitting, moreover, that art has no chemical forces of solution of this kind, capable of effecting a complete solution, in its power, nature might still exhibit them in its vegetal and animal operations and thereby perhaps generate matters, which although indeed mixed, no art could again separate. This chemical penetration might even be met with, where one of the two matters might not be severed by the other, and in a literal sense resolved; as for instance, heat-matter penetrates bodies, since if it only distributed itself in their empty mediate spaces, the solid substance itself would remain cold, since it could not absorb any of it. In the same way, an apparently free passage of certain matters through others could be conceived in such a manner as that of magnetic matter, without preparing for it, to this end, open pores and empty mediate spaces, in all, even the densest matters. But this is not the place to point out hypotheses for special phenomena, but only the

principle according to which they are all to be judged. Everything that relieves us of the necessity of having recourse to empty spaces, is a real gain to natural science. For these give far too much freedom to the imagination, to supply the want of accurate knowledge of nature by fancy. Absolute vacuity and absolute density are, in natural science, much the same as blind chance and blind fate in metaphysical science, namely, stumbling-blocks for the investigating reason, by which, either fancy occupies its place, or it is lulled to rest on the pillow of occult qualities.

But as concerns the procedure in natural science in respect of the most important of all its problems, namely, the explanation of a possible specific variety of matters [extending] to infinity, one can only strike out two ways: the mechanical, by the union of the absolutely full with the absolutely empty, or a dynamical way, opposed to it, by explaining all varieties of matters through the mere variety in the combination of the original forces of repulsion and attraction. The first has, as the materials of its deduction, atoms and the void [emptiness]. An atom is a small portion of matter physically indivisible. A matter is physically indivisible, whose parts cohere with a force, capable of being overpowered by no discoverable moving force in Nature. An atom, in so far as it is specifically distinguished from others by its figure, is called a primal body. A body whose moving force depends on its figure is called a machine. The mode of explanation of the specific variety of matters by the construction and composition of their smallest parts as machines is mechanical natural philosophy, but that which derives the specific variety of matter from matters not as machines, that is, mere tools of external moving forces, but from the moving forces of attraction and repulsion originally belonging to them, may be called dynamical natural philosophy. The mechanical mode of explanation, as it is the most available in mathematics, has, under the name of the atomistic or corpuscular philosophy, always retained its reputation and influence on the principles of natural science, with little change from old Demokritos to Descartes, and even our own times. It consists essentially in the presupposition of the absolute impenetrability of the primitive matter, in the absolute homogeneity of this matter, differences only being admitted in the figure, and in the absolute unconquerability of the cohesion of the matter of these fundamental bodies themselves. Such were the materials for the generation of specifically different matters, in order not only to have at hand an unchangeable, and at the same time variously-formed fundamental material for the unchangeableness of species and kinds, but, also from the form of these primal parts, as machines (to which nothing more than an externally impressed force was wanting), to explain the several effects of nature mechanically. The first and most important credential of this system rests, however, on the pretended unavoidable necessity of employing empty spaces for the specific distinction of the density of matters which were assumed as distributed within the matters and between the said particles in [such] proportion as was found necessary, for the sake of some phenomena so large, that the filled part of the volume, even of the densest matter, would be well nigh as nothing, against the empty. In order, now, to introduce a dynamical mode of explanation (which is far more suited and more advantageous to experimental philosophy, inasmuch as it leads directly to the discovery of the proper moving forces of matters and their laws, while it limits the freedom of assuming empty mediate spaces and fundamental bodies of definite figures, neither of which admit of definition or discovery by any experiments) it is by no means necessary to forge new hypotheses, but merely to refute the postulate of the mechanical mode of explanation [namely] that it is impossible to conceive a specific distinction of the density of matters without the intermixture of empty spaces, by the mere citation of a way in which this admits of being conceived without contradiction. For if the postulate in question, on which the mere mechanical mode of explanation stands, be only first declared invalid, as a fundamental principle, it is self-evident that it must not be adopted as a hypothesis in natural science, so long as a possibility remains of conceiving the specific distinction of densities without any mediate spaces. But this necessity rests upon [the fact] that matter does not (as mere mechanical investigators of nature assume) fill its space by absolute impenetrability, but by repulsive force, which has its degree, that may be different in different matters, and as it has nothing in itself, in common with the attractive force,

which is regulated by the quantity of the matter, it may be originally different in degree, in different matters with the same attractive force; and consequently the degree of extension of these matters may with the same quantity of matter, and conversely, the quantity of matter with the same volume — i.e., density — admit of very great original specific differences. In this way we should not find it impossible to conceive a matter (as, for instance, the ether is represented), which wholly filled its space, without any void, and yet with incomparably less quantity of matter, at an equal volume, than any bodies which we can subject to our experiments. The repulsive force in ether must, in relation to its proper attractive force, be conceived as incomparably greater than in any other matter known to us. And the only [reason] why we merely assume it, because it can be conceived, is as a foil to a hypothesis (that of empty spaces), which is alone supported by the pretension, that such [viz., matter] does not admit of being conceived without empty spaces. Besides this, no law whatever of the attractive or repulsive force may be risked on à priori conjectures, but everything, even the universal attraction as cause of gravity must, together with its laws, be inferred from data of experience. Still less may such be attempted with chemical affinities, otherwise than by way of experiment. For it lies generally beyond the horizon of our Reason, to comprehend original forces à priori as to their possibility; all natural philosophy consists rather in the reduction of given forces in appearance diverse, to a small number of forces and powers, adequate to the explanation of the effects of the former, but which reduction only extends to fundamental forces, beyond which our Reason cannot proceed. And thus, metaphysical research, behind what lies at the foundation of the empirical conception of matter, is only useful for the purpose of leading natural philosophy so far as is possible to the investigation of dynamical grounds of explanation, as these alone admit the hope of definite laws, and consequently of a true rational coherence of explanations.

This is all that metaphysics can ever accomplish to the construction of the conception of matter — in other words, for the application of mathematics to natural science, in respect of properties whereby matter fills its space in definite amount — namely, to regard these properties as dynamical and not as unconditioned original positions, such for instance, as a mere mathematical treatment would postulate.

The well-known problem as to the admissibility of empty spaces in the world may furnish the conclusion. The possibility of this does not admit of dispute. For to all forces of matter space is requisite, and, as it also contains the conditions of the laws of its diffusion, is necessarily pre-supposed before all matter. Thus, attractive force is attributed to matter, in so far as it occupies a space around itself by attraction, without, at the same time, filling it, which, therefore, even where matter is active, may be conceived as empty, because it is not active by repulsive forces, and hence does not fill it. But, to assume empty spaces as real, no experience, inference from [experience], or hypothesis necessary to its explanation, can justify us. For no experience gives us any but comparatively empty spaces to cognise, which can be perfectly explained, from the property of matter, as filling its space by an expansive force, greater or progressively smaller to infinity, in all possible degrees, without requiring empty spaces.

THIRD DIVISION.: METAPHYSICAL FOUNDATIONS OF MECHANICS.

Explanation 1.

Matter is the movable, in so far as it is something having a moving force.

Observation.

Now this is the third definition of a matter; the mere dynamical conception could also regard matter as in rest; the moving force, which was then taken into consideration, concerned merely the filling of a particular space, without our being permitted to regard the matter which filled it, as itself moved. Repulsion was thus an original moving force to impart motion; in mechanics, on the contrary, the force of a matter, set in motion, is considered as [present] in order to communicate this motion to another. But it is clear that the movable would have no moving force through its motion if it did not possess original moving forces, whereby it is active before all proper motion, in every place in which it exists, and that no matter would impress uniform motion upon another matter, the motion of which lay in the path of the straight line before it, if both did not possess original laws of repulsion; nor that it could compel another by its motion, to follow it in the straight line (that it could drag it after it), if both did not possess attractive forces. Thus, all mechanical laws presuppose dynamical, and a matter as moved can have no moving force, except by means of its repulsion or attraction, upon which, and with which, it acts directly in its motion, and thereby communicates its own motion to another. It will be observed that I do not make further mention here of the communication of motion by attraction — for instance, as if a comet of stronger attractive capacity than the earth, in passing by the latter, should drag it after it — but only of the mediation of repulsive forces, in other words, of pressure (as by means of a distended spring), or by impact, since, without this, the application of the laws of the one to those of the other is only different in the line of direction, but otherwise the same in both cases.

Explanation 2.

The quantity of the matter is the multitude of the movable in a definite space. This, in so far as all its parts may be considered as at the same time active (moving) in their motion is termed the mass, and it is said a matter acts in mass when all its parts are moved in the same direction, exercising, at the same time, their moving force, outside themselves. A mass of definite figure is called a body in a mechanical sense). The quantity of motion (mechanically estimated) is that which is estimated at once, by the quantity of the moved matter and its velocity; phoronomically it consists merely in the degree of the velocity.

Proposition 1.

The quantity of the matter may be estimated in comparison, with every other, only by the quantity of motion at a given velocity.

Demonstration.

Matter is divisible to infinity; consequently none of its quantity can be determined directly by a multitude

of its parts. For if this occur in the comparison of the given matter, with a homogeneous one, in which case the quantity of the matter is proportional to the quantity of the volume, this is opposed to the requirements of the proposition [which says], it is to be estimated in comparison with every other (even specifically different) [matter]. Thus matter can be neither indirectly nor directly estimated in comparison with every other matter, so long as abstraction is made of its own motion. Consequently, no other universally valid measure of it remains, but the quantity of its motion. But in this, the difference of the motion, which rests on the different quantity of the matter, can only be given when the velocity is assumed as equal among the compared matters, therefore, &c.

Note.

The quantity of the motion of bodies is in compound proportion to the quantity of its matter and its velocity, i.e., it is the same whether I make the quantity of the matter of a body doubly as great, and retain the velocity, or whether I double the velocity and retain the mass. For the definite conception of a quantity is only possible through the construction of the quantum. But this is, in respect of the conception of the quantity, nothing but the composition of the equivalent; and consequently the construction of the quantity of a motion is the composition of many motions equivalent to each other. Now it is the same thing, according to the phoronomic propositions, whether I impart to a movable a certain degree of velocity, or to many equal movables all the smaller degrees of velocity, produced by the given velocity being divided by the multitude of the movable. Hence arises, at first, an apparently phoronomic conception of the quantity of a motion, as compounded of many motions outside one another, but yet as a whole united in a movable point. If now this point be conceived as something possessing moving force by its motion, there arises the mechanical conception of the quantity of the motion. But in phoronomy it is not practicable to conceive of a motion as compounded of many parts outside one another, because the movable, since it is conceived as without any moving force, gives no distinction in real quantity of the motion, no matter with how many others of its kind it be compounded, beyond that which consists merely in the velocity. As the quantity of the motion of a body to that of another, so is related also the quantity of its effect, the whole effect being understood thereby. Those who assumed merely the size of a space filled with resistance (e.g., the height to which a body can rise with a given velocity against gravitation or the depth to which the same [body] can penetrate into soft matters) as the measure of the whole effect, brought forward another law of moving forces with real motions, namely, that of compound relation, from [the law] of the quantity of the matters and of the squares of their velocities; but they overlooked the quantity of the effect in the given time, in which the body traverses its space with less velocity, and this can alone be the measure of a motion exhausted by a given uniform resistance. Hence no difference can obtain between living and dead forces, if moving forces are considered mechanically, that is, as those such as bodies possess, in so far as they are themselves moved, it matters not whether the velocity of their motion be finite or infinitely small (mere effort towards motion). One might far more suitably indeed call those forces with which matter (even when abstraction is wholly made of its own proper motion, or even effort to move itself), acts on others; in other words, the original moving forces of dynamics, dead forces, and all mechanical [forces], that is, forces moving by their own motion, living forces, regard not being given to the difference of velocity, the degree of which may be infinitely small; always supposing that these designations of dead and living forces deserve to be retained at all.

Observation.

In order to avoid diffuseness, we will condense the explanation of the preceding three paragraphs into one observation.

That the quantity of the matter can only be conceived as the multitude of the movable (outside one another), as the definition expresses it, is a remarkable and fundamental proposition of universal mechanics. For it is indicated thereby, that matter can have no other quantity than that which consists in the multitude of the manifold outside one another; consequently no degree of moving force with given velocity that would be independent of this multitude, and which could be conceived as merely intensive quantity, which would certainly be the case if the matter consisted of monads, whose reality in every connection must have a degree, that might be greater or smaller, without depending on a multitude of parts external to one another. As to that which concerns the conception of mass in the same explanation it cannot be regarded, as is usually [done], as the same as the quantity. Fluid matters can act by their own motion in mass, and they can also act in flux. In the so-called water-hammer the water in striking acts in mass, that is, with all its parts at the same time; the same occurs in water which has been enclosed in a vessel, and which presses by its weight upon the scale on which it stands. On the other hand, the water of a mill-stream acts on the paddle of the water-wheel that strikes it, not in mass, that is, at the same time with all its parts that rush against it, but only successively. If therefore, in this case, the quantity of the matter that is moved with a certain velocity, and that has moving force, is to be determined, one must first of all seek the body of the water, that is, such quantity of matter, that when it acts in mass with a certain velocity (by its weight) can produce the same effect. Hence by the word mass is generally understood the quantity of the matter of a solid body (the vessel, in which a fluid is enclosed, taking the place of its solidity). Finally, as concerns the proposition, together with the appended note, there is nothing strange that according to the former, the quantity of the matter has to be estimated by the quantity of the motion with given velocity, while according to the latter, on the contrary, the quantity of the motion (of a body, for that of a point, consists only in the degree of the velocity) at the same velocity, by the quantity of the moved matter, though this seems to revolve in a circle, and to promise no definite conception of either the one or the other. This supposed circle would indeed be real if it were a reciprocal deduction of two identical conceptions from one another. It contains, however, on the one side only the explanation of a conception, and on the other its application to experience. The quantity of the movable in space is the quantity of the matter; but this quantity of the matter (the multitude of the movable), demonstrates itself in experience only by the amount of the motion, at equal velocity (e.g. by equilibrium.)

It remains yet to be observed, that the quantity of matter is the quantity of substance in the movable; consequently, not the amount of a given quality of the same (of repulsion or attraction, as has been said in the dynamics), and that the quantum of the substance is here nothing else than what is signified by the multitude of the movable, which constitutes matter. For only this multitude of the moved can with the same velocity give a difference in the amount of the motion. But that the moving force a matter possesses in its own motion can alone prove the quantity of the substance, rests on the conception of the latter as the ultimate subject (that is no further predicate of another) in space, which for this reason can have no other quantity, but that of the multitude of the homogeneous outside one another. But as the proper motion of matter is a predicate which determines its subject (the movable), and in a matter, as a multitude of the movable, indicates the plurality of the moved subjects (at equal velocity in the same kind) — while with dynamical properties, whose quantity may be also the quantity of the effect of a single subject (e.g. a [single] molecule of air may have more or less elasticity), this is not the case — it is clear that the quantity of the substance in a matter can only be estimated mechanically, that is, by the amount of its motion, and not dynamically, by the amount of its original moving forces. In the same way the original attraction, as the cause of universal gravitation can afford a measure of the quantity of matter and its substance (as really happens in the comparison of matters by weighing), although in this case, not proper motion of the attracting matter, but a dynamical measure, namely attractive force, seems to be laid at the foundation. But inasmuch as with this force the effect of a matter occurs with all its parts, directly on all parts of another, and thus (at equal distances) is obviously proportioned to the multitude of the parts, and

the attracting body itself thereby imparts a velocity of its own motion (by the resistance of the attracted [body]), which, in similar external circumstances, is exactly proportioned to the multitude of its parts, [for this reason] the estimate takes place here, [also] as a matter of fact, mechanically, although only indirectly so.

Proposition 2.

First law of mechanics. — With all changes of corporeal nature, the quantity of the matter remains, on the whole, the same, unincreased and undiminished.

Demonstration.

(From universal metaphysics the proposition is laid at the foundation, that with all changes of nature, no substance can either arise or be annihilated, and here it is only demonstrated what is substance in matter.) In every matter the movable in space is the ultimate subject of all the accidents inhering in matter, and the multitude of this movable outside one another the quantity of the substance. Thus the amount of the matter as substance, is nothing other than the multitude of the substances of which it consists. Hence the quantity of the matter cannot be increased or diminished except by new substance arising or being annihilated. Now, with all change of matter, substance never arises or is destroyed; thus the quantity of matter is thereby neither increased nor diminished, but remains always the same as a whole, that is, so that somewhere in the world it continues [to exist], although this or that [particular] matter may by the addition or subtraction of its parts be increased or diminished.

Observation.

The essential, characterising substance in this demonstration, which is only possible in space and according to the conditions of the same, consequently as object of the external sense, is that its amount cannot be increased or diminished, without substance arising or being annihilated; therefore as any quantity of a merely possible object in space must consist of parts outside one another, these, if they are real (something movable) must be necessarily substances. That, on the contrary, which is considered as object of the internal sense may have a quantity as substance, not consisting of parts outside one another, whose parts are therefore not substances, whose origination or annihilation therefore need not be the origination or annihilation of a substance, and hence whose increase or diminution is possible, notwithstanding the principle of the permanence of substance. Thus consciousness, in other words, the clearness of the presentations of my soul, and in consequence of this also, the faculty of consciousness, apperception, and therewith even the substance of the soul, has a degree that may be greater or smaller, without, to this end any substance requiring to arise or to be annihilated. But because with the gradual diminution of this faculty of apperception, a total disappearance of the same could not but finally result, the substance of the soul would still be subjected to a gradual destruction, even were it of simple nature, inasmuch as this disappearance of its fundamental force could not result through division (separation of substance from a composite), but, as it were, by extinction, and even this not in a moment, but by the gradual failing of its degree, from whatever cause arising. The ego, the universal correlate of apperception and itself merely a thought, indicates as a mere prefix, a thing of undefined signification, namely, the subject of all predicates without any condition distinguishing this presentation of the subject from a something generally, in short, substance, of which no conception of what it is [is conveyed] through this expression. On the contrary, the conception of a matter as substance is the conception of the movable in space. It is no wonder therefore, if permanence of substance can be proved of the latter, but not the

former, since with matter it follows from its conception, namely, as being the movable, which is only possible in space, that that which possesses quantity in it, contains a plurality of the real outside one another, in other words of substances, and consequently its quantity can only be diminished by division, which is no disappearance, and even the latter would be impossible in this case according to the law of permanence. The thought I is on the contrary, no conception, but only inward perception; from it therefore nothing whatever can be deduced (except the complete distinction of an object of the internal sense from that which is merely conceived as object of external sense), and consequently not the permanence of the soul as substance.

Proposition 3.

Second law of mechanics. — All change of matter has an external cause. (Every body remains in its state of rest or motion in the same direction and with the same velocity, if not compelled by an external cause to forsake this state.)

Demonstration.

(From universal metaphysics the proposition that all change has a cause, is laid at the foundation; here it only remains to be proved of matter, that its change must always have an external cause.) Matter, as mere object of the external sense, has no determinations but those of external relation in space, and hence is subject to no change except through motion. In respect of this, a change of one motion with another, or of the same with rest, and conversely, a cause of the same though this, must be traceable (according to principles of metaphysics). But this cause cannot be internal, for matter has no absolutely internal determinations and grounds of determination. Hence all change of a matter is based upon external causes (i.e., a body continues, &c.).

Observation.

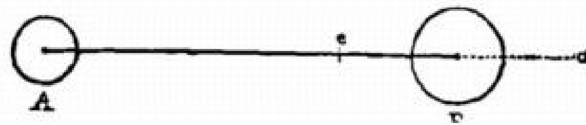
This mechanical law can only be called the law of inertia (lex inertiæ); the law that every action has an equal reaction opposed to it, cannot bear this name. For the latter says what matter does, but the former, only what it does not do, which is better adapted to the expression inertia. The inertia of matter is and means nothing but its lifelessness, as matter in itself. Life means the capacity of a substance, to act from an internal principle, determining a finite substance to change, and a material substance to rest or motion, as change of its state. Now we know no other internal principle of a substance to change its state but desire, and no other internal activity whatever but thought, with that which depends upon it, feeling of pleasure or pain, and impulse or will. But these grounds of determination and action in no wise belong to the presentations of the external sense, and thus not to the determinations of matter as matter. Thus all matter as such is lifeless. The proposition of inertia says so much and no more. If we seek the cause of any change of matter whatsoever in life, we shall have to seek it at once in another substance, distinct from matter, although bound up with it. For in natural knowledge it is necessary, first of all, to know the laws of matter as such, and to clear them from the admixture of all other efficient causes, before connecting them therewith, in order to distinguish how each acts for itself alone. On the law of inertia (next to that of the permanence of substance) the possibility of a natural science proper entirely rests. The opposite of the first, and therefore the death of all natural philosophy, would be hylozoism. From the same conception of inertia as that of mere lifelessness, it follows of itself, that it does not signify a positive effort to maintain its state. Only living beings can be termed inert in this latter sense, inasmuch as they have a conception of another state, which they dread and strive against with all their might.

Proposition 4.

Third mechanical law. — In all communication of motion, action and reaction are always equal to one another.

Demonstration.

(From universal metaphysics the proposition must be borrowed, that all external action is reciprocal action. In this place it only has to be shown in order to remain within the bounds of mechanics that this reciprocal action (actio mutua) is at the same time reaction (reactio); but, without doing violence to the completeness of the insight, the above metaphysical law of reciprocity nevertheless cannot be left out here. All active relations of matters in space, and all changes of these relations, in so far as they can be causes of certain effects, must always be conceived as reciprocal, that is since all change of the same is motion, no motion of a body, with reference to an absolutely-resting [one] which would be thereby set in motion, can be conceived; but the latter must rather be conceived as only relatively-resting in respect of the space, to which it is referred, but together with this space as moved in the opposite direction with the same quantity of motion in absolute space, as the moved [body] has against it, in the same space. For the change of relation (in other words, the motion) is completely reciprocal between both; by as much as the one body approaches every part of the other, by so much the other approaches every part of the first. And because here the question is not as to the empirical space surrounding both bodies, but only of the line lying between them (inasmuch as these bodies are considered simply in mutual relation, according to the influence, which the motion of the one can have on the change of state of the other, by abstraction of all relation to empirical space), their motion will be regarded as merely determinable in absolute space, in which each of the two bodies must have an equal share of the motion attributed to the one in relative space, since there is no ground for ascribing more to one of them than to the other. On this footing the motion of a body, A, against another, resting, B, with regard to which it may be moving if reduced to absolute space — that is, as the relation of active causes merely referred to one another — is so considered that each has an equal share in the motion, which in the phenomenon is attributed to the body A alone. This cannot occur otherwise, than by the velocity attributed to the body A in the relative space, being distributed between A and B in inverse proportion to the masses, to A only what belongs to it in absolute space, to B, on the other hand, the relative, in addition, in which it rests, in the opposite direction, whereby the same phenomenon of motion is completely retained, the effect in the reciprocity of both bodies being constructed in the following manner:



Let a body A be in motion with a velocity = AB in respect of the relative space towards the body B, which in respect of the same space is resting. Let the velocity AB be divided into two parts, Ac and Bc, which are related to one another inversely as the masses B and A. Conceive A as moved with the velocity Ac, in absolute space, but B with the velocity Bc, in the opposite direction, together with the relative space; both motions are then opposite and equal to one another, and as they reciprocally destroy one another, both bodies are translated with reference to one another, that is, in absolute space, into [a state of] rest. B, however, was in motion with the velocity Bc in the direction BA, which is exactly opposed to that of the body A, namely AB, together with the relative space. If then the motion of the body B is destroyed by impact, the motion of the relative space is not therefore also destroyed. Thus, after the impact, the relative space moves in respect of both bodies A and B (which now rest in absolute space) in the direction BA with the velocity Bc, or, which is the same thing, both bodies move after the impact with

equal velocity, Bd = Bc, in the direction of the impacting AB. According to the foregoing, however, the quantity of the motion of the body B in the direction and with the velocity Bc, and hence also that in the direction Bd with the same velocity, is equal to the quantity of the motion of the body A with the velocity and in the direction Ac. Consequently the effect, namely, the motion Bd, which maintains the body B by impact in relative space, and therefore the action of the body A with the velocity Ac, is always equal to the reaction Bc. Since this law (as mathematical mechanics teaches) suffers no alteration, when instead of the impact of a resting, an impact of the same body in the same way on a moved body is assumed; similarly as the communication of motion by impact, is only distinguished from that by traction by the direction in which the matters resist one another in their motion, it follows that in all communication of motion action and reaction are always equal to one another (that no impact can communicate the motion of a body to another except by means of an equal counter-impact, no pressure except by means of an equal counter-pressure, and in the same way no traction except by means of an equal counter-traction).

Note 1.

From the above there follows, the natural, and for universal mechanics, not unimportant law, that every body, however great its mass may be, must be movable by the impact of every other, however small its mass or velocity may be. For to the motion of A in the direction AB, there corresponds necessarily an equal opposite motion of B in the direction BA. Both motions destroy one another in absolute space by impact. But thereby both bodies retain a velocity Bd = Bc in the direction of the striking [one]; consequently the body B is movable by even the smallest force of impact.

Note 2.

This, then, is the mechanical law of the equality of action and reaction, which is based upon [the fact] that no communication of motion takes place except in so far as a community of these motions is pre-supposed, and thus that no body strikes another, which is at rest in respect of itself, but that if it be so in respect of the space, it is only in so far as together with this space it is moved in equal degree, but in contrary direction to the motion, falling to the relative share of the former, [both together] giving the quantity of the motion to be attributed to the former, in absolute space. For no motion which is [conceived as] moving in respect of another body, can be absolute; but if it be relative in respect of the latter, there is no relation in space that is not reciprocal and equal. But there is yet another, namely, a dynamical law of the action and reaction of matters not in so far as one communicates its motion to another, but imparts it to the latter originally, and by its resistance at the same time produces it in itself. This may be readily demonstrated in a similar way. For if the matter A attract the matter B, it compels the latter to approach it, or, which is the same thing, the former resists the force with which the latter strives to retreat. But inasmuch as it is the same thing whether B retreats from A or A from B, this resistance is at the same time a resistance that the body B exercises against the body A in so far as it strives to retreat, and hence traction and countertraction are equal to one another. In the same way, if A repel the matter B, A resists the approach of B. But it is the same thing whether B approaches A, or A B, for B resists just as much the approach from A, hence pressure and counter-pressure are always equal to one another.

Observation 1.

This, then, is the construction of the communication of motion, which at the same time carries with it as its necessary condition the law of the equality of action and reaction, which Newton did not trust himself to

prove à priori, but for which we appealed to experience, and for the sake of which others introduced into natural science a special force of matter under the name force of inertia (vis inertiæ) first invented by Kepler, and thus, in the end, also deduced it from experience; while finally others again placed it in the conception of a mere communication of motion which they regarded as a gradual transference of the motion of one body into the other, whereby the moving sacrificed precisely as much as it imparted to the moved until it impressed the latter no longer (when, namely, it had arrived at equality of velocity in the direction of it). In this way all reaction, that is, all really reacting force of the one struck against the striking [body], (such for instance as would be possible to distend a spring) is abolished; and besides that it fails to prove what is really meant by the law referred to, in nowise explains the communication of motion itself, as to its possibility. For the word transference of motion from one body to another explains nothing, and if one is unwilling to take it, so to speak literally ([as being] opposed to the principle, accidentia non migrant e substantiis in substantias) as though motion were poured from one body into the other, as water from one glass into the other, the problem is, how to make this possibility — the explanation of which rests precisely on the same ground, whence the law of the equality of action and reaction is derived — comprehensible. One cannot conceive how the motion of a body A is necessarily connected with the motion of another B, except that forces are conceived in both, as accruing to them before all motion (dynamically) — as for instance repulsion — and it can be proved, that the motion of the body A through approach towards B, with the approach of B towards A, and if B be regarded as at rest, its motion together with its space towards A, are necessarily connected, in so far as the bodies with their (original) moving forces, are merely considered in motion as relative to one another. This latter can be thereby fully comprehended à priori [viz.] that whether the body B in respect of empirically cognisable space be resting or moved, it must be regarded as necessarily moved in respect of the body A, and [moved] in an opposite direction; since otherwise, no influence thereof on the repulsive force of both would take place, without which no mechanical action whatever of matters on one another, i.e. no communication of motion by impact is possible.

Observation 2.

The designation force of inertia (vis inertiæ) must thus, in spite of the eminence of its founder's name, be entirely banished from natural science, — not only because it carries with it a contradiction in expression, or because the law of inertia (lifelessness) might thereby be easily confounded with the law of reaction in every communicated motion, but principally — because thereby the mistaken conception of those, insufficiently acquainted with the mechanical laws, would be maintained and strengthened according to which the reaction of bodies, of which we are speaking under the name force of inertia, consists in the motion being thereby swallowed up, diminished or destroyed, without the mere communication of motion being effected, in that, namely, the moving body would have to apply a part of its motion to overcoming the inertia of the resting [one] (which would be pure loss), and with the remaining portion only, could set the latter in motion; but if nothing remained, would not be able by its impact to bring the latter into motion on account of its great mass. A motion can resist nothing except opposite motion of another, but, in nowise its rest. Here therefore inertia of matter, that is mere incapacity to move of itself, is not the cause of a resistance. The expression force of inertia used to designate a special and quite peculiar force, merely in order to resist without being able to move a body, would be a word without any significance. The three laws of universal mechanics might be more suitably designated, the law of the subsistence, the inertia, and the reaction of matters (lex subsistentiæ, inertiæ et antagonismi) by all changes of the same. That these, in other words, the entire propositions of the present science, exactly answer to the categories of substance, causality and community, in so far as these conceptions are applied to matter, requires no further elucidation.

General Observation on Mechanics.

The communication of motion only takes place by means of such moving forces, as inhere in a matter at rest (impenetrability and attraction). The action of a moving force on a body in one moment is its solicitation, the velocity acquired by the latter through solicitation, in so far as it increases in equal proportion to the time, is the moment of acceleration. (The moment of acceleration must therefore only contain an infinitely small velocity, as otherwise the bodies would attain through this an infinite velocity in a given time, which is impossible. The possibility of acceleration generally moreover, rests, through a continuous moment of the same, on the law of inertia.) The solicitation of matter through expansive force (e.g., a compressed air that bears a weight) occurs always with a finite velocity; but the velocity impressed thereby on another body (or withdrawn from it) can only be infinitely small; for the former is only a superficial force, or, which is the same thing, the motion of an infinitely small quantum of matter, which must occur consequently with finite velocity in order to be equal to the motion of a body of finite mass with infinitely small velocity (a weight). On the other hand attraction is a penetrating force, by virtue of which, a finite quantum of matter exercises moving force on a similarly finite quantum of another [matter]. The solicitation of attraction must therefore be infinitely small, because it is equal to the moment of acceleration (which must always be infinitely small), while with repulsion, where an infinitely small portion of matter is to impress a moment on a finite [portion] this is not the case. No attraction admits of being conceived with a finite velocity without the matter being obliged to penetrate itself by its own attractive force. For the attraction, which a finite quantity of matter exercises on [another] finite with a finite velocity, must be superior to every finite velocity, whereby matter reacts through its impenetrability, but only with an infinitely small portion of the quantity of its matter, on all points of the compression. If attraction is only a superficial force, as cohesion is conceived, the opposite of this would follow. But it is impossible, so to conceive it, if it is to be true attraction (and not mere external compression).

An absolutely hard body would be one whose parts attracted one another so strongly, that they could not be separated by any weight, nor altered in their position with regard to one another. Now, since the parts of the matter of such a body would have to attract one another with a moment of acceleration, which would be infinite as against that of gravity, but finite as to the mass thereby driven, resistance by impenetrability as expansive force, since it always occurs with an infinitely small quantity of matter, would have to take place with more than finite velocity of solicitation, that is, the matter would seek to extend itself with infinite velocity which is impossible. Thus an absolutely hard body, that is, one which would oppose in one moment a resistance on impact, to a body moved with finite velocity equal to the whole of its force, is impossible. Consequently, a matter exercises by its impenetrability or cohesion only an infinitely small resistance in one moment, to the force of a body in finite motion. Hence follows the mechanical law of continuity (lex continui mechanica), namely: in no body is the state of rest or motion — and in the latter, velocity or direction — changed by impact, in one moment, but only in a certain time, through an infinite series of intermediate states whose difference from one another is smaller than the first and last. A moved body that strikes against a matter, is not brought to rest by its resistance at once, but only by continuous retardations, or that which was at rest only [set in] motion by continuous acceleration, or from one degree of velocity into another according to the same rule. In the same way, the direction of its motion in [a body] that describes an angle, is only changed by means of all possible intermediate directions, that is, by means of motion in a curved line (which law for a similar reason, can be also extended to the change of the state of a body by attraction). This lex continui is based on the law of the inertia of matter, while, on the other hand, the metaphysical law of continuity in all change (internal as well as external) must be extended universally, and hence would be based on the mere conception of a change in general, as quantity, and on the generation of the same (which must necessarily proceed continuously in a certain time, like time itself), and thus has no place here.

FOURTH DIVISION.: METAPHYSICAL FOUNDATIONS OF PHENOMENOLOGY.

Explanation.

Matter is the movable, in so far as it can be an object of experience as such.

Observation.

Motion, like all that can be presented through sense, is only given as phenomenon. In order that its presentation may become experience, it requires in addition, that something should be conceived through the understanding, namely, as to the way in which the presentation inheres in the subject, not the definition of an object through the same. Thus the movable, as such, is an object of experience, when a certain object (here a material thing) is conceived as defined in respect of the predicate of motion. But motion is change of relation in space. Hence, firstly there are always two correlates here, to one no less than to the other of which, change is attributed in the phenomenon, and either the one or the other can be termed moved inasmuch as it is indifferent to both, or secondly, of which one must, in experience be conceived as moved to the exclusion of the other, or thirdly of which both must necessarily be conceived through Reason as moved at the same time. In the phenomenon, which contains nothing but the relation in motion (as to its change), there are none of these determinations, but when the movable, as such, i.e. as to its motion, is to be conceived as determined, namely, for the sake of a possible experience, it is necessary to indicate the conditions, by which the object (matter) would have to be determined in this or that manner, by the predicate of motion. Here, the question is not of the transformation of illusion into truth, but of phenomenon into experience. For with illusion the understanding is always engaged with its own judgment determining an object — although it is in danger of mistaking the subjective for objective — but in the phenomenon no judgment of the understanding is to be met with; and this is necessary to be remembered, not only here, but in the whole of philosophy, because, otherwise, when we are concerned with phenomena, and this expression is taken as identical in signification with that of illusion, misunderstanding will always arise.

Proposition 1.

The rectilinear motion of a matter is, in respect of an empirical space, as distinguished from the opposite motion of the space, a merely possible predicate. The same [thing] conceived in no relation to a matter outside it, that is, as absolute motion, is impossible.

Demonstration.

Whether [in the case of] a body moved in relative space, this latter be described as resting, or conversely, as moved with equal velocity in an opposite direction, and the former as resting, there is no statement as to what belongs to the object, but only to its relation to the subject, in other words, to the phenomenon and not to experience. For if the spectator place himself in the same space as resting, he terms the body moved; but if he place himself (at least in thought) in another space enclosing this, in respect of which the body is, in the same way, resting, then the relative space is termed “moved.” In experience, therefore (a cognition, determining validly the object for all phenomena), there is no difference whatever between the

motion of the body in relative space, or the rest of the body in absolute, and the equal and opposite motion of the relative, space. Now the presentation of an object by one of its two predicates — which, in respect of the object, are equivalent, and only as regards the subject and its mode of presentation distinguished from one another — is not its determination according to a disjunctive, but merely an alternative judgment according to choice (of which the first of two objectively opposed predicates, one with the exclusion of its contrary, but the other of objectively equivalent indeed, but subjectively opposed judgments without excluding the contrary of the object, in other words, by mere choice) — one is assumed for the determination of the same [viz., the object]. This means: by the conception of motion as object of experience, it is in itself undetermined, and therefore equivalent, whether a body is conceived as moved in relative space or the space in respect of the body. Now that which, in respect of two mutually opposed predicates, is in itself undetermined, is so far merely possible. Hence the rectilinear motion of a matter in empirical space, as distinguished from the equal opposite motion of the space, is in experience a merely possible predicate, which was the first [point].

Further, since a relation, in other words a change of the same, namely, motion, can only be an object of experience in so far as both correlates are objects of experience — but pure space, also called, in contradistinction to the relative (empirical), absolute space, is no object of experience and nothing at all — therefore rectilinear motion, without reference to anything empirical — that is, absolute motion — is simply impossible; — which was the second [point.]

Observation.

This proposition determines the modality of the motion in respect of Phoronomy.

Proposition 2.

The circular motion of a matter as distinguished from the opposite motion of the space, is a real predicate of the same; while, on the other hand, if the opposite motion of a relative space be taken, instead of the motion of the body, there is no real motion of the latter, but [should it be regarded as such] a mere illusion.

Demonstration.

The circular motion is (like every non-rectilinear [motion]) a continuous change of the rectilinear, and as this is itself a continuous change of relation in respect of external space, the circular motion is a change of the change of these external relations in space, and consequently a continuous arising of new motions; since, now, according to the law of inertia, a motion, in so far as it arises, must have an external cause, while the body, in every point of this circle, is endeavouring, according to the same law, to proceed in the straight line touching the circle, which motion works against the above external cause, every body in circular motion demonstrates by its motion a moving force. Now the motion of the space as distinguished from that of the body is merely phoronomic, and has no moving force. As a consequence, the judgment, that here, either the body or the space is moved in an opposite direction, is a disjunctive judgment, by which, if the one member, the motion of the body, be posited, the other, namely, that of the space, is excluded. Hence the circular motion of the body, as distinguished from the motion of the space, is a real motion, and consequently the latter, even though as phenomenon it coincide with the former, nevertheless, in the complex of all phenomena, that is, of possible experience, contradicts it, and hence is nothing but mere illusion.

Observation.

This proposition determines the modality of motion in respect of Dynamics; for a motion, which cannot take place without the influence of a continuously active external moving force, proves indirectly or directly original moving forces of matter, either of attraction or repulsion. For the rest, Newton's scholium to the definitions with which he introduces his Princ. Philos. Nat. Math., towards the end, may be referred to, on the present subject, from which it will appear, that the circular motion of two bodies round a common centre (hence, also the motion of the earth on its axis), even in empty space, and thus without any comparison being possible through experience, with external space, may nevertheless be cognised by means of experience, in short, that a motion which is a change of external relation in space can be given empirically, although this space itself is not empirically given, and is no object of experience — a paradox deserving to be solved.

Proposition 3.

In every motion of a body, whereby it is moving in respect of another, an opposite and equal motion of the latter is necessary.

Demonstration.

According to the third law of mechanics (Proposition 4) the communication of the motion of a body is only possible through the community of its original moving forces, and these only through reciprocal and equal motion. The motion of both is then real. But as the reality of this motion does not rest (as in the second proposition) on the influence of external forces, but follows immediately and inevitably from the conception of the relation of the moved in space, to every other [thing] thereby movable, the motion of the latter is necessary.

Observation.

This proposition determines the modality of motion in respect of mechanics; that, for the rest, these three propositions determine the motion of matter in respect of its possibility, reality, and necessity, in short, in respect of all the three categories of modality, is sufficiently obvious of itself.

General Observation on Phenomenology.

There are thus three conceptions noticeable here, whose employment in universal natural science is unavoidable, and whose exact definition is for this reason necessary, although not so easy and comprehensible: firstly, the conception of motion in relative (movable) space; secondly, the conception of motion in absolute (immovable) space; thirdly, the conception of relative motion generally, as distinguished from absolute [motion.] The conception of absolute space is laid at the foundation of all [these]. But how do we come by this singular conception, and on what rests the necessity of its employment?

It can be no object of experience; for space without matter is no object of perception, and yet is a necessary conception of the Reason, and therefore nothing but a a mere idea. For in order that motion may be given even as phenomenon, an empirical presentation of space in respect of which the movable has to change its relation is required. But space, which is to be perceived, must be material, and therefore in accordance with the conception of a matter generally, itself movable. Now, in order to conceive it as moved, one has only to conceive it as contained in a space of greater compass, and to assume the latter as resting. But this admits of being treated similarly as regards a still more extended space, and so on to

infinity, without ever attaining through experience to an immovable (immaterial) space, in respect of which any matter could have absolute motion or rest attributed to it; but the conception of these relational determinations will have to be constantly changed, according as the movable is considered as in relation to one or the other of these spaces. Now, as the condition of regarding anything as resting or moved is always again and again conditioned to infinity in relative space, it thence appears: firstly, that all motion or rest is merely relative, and that neither can be absolute, i.e., that matter can merely be conceived in relation to matter as moved or resting, but not in respect of mere space without matter; in other words, that absolute motion, such, namely, as is conceived without any reference of one matter to another, is simply impossible: secondly, [it will appear] that for this very reason no conception of motion or rest, in relative space, valid for every phenomenon, is possible, but that a space must be conceived, in which the latter itself can be thought of as moved, but whose determination does not depend on any other empirical space, and hence is not again conditioned, that is, an absolute space to which all relative motions may be referred, and in which everything empirical is movable; [and this] in order that all motions of the material in the same can be valid as merely relative to one another, as alternatively-reciprocal, but none as absolute motion or rest (since, inasmuch as one is called moved, the other, with reference to which our former is moved, may be similarly conceived as absolutely resting). Absolute space is then necessary, not as a conception of a real object, but as a mere idea which is to serve as a rule, for considering all motion therein as merely relative, and all motion and rest must be reduced to absolute space if the phenomenon of the same is to be transformed into a definite conception of experience (which combines all phenomena).

In this way the rectilinear motion of a body in relative space, is reduced to absolute space, which does not fall within the range of the senses if I conceive the body, as at rest in itself, and this presentation as that which gives precisely the same phenomenon, whereby all possible phenomena of rectilinear motions, which a body may happen at the same time, to possess, are reduced to the conception of experience, which unites them together (namely, to that of merely relative motion and rest).

Circular motion, inasmuch as, according to the second proposition, even without reference to the external empirically given space, it can be given as real motion in experience, seems to be really absolute motion. For the relative in respect of external space (for instance, the motion of the earth on its axis, relative to the heavenly bodies), is a phenomenon, in place of which, the opposite motion of this space (the heavens), in the same time, can be posited as fully equivalent to the former, but which, according to this proposition, can never in experience be put in the place of the former; and therefore the above circular motion cannot be regarded as externally relative, which sounds as though this kind of motion were assumed as absolute.

But it is to be observed that the question is here of the true (real) motion, which does not appear as such — which therefore, were we content to judge according to empirical relations of the space, might be regarded as rest — in other words, the question is of the true motion as distinguished from the illusive, but not of it as absolute motion in contradistinction to the relative; and hence circular motion, although it exhibits in the phenomenon, no change of place, that is, no phoronomic [change] of the relation of the moved to empirical space, exhibits, nevertheless, a continuous dynamic change of the relation of matter in its space, demonstrable by experience; for instance, it shows a constant diminution of the attraction by an effort to retreat, as the effect of circular motion, and thereby decisively indicates its distinction from illusion. For instance, one can conceive the earth as turned about its axis in infinite empty space, and demonstrate this motion by experience, although neither the relation of the parts of the earth among one another, or to the space outside it, is changed phoronomically, i.e., in the phenomenon. For, as regards the first, nothing changes its place upon or in the earth as empirical space; and with reference to the second, which is quite empty, no externally changed relation, and therefore no phenomenon of a motion can take place. But if I suppose a deep cavern tending towards the centre of the earth, and dropping a stone into it, find that although at every distance from the centre, the gravity is always directed thereto, the falling stone

nevertheless, continuously reverts from its upright position, from west to east, I conclude that the earth is from evening to morning turned about its axis. Or, if I withdraw the stone from the surface of the earth, and it does not remain over the same point of the surface, but moves itself from east to west, I shall still infer the foregoing motion of the earth on its axis, and both perceptions are a sufficient proof of the reality of this motion, for which the change of relation to external space (the starry heaven) is inadequate as it is mere phenomenon, which may proceed from two actually opposed causes, and which is not a cognition deducible from the ground of explanation of all phenomena of this change, that is, experience. But that this motion, although no change of relation to empirical space, is nevertheless no absolute motion, but continuous change of the relation of matters to one another, and while conceived in absolute space, is really only relative and for this very reason, alone true motion; this rests on the conception of the reciprocally continuous retreat of each part of the earth (outside the axis) from every other [part], situated opposite to it in the diameter, at equal distance from the centre. For this motion is real in absolute space, in that thereby the retreat from the distance in question, when gravity in itself would attract to the body, and indeed without any dynamical repulsive cause (as may be seen from the instances chosen in Newton's Princ. Phil. Nat., , Edit. 1711), is continuously replaced by real motion inclosed within the moved matter (namely, the centre of the same), but not having reference to the external space.

As to the case of the third proposition, it does not require, in order to show the truth of the reciprocally opposed and equal motion of two bodies even without reference to the empirical space, [to exhibit] the active dynamical influence (of gravity or of a distended string) given through experience, which is necessary in the second case, but the mere dynamical possibility of such an influence as property of matter (repulsion or attraction) since the motion of the one carries with it, at the same time, the opposite and equal motion of the other, and indeed from mere conceptions of a relative motion, if it be considered in absolute space, i.e. according to truth; and it is, therefore, like all that is adequately demonstrable from mere conceptions a law of absolutely necessary counter-motion.

There is no absolute motion, even where a body is conceived as moved in respect of another in empty space; the motion of both being here, not relative to the space surrounding them, but only to that between them, which alone determines their external relation to each other, considered as abstract space, and is thus in its turn, only relative. Hence, absolute motion would be only that accruing to a body without relation to any other matter. But such would be the rectilinear motion of the universe, i.e. the system of all matter. For so long as any other matter existed outside of a matter, even though separated by empty space, the motion would still be relative. For this reason every proof of a law of motion, having as its result, that its contrary would necessarily imply a rectilinear motion of the whole universe as its consequence, is an apodictic demonstration of its truth; simply because absolute motion would thence ensue, which is quite impossible. Of this kind is the law of antagonism in all community of matter through motion. For every deviation from the same would move the common centre of gravity of all matters, in short, the whole universe, from its place, while on the contrary this would not happen if one regarded the latter as turned on its axis, a motion always possible to be conceived, although so far as one can see, there would be no use in assuming it.

The different conceptions of empty space also have their reference to the different conceptions of motion and moving forces. Empty space in a phoronomic sense, also termed absolute space, ought not properly to be called empty space; for it is only the idea of a space, in which I abstract from all particular matter, making it an object of experience, in order to conceive therein, the material, or every empirical space, as movable, and the motion not merely as on one side absolute, but as mutually relative predicate. Hence it is nothing belonging to the existence of things, but merely to the determination of the conception, and in so far no empty space exists. Empty space, in a dynamic sense, is that which is not filled, i.e., in which nothing else movable resists the penetration of the movable, consequently in which no repulsive force acts, and it may be either the empty space within the world (vacuum mundanum), or, if the latter be

conceived as bounded, empty space outside the world (vacuum extramundanum); the first moreover, either as distributed (vacuum disseminatum), which constitutes only one portion of the volume of the matter, or as continuous empty space (vacuum coacervatum, which separates bodies, for instance, the heavenly bodies, from one another), a distinction which, inasmuch as it rests on the difference of places, assigned to empty space in the universe, is not essential, but is used in various ways; firstly, in order to deduce the specific difference of density, and secondly, in order [to deduce] the possibility of a movement in the universe, free from all external resistance. That empty space in the first sense is not necessary to be assumed, has already been shown in the general remark on dynamics; but that it is impossible can by no means be demonstrated from its conception alone, according to the principle of contradiction. Yet, even if no merely logical ground for its rejection be present, a universal physical ground for banishing it from natural science exists, namely, that of the possibility of the composition of a matter generally, if the latter [question] were only better understood. For if attraction, which is assumed for the explanation of the cohesion of matter, be only apparent, not real, attraction — but as it were the effect of a compression, by external matter (the ether) existing throughout the universe, which is itself brought to this pressure, by a universal and original attraction, namely, gravitation, an opinion supported by many reasons — empty space within matters would then, although not logically, be nevertheless dynamically, and hence physically, impossible, since every matter would expand of itself, in the empty spaces assumed within the same (as nothing would then resist its expansive force), and they would thus be always filled. An empty space outside the world, would, if by this expression be understood all the principal attractive matters (the large heavenly bodies), be impossible, for the same reason, for in proportion as the distance from these increased, the attractive force on the ether (which encloses all the above bodies, and impelled by them maintains in their density by compression), would diminish in inverse proportion, and the latter itself, would diminish in density to infinity, though it would nowhere leave the space entirely empty. Meanwhile, it need surprise no one that in this rejection of empty space, we are proceeding quite hypothetically; for its assumption fares no better. Those who venture to decide this moot question dogmatically, whether they do so affirmatively or negatively, support themselves in the end on mere metaphysical assumptions, as may be seen from the dynamics; but it was at least necessary to show here, that this could not decide in the problem in question. Thirdly, as concerns empty space in a mechanical sense, this is continuous emptiness within the universe, in order to procure free motion for the heavenly bodies. It is easily seen, that the possibility or impossibility of this rests, not on metaphysical grounds, but on the hardly disclosed secrets of nature, as to the way in which matter sets limits to its own expansive force. Notwithstanding this, if that be admitted which has been said in the general observation on dynamics, as to the possibly greater expansion to infinity of specifically different matters, with the same quantity of matter (as regards its weight) an empty space might indeed be then unnecessary to assume, even for the sake of the free and lasting motion of the heavenly bodies, as the resistance, even in entirely filled spaces, might then be assumed to be as small as one liked.

And so ends the metaphysical doctrine of body with emptiness and therefore incomprehensibility, and the reason has the same fortune in all other attempts, where it strives to reach principles of the ultimate grounds of things, inasmuch as its nature is such, that it can never comprehend anything except in so far as it is determined under given conditions; consequently, since it can neither rest at the conditioned nor can make the unconditioned comprehensible, when thirst for knowledge stimulates it, to grasp the absolute totality of all conditions, nothing remains for it but to turn back from objects, upon itself, in order that instead of the ultimate boundaries of things, it may investigate and determine the ultimate boundaries of the capacity pertaining to itself.

CRITIQUE OF PRACTICAL REASON

Translated by Thomas Kingsmill Abbott

The second of Kant's three critiques, the *Critique of Practical Reason* was first published in 1788 and follows on from *The Critique of Pure Reason*. It would exercise a decisive influence over the subsequent development of the field of ethics and moral philosophy, beginning with Johann Gottlieb Fichte's *Doctrine of Science* and later becoming the principal reference point for deontological moral philosophy.

In the introduction, Kant focuses on comparing the situation of theoretical and of practical reason, discussing how the *Critique of Practical Reason* compares to *The Critique of Pure Reason*. The first Critique explained the pretensions of pure theoretical reason to attain metaphysical truths beyond the ken of applied theoretical reason. The conclusion was that pure theoretical reason must be restrained, as it produces confused arguments when applied outside of its appropriate sphere. However, the *Critique of Practical Reason* is not a critique of pure practical reason, but rather a defence of it as being capable of grounding behaviour superior to that grounded by desire-based practical reasoning. It is in fact a critique of the pretensions of applied practical reason. Pure practical reason must not be restrained, in fact, but cultivated.

Kant explains that while the first Critique suggested that God, freedom and immortality are unknowable, the second Critique will mitigate this claim. Freedom is indeed knowable because it is revealed by God. God and immortality are also knowable, but practical reason now requires belief in these postulates of reason. Kant once again invites his dissatisfied critics to actually provide a proof of God's existence and demonstrates that this is impossible since the various arguments (ontological, cosmological and teleological) for God's existence all depend essentially on the idea that existence is a predicate inherent to the concepts to which it is applied. Kant insists that the Critique can stand alone from the earlier Groundwork of the Metaphysics of Morals, although it addresses some criticisms levelled at that work. This work will proceed at a higher level of abstraction.

Finally, the sketch of the second Critique is presented in the Introduction. It is modelled on the first Critique: the Analytic will investigate the operations of the faculty in question; the Dialectic will investigate how this faculty can be led astray; and the Doctrine of Method will discuss the questions of moral education.

Whereas in the first Critique the Doctrine of Method plans out the scientific study of the principles of pure theoretical reason, in the second Critique the Doctrine of Method instead provides a discussion of how the principles of practical reason can be brought to bear on real life. In other words, the Doctrine of Method in the second Critique is fundamentally concerned with moral education: the question of how we can make people live and act morally.

Kant reveals that truly moral behaviour requires more than just the outward show of good behaviour; it also requires the right inner motivations. The cynic or utilitarian might be doubtful as to whether it is truly possible for human beings to act out of an "obligation to duty." In his view, even if we could produce a simulacrum of a moral society, it would all be an enormous theatre of hypocrisy, since everyone would inwardly, privately continue to pursue his or her own advantage. Moreover, this outward show of morality would not be stable, but dependent on its continuing to be to the advantage of each individual. Fortunately, Kant believes, such doubts are misguided.

Kant concludes the second Critique on a hopeful note on the future of ethics. The wonders of both the physical and the ethical worlds are not far for us to find: to feel awe, we should only look upward to the

stars or inward to the moral law which we carry around within us. The study of the physical world was dormant for centuries and wrapped in superstition before the physical sciences actually came into existence. We are allowed to hope that soon the moral sciences will replace superstition with knowledge about ethics.

Critik

der

practischen Vernunft

von

Immanuel Kant.

Riga,

bey Johann Friedrich Hartknoch

1788.

The first edition’s title page

CONTENTS

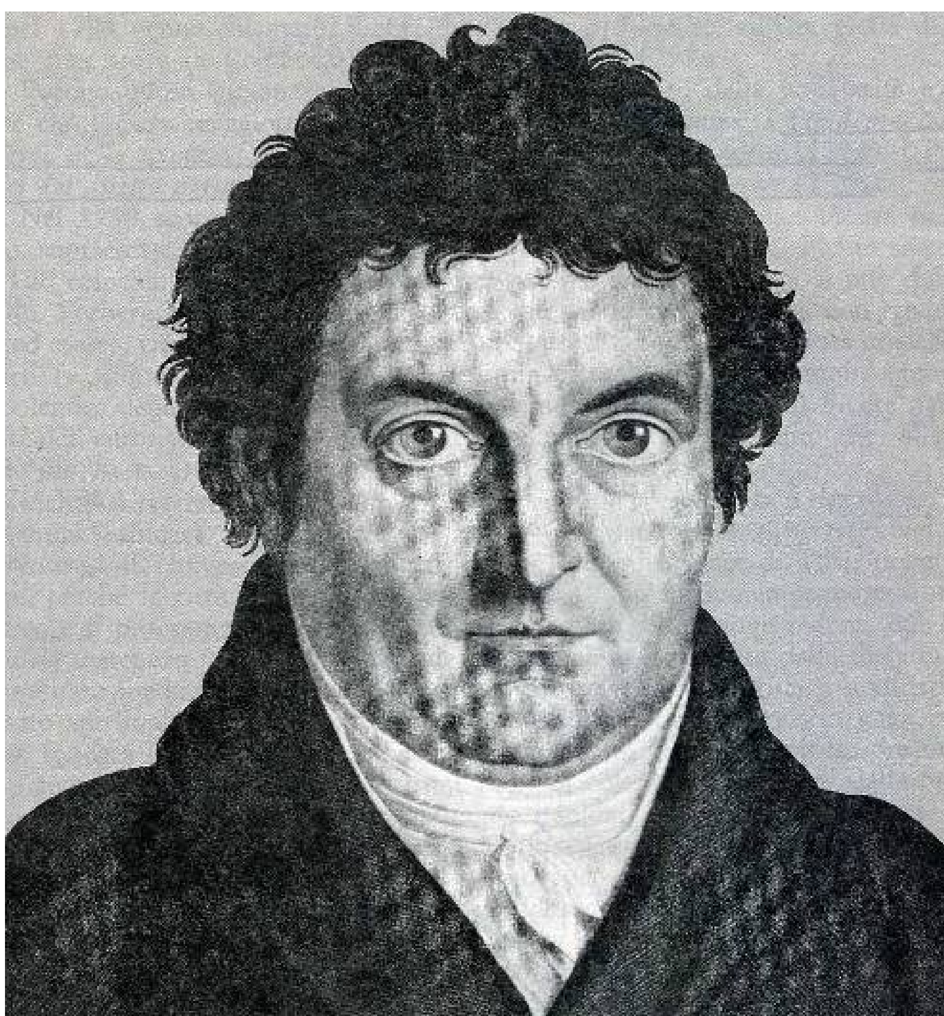
PREFACE.
INTRODUCTION.

FIRST PART.

BOOK I. The Analytic of Pure Practical Reason.
CHAPTER I. Of the Principles of Pure Practical Reason.
CHAPTER II. Of the Concept of an Object of Pure Practical Reason.
CHAPTER III. Of the Motives of Pure Practical Reason.

BOOK II. Dialectic of Pure Practical Reason.
CHAPTER I. Of a Dialectic of Pure Practical Reason Generally.
CHAPTER II. Of the Dialectic of Pure Reason in defining the

SECOND PART.
CONCLUSION.



The German philosopher Johann Gottlieb Fichte (1762-1814) became a founding figure of the philosophical movement known as German idealism, which developed from the theoretical and ethical writings of Immanuel Kant.

PREFACE.

This work is called the Critique of Practical Reason, not of the pure practical reason, although its parallelism with the speculative critique would seem to require the latter term. The reason of this appears sufficiently from the treatise itself. Its business is to show that there is pure practical reason, and for this purpose it criticizes the entire practical faculty of reason. If it succeeds in this, it has no need to criticize the pure faculty itself in order to see whether reason in making such a claim does not presumptuously overstep itself (as is the case with the speculative reason). For if, as pure reason, it is actually practical, it proves its own reality and that of its concepts by fact, and all disputation against the possibility of its being real is futile.

With this faculty, transcendental freedom is also established; freedom, namely, in that absolute sense in which speculative reason required it in its use of the concept of causality in order to escape the antinomy into which it inevitably falls, when in the chain of cause and effect it tries to think the unconditioned. Speculative reason could only exhibit this concept (of freedom) problematically as not impossible to thought, without assuring it any objective reality, and merely lest the supposed impossibility of what it must at least allow to be thinkable should endanger its very being and plunge it into an abyss of scepticism.

Inasmuch as the reality of the concept of freedom is proved by an apodeictic law of practical reason, it is the keystone of the whole system of pure reason, even the speculative, and all other concepts (those of God and immortality) which, as being mere ideas, remain in it unsupported, now attach themselves to this concept, and by it obtain consistence and objective reality; that is to say, their possibility is proved by the fact that freedom actually exists, for this idea is revealed by the moral law.

Freedom, however, is the only one of all the ideas of the speculative reason of which we know the possibility a priori (without, however, understanding it), because it is the condition of the moral law which we know. * The ideas of God and immortality, however, are not conditions of the moral law, but only conditions of the necessary object of a will determined by this law; that is to say, conditions of the practical use of our pure reason. Hence, with respect to these ideas, we cannot affirm that we know and understand, I will not say the actuality, but even the possibility of them. However they are the conditions of the application of the morally determined will to its object, which is given to it a priori, viz., the summum bonum. Consequently in this practical point of view their possibility must be assumed, although we cannot theoretically know and understand it. To justify this assumption it is sufficient, in a practical point of view, that they contain no intrinsic impossibility (contradiction). Here we have what, as far as speculative reason is concerned, is a merely subjective principle of assent, which, however, is objectively valid for a reason equally pure but practical, and this principle, by means of the concept of freedom, assures objective reality and authority to the ideas of God and immortality. Nay, there is a subjective necessity (a need of pure reason) to assume them. Nevertheless the theoretical knowledge of reason is not hereby enlarged, but only the possibility is given, which heretofore was merely a problem and now becomes assertion, and thus the practical use of reason is connected with the elements of theoretical reason. And this need is not a merely hypothetical one for the arbitrary purposes of speculation, that we must assume something if we wish in speculation to carry reason to its utmost limits, but it is a need which has the force of law to assume something without which that cannot be which we must inevitably set before us as the aim of our action.

* Lest any one should imagine that he finds an inconsistency here when I call freedom the condition of the moral law, and hereafter maintain in the treatise itself that the moral law is the condition under which we can first become conscious of freedom, I will merely remark that freedom is the ratio essendi of the

moral law, while the moral law is the ratio cognoscendi of freedom. For had not the moral law been previously distinctly thought in our reason, we should never consider ourselves justified in assuming such a thing as freedom, although it be not contradictory. But were there no freedom it would be impossible to trace the moral law in ourselves at all.

It would certainly be more satisfactory to our speculative reason if it could solve these problems for itself without this circuit and preserve the solution for practical use as a thing to be referred to, but in fact our faculty of speculation is not so well provided. Those who boast of such high knowledge ought not to keep it back, but to exhibit it publicly that it may be tested and appreciated. They want to prove: very good, let them prove; and the critical philosophy lays its arms at their feet as the victors. Quid statis? Nolint. Atqui licet esse beatis. As they then do not in fact choose to do so, probably because they cannot, we must take up these arms again in order to seek in the mortal use of reason, and to base on this, the notions of God, freedom, and immortality, the possibility of which speculation cannot adequately prove.

Here first is explained the enigma of the critical philosophy, viz.: how we deny objective reality to the supersensible use of the categories in speculation and yet admit this reality with respect to the objects of pure practical reason. This must at first seem inconsistent as long as this practical use is only nominally known. But when, by a thorough analysis of it, one becomes aware that the reality spoken of does not imply any theoretical determination of the categories and extension of our knowledge to the supersensible; but that what is meant is that in this respect an object belongs to them, because either they are contained in the necessary determination of the will a priori, or are inseparably connected with its object; then this inconsistency disappears, because the use we make of these concepts is different from what speculative reason requires. On the other hand, there now appears an unexpected and very satisfactory proof of the consistency of the speculative critical philosophy. For whereas it insisted that the objects of experience as such, including our own subject, have only the value of phenomena, while at the same time things in themselves must be supposed as their basis, so that not everything supersensible was to be regarded as a fiction and its concept as empty; so now practical reason itself, without any concert with the speculative, assures reality to a supersensible object of the category of causality, viz., freedom, although (as becomes a practical concept) only for practical use; and this establishes on the evidence of a fact that which in the former case could only be conceived. By this the strange but certain doctrine of the speculative critical philosophy, that the thinking subject is to itself in internal intuition only a phenomenon, obtains in the critical examination of the practical reason its full confirmation, and that so thoroughly that we should be compelled to adopt this doctrine, even if the former had never proved it at all. *

* The union of causality as freedom with causality as rational mechanism, the former established by the moral law, the latter by the law of nature in the same subject, namely, man, is impossible, unless we conceive him with reference to the former as a being in himself, and with reference to the latter as a phenomenon- the former in pure consciousness, the latter in empirical consciousness. Otherwise reason inevitably contradicts itself.

By this also I can understand why the most considerable objections which I have as yet met with against the Critique turn about these two points, namely, on the one side, the objective reality of the categories as applied to noumena, which is in the theoretical department of knowledge denied, in the practical affirmed; and on the other side, the paradoxical demand to regard oneself qua subject of freedom as a noumenon, and at the same time from the point of view of physical nature as a phenomenon in one’s own empirical consciousness; for as long as one has formed no definite notions of morality and freedom, one could not conjecture on the one side what was intended to be the noumenon, the basis of the alleged phenomenon, and on the other side it seemed doubtful whether it was at all possible to form any notion of it, seeing that we had previously assigned all the notions of the pure understanding in its theoretical use exclusively to phenomena. Nothing but a detailed criticism of the practical reason can remove all this misapprehension and set in a clear light the consistency which constitutes its greatest merit.

So much by way of justification of the proceeding by which, in this work, the notions and principles of pure speculative reason which have already undergone their special critical examination are, now and then, again subjected to examination. This would not in other cases be in accordance with the systematic process by which a science is established, since matters which have been decided ought only to be cited and not again discussed. In this case, however, it was not only allowable but necessary, because reason is here considered in transition to a different use of these concepts from what it had made of them before. Such a transition necessitates a comparison of the old and the new usage, in order to distinguish well the new path from the old one and, at the same time, to allow their connection to be observed. Accordingly considerations of this kind, including those which are once more directed to the concept of freedom in the practical use of the pure reason, must not be regarded as an interpolation serving only to fill up the gaps in the critical system of speculative reason (for this is for its own purpose complete), or like the props and buttresses which in a hastily constructed building are often added afterwards; but as true members which make the connexion of the system plain, and show us concepts, here presented as real, which there could only be presented problematically. This remark applies especially to the concept of freedom, respecting which one cannot but observe with surprise that so many boast of being able to understand it quite well and to explain its possibility, while they regard it only psychologically, whereas if they had studied it in a transcendental point of view, they must have recognized that it is not only indispensable as a problematical concept, in the complete use of speculative reason, but also quite incomprehensible; and if they afterwards came to consider its practical use, they must needs have come to the very mode of determining the principles of this, to which they are now so loth to assent. The concept of freedom is the stone of stumbling for all empiricists, but at the same time the key to the loftiest practical principles for critical moralists, who perceive by its means that they must necessarily proceed by a rational method. For this reason I beg the reader not to pass lightly over what is said of this concept at the end of the Analytic.

I must leave it to those who are acquainted with works of this kind to judge whether such a system as that of the practical reason, which is here developed from the critical examination of it, has cost much or little trouble, especially in seeking not to miss the true point of view from which the whole can be rightly sketched. It presupposes, indeed, the Fundamental Principles of the Metaphysic of Morals, but only in so far as this gives a preliminary acquaintance with the principle of duty, and assigns and justifies a definite formula thereof; in other respects it is independent. * It results from the nature of this practical faculty itself that the complete classification of all practical sciences cannot be added, as in the critique of the speculative reason. For it is not possible to define duties specially, as human duties, with a view to their classification, until the subject of this definition (viz., man) is known according to his actual nature, at least so far as is necessary with respect to duty; this, however, does not belong to a critical examination of the practical reason, the business of which is only to assign in a complete manner the principles of its possibility, extent, and limits, without special reference to human nature. The classification then belongs to the system of science, not to the system of criticism.

* A reviewer who wanted to find some fault with this work has hit the truth better, perhaps, than he thought, when he says that no new principle of morality is set forth in it, but only a new formula. But who would think of introducing a new principle of all morality and making himself as it were the first discoverer of it, just as if all the world before him were ignorant what duty was or had been in thorough-going error? But whoever knows of what importance to a mathematician a formula is, which defines accurately what is to be done to work a problem, will not think that a formula is insignificant and useless which does the same for all duty in general.

In the second part of the Analytic I have given, as I trust, a sufficient answer to the objection of a truth-loving and acute critic * of the Fundamental Principles of the Metaphysic of Morals- a critic always worthy of respect- the objection, namely, that the notion of good was not established before the moral principle, as he thinks it ought to have been. *(2) I have also had regard to many of the objections which

have reached me from men who show that they have at heart the discovery of the truth, and I shall continue to do so (for those who have only their old system before their eyes, and who have already settled what is to be approved or disapproved, do not desire any explanation which might stand in the way of their own private opinion.)

* [See Kant's "Das mag in der Theoric ricktig seyn," etc. Werke, vol. vii, .]

*(2) It might also have been objected to me that I have not first defined the notion of the faculty of desire, or of the feeling of Pleasure, although this reproach would be unfair, because this definition might reasonably be presupposed as given in psychology. However, the definition there given might be such as to found the determination of the faculty of desire on the feeling of pleasure (as is commonly done), and thus the supreme principle of practical philosophy would be necessarily made empirical, which, however, remains to be proved and in this critique is altogether refuted. It will, therefore, give this definition here in such a manner as it ought to be given, in order to leave this contested point open at the beginning, as it should be. LIFE is the faculty a being has of acting according to laws of the faculty of desire. The faculty of DESIRE is the being's faculty of becoming by means of its ideas the cause of the actual existence of the objects of these ideas. PLEASURE is the idea of the agreement of the object, or the action with the subjective conditions of life, i.e., with the faculty of causality of an idea in respect of the actuality of its object (or with the determination of the forces of the subject to action which produces it). I have no further need for the purposes of this critique of notions borrowed from psychology; the critique itself supplies the rest. It is easily seen that the question whether the faculty of desire is always based on pleasure, or whether under certain conditions pleasure only follows the determination of desire, is by this definition left undecided, for it is composed only of terms belonging to the pure understanding, i.e., of categories which contain nothing empirical. Such precaution is very desirable in all philosophy and yet is often neglected; namely, not to prejudge questions by adventuring definitions before the notion has been completely analysed, which is often very late. It may be observed through the whole course of the critical philosophy (of the theoretical as well as the practical reason) that frequent opportunity offers of supplying defects in the old dogmatic method of philosophy, and of correcting errors which are not observed until we make such rational use of these notions viewing them as a whole.

When we have to study a particular faculty of the human mind in its sources, its content, and its limits; then from the nature of human knowledge we must begin with its parts, with an accurate and complete exposition of them; complete, namely, so far as is possible in the present state of our knowledge of its elements. But there is another thing to be attended to which is of a more philosophical and architectonic character, namely, to grasp correctly the idea of the whole, and from thence to get a view of all those parts as mutually related by the aid of pure reason, and by means of their derivation from the concept of the whole. This is only possible through the most intimate acquaintance with the system; and those who find the first inquiry too troublesome, and do not think it worth their while to attain such an acquaintance, cannot reach the second stage, namely, the general view, which is a synthetical return to that which had previously been given analytically. It is no wonder then if they find inconsistencies everywhere, although the gaps which these indicate are not in the system itself, but in their own incoherent train of thought.

I have no fear, as regards this treatise, of the reproach that I wish to introduce a new language, since the sort of knowledge here in question has itself somewhat of an everyday character. Nor even in the case of the former critique could this reproach occur to anyone who had thought it through and not merely turned over the leaves. To invent new words where the language has no lack of expressions for given notions is a childish effort to distinguish oneself from the crowd, if not by new and true thoughts, yet by new patches on the old garment. If, therefore, the readers of that work know any more familiar expressions which are as suitable to the thought as those seem to me to be, or if they think they can show the futility of these thoughts themselves and hence that of the expression, they would, in the first case, very much oblige me, for I only desire to be understood: and, in the second case, they would deserve well of philosophy. But, as

long as these thoughts stand, I very much doubt that suitable and yet more common expressions for them can be found. *

* I am more afraid in the present treatise of occasional misconception in respect of some expressions which I have chosen with the greatest care in order that the notion to which they point may not be missed. Thus, in the table of categories of the Practical reason under the title of Modality, the Permitted, and forbidden (in a practical objective point of view, possible and impossible) have almost the same meaning in common language as the next category, duty and contrary to duty. Here, however, the former means what coincides with, or contradicts, a merely possible practical precept (for example, the solution of all problems of geometry and mechanics); the latter, what is similarly related to a law actually present in the reason; and this distinction is not quite foreign even to common language, although somewhat unusual. For example, it is forbidden to an orator, as such, to forge new words or constructions; in a certain degree this is permitted to a poet; in neither case is there any question of duty. For if anyone chooses to forfeit his reputation as an orator, no one can prevent him. We have here only to do with the distinction of imperatives into problematical, assertorial, and apodeictic. Similarly in the note in which I have pared the moral ideas of practical perfection in different philosophical schools, I have distinguished the idea of wisdom from that of holiness, although I have stated that essentially and objectively they are the same. But in that place I understand by the former only that wisdom to which man (the Stoic) lays claim; therefore I take it subjectively as an attribute alleged to belong to man. (Perhaps the expression virtue, with which also the Stoic made great show, would better mark the characteristic of his school.) The expression of a postulate of pure practical reason might give most occasion to misapprehension in case the reader confounded it with the signification of the postulates in pure mathematics, which carry apodeictic certainty with them. These, however, postulate the possibility of an action, the object of which has been previously recognized a priori in theory as possible, and that with perfect certainty. But the former postulates the possibility of an object itself (God and the immortality of the soul) from apodeictic practical laws, and therefore only for the purposes of a practical reason. This certainty of the postulated possibility then is not at all theoretic, and consequently not apodeictic; that is to say, it is not a known necessity as regards the object, but a necessary supposition as regards the subject, necessary for the obedience to its objective but practical laws. It is, therefore, merely a necessary hypothesis. I could find no better expression for this rational necessity, which is subjective, but yet true and unconditional.

In this manner, then, the a priori principles of two faculties of the mind, the faculty of cognition and that of desire, would be found and determined as to the conditions, extent, and limits of their use, and thus a sure foundation be paid for a scientific system of philosophy, both theoretic and practical.

Nothing worse could happen to these labours than that anyone should make the unexpected discovery that there neither is, nor can be, any a priori knowledge at all. But there is no danger of this. This would be the same thing as if one sought to prove by reason that there is no reason. For we only say that we know something by reason, when we are conscious that we could have known it, even if it had not been given to us in experience; hence rational knowledge and knowledge a priori are one and the same. It is a clear contradiction to try to extract necessity from a principle of experience (ex pumice aquam), and to try by this to give a judgement true universality (without which there is no rational inference, not even inference from analogy, which is at least a presumed universality and objective necessity). To substitute subjective necessity, that is, custom, for objective, which exists only in a priori judgements, is to deny to reason the power of judging about the object, i.e., of knowing it, and what belongs to it. It implies, for example, that we must not say of something which often or always follows a certain antecedent state that we can conclude from this to that (for this would imply objective necessity and the notion of an a priori connexion), but only that we may expect similar cases (just as animals do), that is that we reject the notion of cause altogether as false and a mere delusion. As to attempting to remedy this want of objective and consequently universal validity by saying that we can see no ground for attributing any other sort of

knowledge to other rational beings, if this reasoning were valid, our ignorance would do more for the enlargement of our knowledge than all our meditation. For, then, on this very ground that we have no knowledge of any other rational beings besides man, we should have a right to suppose them to be of the same nature as we know ourselves to be: that is, we should really know them. I omit to mention that universal assent does not prove the objective validity of a judgement (i.e., its validity as a cognition), and although this universal assent should accidentally happen, it could furnish no proof of agreement with the object; on the contrary, it is the objective validity which alone constitutes the basis of a necessary universal consent.

Hume would be quite satisfied with this system of universal empiricism, for, as is well known, he desired nothing more than that, instead of ascribing any objective meaning to the necessity in the concept of cause, a merely subjective one should be assumed, viz., custom, in order to deny that reason could judge about God, freedom, and immortality; and if once his principles were granted, he was certainly well able to deduce his conclusions therefrom, with all logical coherence. But even Hume did not make his empiricism so universal as to include mathematics. He holds the principles of mathematics to be analytical; and if his were correct, they would certainly be apodeictic also: but we could not infer from this that reason has the faculty of forming apodeictic judgements in philosophy also- that is to say, those which are synthetical judgements, like the judgement of causality. But if we adopt a universal empiricism, then mathematics will be included.

Now if this science is in contradiction with a reason that admits only empirical principles, as it inevitably is in the antinomy in which mathematics prove the infinite divisibility of space, which empiricism cannot admit; then the greatest possible evidence of demonstration is in manifest contradiction with the alleged conclusions from experience, and we are driven to ask, like Cheselden's blind patient, "Which deceives me, sight or touch?" (for empiricism is based on a necessity felt, rationalism on a necessity seen). And thus universal empiricism reveals itself as absolute scepticism. It is erroneous to attribute this in such an unqualified sense to Hume, * since he left at least one certain touchstone (which can only be found in a priori principles), although experience consists not only of feelings, but also of judgements.

* Names that designate the followers of a sect have always been accompanied with much injustice; just as if one said, "N is an Idealist." For although he not only admits, but even insists, that our ideas of external things have actual objects of external things corresponding to them, yet he holds that the form of the intuition does not depend on them but on the human mind.

However, as in this philosophical and critical age such empiricism can scarcely be serious, and it is probably put forward only as an intellectual exercise and for the purpose of putting in a clearer light, by contrast, the necessity of rational a priori principles, we can only be grateful to those who employ themselves in this otherwise uninstructive labour.

INTRODUCTION.

Of the Idea of a Critique of Practical Reason.

The theoretical use of reason was concerned with objects of the cognitive faculty only, and a critical examination of it with reference to this use applied properly only to the pure faculty of cognition; because this raised the suspicion, which was afterwards confirmed, that it might easily pass beyond its limits, and be lost among unattainable objects, or even contradictory notions. It is quite different with the practical use of reason. In this, reason is concerned with the grounds of determination of the will, which is a faculty either to produce objects corresponding to ideas, or to determine ourselves to the effecting of such objects (whether the physical power is sufficient or not); that is, to determine our causality. For here, reason can at least attain so far as to determine the will, and has always objective reality in so far as it is the volition only that is in question. The first question here then is whether pure reason of itself alone suffices to determine the will, or whether it can be a ground of determination only as dependent on empirical conditions. Now, here there comes in a notion of causality justified by the critique of the pure reason, although not capable of being presented empirically, viz., that of freedom; and if we can now discover means of proving that this property does in fact belong to the human will (and so to the will of all rational beings), then it will not only be shown that pure reason can be practical, but that it alone, and not reason empirically limited, is indubitably practical; consequently, we shall have to make a critical examination, not of pure practical reason, but only of practical reason generally. For when once pure reason is shown to exist, it needs no critical examination. For reason itself contains the standard for the critical examination of every use of it. The critique, then, of practical reason generally is bound to prevent the empirically conditioned reason from claiming exclusively to furnish the ground of determination of the will. If it is proved that there is a [practical] reason, its employment is alone immanent; the empirically conditioned use, which claims supremacy, is on the contrary transcendent and expresses itself in demands and precepts which go quite beyond its sphere. This is just the opposite of what might be said of pure reason in its speculative employment.

However, as it is still pure reason, the knowledge of which is here the foundation of its practical employment, the general outline of the classification of a critique of practical reason must be arranged in accordance with that of the speculative. We must, then, have the Elements and the Methodology of it; and in the former an Analytic as the rule of truth, and a Dialectic as the exposition and dissolution of the illusion in the judgements of practical reason. But the order in the subdivision of the Analytic will be the reverse of that in the critique of the pure speculative reason. For, in the present case, we shall commence with the principles and proceed to the concepts, and only then, if possible, to the senses; whereas in the case of the speculative reason we began with the senses and had to end with the principles. The reason of this lies again in this: that now we have to do with a will, and have to consider reason, not in its relation to objects, but to this will and its causality. We must, then, begin with the principles of a causality not empirically conditioned, after which the attempt can be made to establish our notions of the determining grounds of such a will, of their application to objects, and finally to the subject and its sense faculty. We necessarily begin with the law of causality from freedom, that is, with a pure practical principle, and this determines the objects to which alone it can be applied.

FIRST PART.

ELEMENTS OF PURE PRACTICAL REASON.

BOOK I. The Analytic of Pure Practical Reason.

CHAPTER I. Of the Principles of Pure Practical Reason.

I. DEFINITION.

Practical principles are propositions which contain a general determination of the will, having under it several practical rules. They are subjective, or maxims, when the condition is regarded by the subject as valid only for his own will, but are objective, or practical laws, when the condition is recognized as objective, that is, valid for the will of every rational being.

REMARK.

Supposing that pure reason contains in itself a practical motive, that is, one adequate to determine the will, then there are practical laws; otherwise all practical principles will be mere maxims. In case the will of a rational being is pathologically affected, there may occur a conflict of the maxims with the practical laws recognized by itself. For example, one may make it his maxim to let no injury pass unrevenged, and yet he may see that this is not a practical law, but only his own maxim; that, on the contrary, regarded as being in one and the same maxim a rule for the will of every rational being, it must contradict itself. In natural philosophy the principles of what happens, (e.g., the principle of equality of action and reaction in the communication of motion) are at the same time laws of nature; for the use of reason there is theoretical and determined by the nature of the object. In practical philosophy, i.e., that which has to do only with the grounds of determination of the will, the principles which a man makes for himself are not laws by which one is inevitably bound; because reason in practical matters has to do with the subject, namely, with the faculty of desire, the special character of which may occasion variety in the rule. The practical rule is always a product of reason, because it prescribes action as a means to the effect. But in the case of a being with whom reason does not of itself determine the will, this rule is an imperative, i.e., a rule characterized by "shall," which expresses the objective necessitation of the action and signifies that, if reason completely determined the will, the action would inevitably take place according to this rule. Imperatives, therefore, are objectively valid, and are quite distinct from maxims, which are subjective principles. The former either determine the conditions of the causality of the rational being as an efficient cause, i.e., merely in reference to the effect and the means of attaining it; or they determine the will only, whether it is adequate to the effect or not. The former would be hypothetical imperatives, and contain mere precepts of skill; the latter, on the contrary, would be categorical, and would alone be practical laws. Thus maxims are principles, but not imperatives. Imperatives themselves, however, when they are conditional (i.e., do not determine the will simply as will, but only in respect to a desired effect, that is, when they are hypothetical imperatives), are practical precepts but not laws. Laws must be sufficient to determine the will as will, even before I ask whether I have power sufficient for a desired effect, or the means necessary to produce it; hence they are categorical: otherwise they are not laws at all, because the necessity is wanting, which, if it is to be practical, must be independent of conditions which are pathological and are therefore only contingently connected with the will. Tell a man, for example, that he must be industrious and thrifty in youth, in order that he may not want in old age; this is a correct and important practical precept of the will. But it is easy to see that in this case the will is directed to something else which it is presupposed that it desires; and as to this desire, we must leave it to the actor himself whether he looks forward to other resources than those of his own acquisition, or does not expect to be old, or thinks that in case of future necessity he will be able to make shift with little. Reason, from which alone can spring a rule involving necessity, does, indeed, give necessity to this

precept (else it would not be an imperative), but this is a necessity dependent on subjective conditions, and cannot be supposed in the same degree in all subjects. But that reason may give laws it is necessary that it should only need to presuppose itself, because rules are objectively and universally valid only when they hold without any contingent subjective conditions, which distinguish one rational being from another. Now tell a man that he should never make a deceitful promise, this is a rule which only concerns his will, whether the purposes he may have can be attained thereby or not; it is the volition only which is to be determined a priori by that rule. If now it is found that this rule is practically right, then it is a law, because it is a categorical imperative. Thus, practical laws refer to the will only, without considering what is attained by its causality, and we may disregard this latter (as belonging to the world of sense) in order to have them quite pure.

II. THEOREM I.

All practical principles which presuppose an object (matter) of the faculty of desire as the ground of determination of the will are empirical and can furnish no practical laws.

By the matter of the faculty of desire I mean an object the realization of which is desired. Now, if the desire for this object precedes the practical rule and is the condition of our making it a principle, then I say (in the first place) this principle is in that case wholly empirical, for then what determines the choice is the idea of an object and that relation of this idea to the subject by which its faculty of desire is determined to its realization. Such a relation to the subject is called the pleasure in the realization of an object. This, then, must be presupposed as a condition of the possibility of determination of the will. But it is impossible to know a priori of any idea of an object whether it will be connected with pleasure or pain, or be indifferent. In such cases, therefore, the determining principle of the choice must be empirical and, therefore, also the practical material principle which presupposes it as a condition.

In the second place, since susceptibility to a pleasure or pain can be known only empirically and cannot hold in the same degree for all rational beings, a principle which is based on this subjective condition may serve indeed as a maxim for the subject which possesses this susceptibility, but not as a law even to him (because it is wanting in objective necessity, which must be recognized a priori); it follows, therefore, that such a principle can never furnish a practical law.

III. THEOREM II.

All material practical principles as such are of one and the same kind and come under the general principle of self-love or private happiness.

Pleasure arising from the idea of the idea of the existence of a thing, in so far as it is to determine the desire of this thing, is founded on the susceptibility of the subject, since it depends on the presence of an object; hence it belongs to sense (feeling), and not to understanding, which expresses a relation of the idea to an object according to concepts, not to the subject according to feelings. It is, then, practical only in so far as the faculty of desire is determined by the sensation of agreeableness which the subject expects from the actual existence of the object. Now, a rational being’s consciousness of the pleasantness of life uninterruptedly accompanying his whole existence is happiness; and the principle which makes this the supreme ground of determination of the will is the principle of self-love. All material principles, then, which place the determining ground of the will in the pleasure or pain to be received from the existence of any object are all of the same kind, inasmuch as they all belong to the principle of self-love or private happiness.

COROLLARY.

All material practical rules place the determining principle of the will in the lower desires; and if there were no purely formal laws of the will adequate to determine it, then we could not admit any higher desire at all.

REMARK I.

It is surprising that men, otherwise acute, can think it possible to distinguish between higher and lower desires, according as the ideas which are connected with the feeling of pleasure have their origin in the senses or in the understanding; for when we inquire what are the determining grounds of desire, and place them in some expected pleasantness, it is of no consequence whence the idea of this pleasing object is derived, but only how much it pleases. Whether an idea has its seat and source in the understanding or not, if it can only determine the choice by presupposing a feeling of pleasure in the subject, it follows that its capability of determining the choice depends altogether on the nature of the inner sense, namely, that this can be agreeably affected by it. However dissimilar ideas of objects may be, though they be ideas of the understanding, or even of the reason in contrast to ideas of sense, yet the feeling of pleasure, by means of which they constitute the determining principle of the will (the expected satisfaction which impels the activity to the production of the object), is of one and the same kind, not only inasmuch as it can only be known empirically, but also inasmuch as it affects one and the same vital force which manifests itself in the faculty of desire, and in this respect can only differ in degree from every other ground of determination. Otherwise, how could we compare in respect of magnitude two principles of determination, the ideas of which depend upon different faculties, so as to prefer that which affects the faculty of desire in the highest degree. The same man may return unread an instructive book which he cannot again obtain, in order not to miss a hunt; he may depart in the midst of a fine speech, in order not to be late for dinner; he may leave a rational conversation, such as he otherwise values highly, to take his place at the gaming-table; he may even repulse a poor man whom he at other times takes pleasure in benefiting, because he has only just enough money in his pocket to pay for his admission to the theatre. If the determination of his will rests on the feeling of the agreeableness or disagreeableness that he expects from any cause, it is all the same to him by what sort of ideas he will be affected. The only thing that concerns him, in order to decide his choice, is, how great, how long continued, how easily obtained, and how often repeated, this agreeableness is. Just as to the man who wants money to spend, it is all the same whether the gold was dug out of the mountain or washed out of the sand, provided it is everywhere accepted at the same value; so the man who cares only for the enjoyment of life does not ask whether the ideas are of the understanding or the senses, but only how much and how great pleasure they will give for the longest time. It is only those that would gladly deny to pure reason the power of determining the will, without the presupposition of any feeling, who could deviate so far from their own exposition as to describe as quite heterogeneous what they have themselves previously brought under one and the same principle. Thus, for example, it is observed that we can find pleasure in the mere exercise of power, in the consciousness of our strength of mind in overcoming obstacles which are opposed to our designs, in the culture of our mental talents, etc.; and we justly call these more refined pleasures and enjoyments, because they are more in our power than others; they do not wear out, but rather increase the capacity for further enjoyment of them, and while they delight they at the same time cultivate. But to say on this account that they determine the will in a different way and not through sense, whereas the possibility of the pleasure presupposes a feeling for it implanted in us, which is the first condition of this satisfaction; this is just as when ignorant persons that like to dabble in metaphysics imagine matter so subtle, so supersubtle that they almost make themselves giddy with it, and then think that in this way they have conceived it as a spiritual and yet extended being. If with Epicurus we make virtue determine the will

only by means of the pleasure it promises, we cannot afterwards blame him for holding that this pleasure is of the same kind as those of the coarsest senses. For we have no reason whatever to charge him with holding that the ideas by which this feeling is excited in us belong merely to the bodily senses. As far as can be conjectured, he sought the source of many of them in the use of the higher cognitive faculty, but this did not prevent him, and could not prevent him, from holding on the principle above stated, that the pleasure itself which those intellectual ideas give us, and by which alone they can determine the will, is just of the same kind. Consistency is the highest obligation of a philosopher, and yet the most rarely found. The ancient Greek schools give us more examples of it than we find in our syncretistic age, in which a certain shallow and dishonest system of compromise of contradictory principles is devised, because it commends itself better to a public which is content to know something of everything and nothing thoroughly, so as to please every party.

The principle of private happiness, however much understanding and reason may be used in it, cannot contain any other determining principles for the will than those which belong to the lower desires; and either there are no [higher] desires at all, or pure reason must of itself alone be practical; that is, it must be able to determine the will by the mere form of the practical rule without supposing any feeling, and consequently without any idea of the pleasant or unpleasant, which is the matter of the desire, and which is always an empirical condition of the principles. Then only, when reason of itself determines the will (not as the servant of the inclination), it is really a higher desire to which that which is pathologically determined is subordinate, and is really, and even specifically, distinct from the latter, so that even the slightest admixture of the motives of the latter impairs its strength and superiority; just as in a mathematical demonstration the least empirical condition would degrade and destroy its force and value. Reason, with its practical law, determines the will immediately, not by means of an intervening feeling of pleasure or pain, not even of pleasure in the law itself, and it is only because it can, as pure reason, be practical, that it is possible for it to be legislative.

REMARK II.

To be happy is necessarily the wish of every finite rational being, and this, therefore, is inevitably a determining principle of its faculty of desire. For we are not in possession originally of satisfaction with our whole existence- a bliss which would imply a consciousness of our own independent self-sufficiency this is a problem imposed upon us by our own finite nature, because we have wants and these wants regard the matter of our desires, that is, something that is relative to a subjective feeling of pleasure or pain, which determines what we need in order to be satisfied with our condition. But just because this material principle of determination can only be empirically known by the subject, it is impossible to regard this problem as a law; for a law being objective must contain the very same principle of determination of the will in all cases and for all rational beings. For, although the notion of happiness is in every case the foundation of practical relation of the objects to the desires, yet it is only a general name for the subjective determining principles, and determines nothing specifically; whereas this is what alone we are concerned with in this practical problem, which cannot be solved at all without such specific determination. For it is every man’s own special feeling of pleasure and pain that decides in what he is to place his happiness, and even in the same subject this will vary with the difference of his wants according as this feeling changes, and thus a law which is subjectively necessary (as a law of nature) is objectively a very contingent practical principle, which can and must be very different in different subjects and therefore can never furnish a law; since, in the desire for happiness it is not the form (of conformity to law) that is decisive, but simply the matter, namely, whether I am to expect pleasure in following the law, and how much. Principles of self-love may, indeed, contain universal precepts of skill (how to find means to accomplish one’s purpose), but in that case they are merely theoretical principles; * as, for example,

how he who would like to eat bread should contrive a mill; but practical precepts founded on them can never be universal, for the determining principle of the desire is based on the feeling pleasure and pain, which can never be supposed to be universally directed to the same objects.

* Propositions which in mathematics or physics are called practical ought properly to be called technical. For they have nothing to do with the determination of the will; they only point out how a certain effect is to be produced and are, therefore, just as theoretical as any propositions which express the connection of a cause with an effect. Now whoever chooses the effect must also choose the cause.

Even supposing, however, that all finite rational beings were thoroughly agreed as to what were the objects of their feelings of pleasure and pain, and also as to the means which they must employ to attain the one and avoid the other; still, they could by no means set up the principle of self-love as a practical law, for this unanimity itself would be only contingent. The principle of determination would still be only subjectively valid and merely empirical, and would not possess the necessity which is conceived in every law, namely, an objective necessity arising from a priori grounds; unless, indeed, we hold this necessity to be not at all practical, but merely physical, viz., that our action is as inevitably determined by our inclination, as yawning when we see others yawn. It would be better to maintain that there are no practical laws at all, but only counsels for the service of our desires, than to raise merely subjective principles to the rank of practical laws, which have objective necessity, and not merely subjective, and which must be known by reason a priori, not by experience (however empirically universal this may be). Even the rules of corresponding phenomena are only called laws of nature (e.g., the mechanical laws), when we either know them really a priori, or (as in the case of chemical laws) suppose that they would be known a priori from objective grounds if our insight reached further. But in the case of merely subjective practical principles, it is expressly made a condition that they rest, not on objective, but on subjective conditions of choice, and hence that they must always be represented as mere maxims, never as practical laws. This second remark seems at first sight to be mere verbal refinement, but it defines the terms of the most important distinction which can come into consideration in practical investigations.

IV. THEOREM II.

A rational being cannot regard his maxims as practical universal laws, unless he conceives them as principles which determine the will, not by their matter, but by their form only.

By the matter of a practical principle I mean the object of the will. This object is either the determining ground of the will or it is not. In the former case the rule of the will is subjected to an empirical condition (viz., the relation of the determining idea to the feeling of pleasure and pain), consequently it can not be a practical law. Now, when we abstract from a law all matter, i.e., every object of the will (as a determining principle), nothing is left but the mere form of a universal legislation. Therefore, either a rational being cannot conceive his subjective practical principles, that is, his maxims, as being at the same time universal laws, or he must suppose that their mere form, by which they are fitted for universal legislation, is alone what makes them practical laws.

REMARK.

The commonest understanding can distinguish without instruction what form of maxim is adapted for universal legislation, and what is not. Suppose, for example, that I have made it my maxim to increase my fortune by every safe means. Now, I have a deposit in my hands, the owner of which is dead and has left no writing about it. This is just the case for my maxim. I desire then to know whether that maxim can also bold good as a universal practical law. I apply it, therefore, to the present case, and ask whether it could take the form of a law, and consequently whether I can by my maxim at the same time give such a law as

this, that everyone may deny a deposit of which no one can produce a proof. I at once become aware that such a principle, viewed as a law, would annihilate itself, because the result would be that there would be no deposits. A practical law which I recognise as such must be qualified for universal legislation; this is an identical proposition and, therefore, self-evident. Now, if I say that my will is subject to a practical law, I cannot adduce my inclination (e.g., in the present case my avarice) as a principle of determination fitted to be a universal practical law; for this is so far from being fitted for a universal legislation that, if put in the form of a universal law, it would destroy itself.

It is, therefore, surprising that intelligent men could have thought of calling the desire of happiness a universal practical law on the ground that the desire is universal, and, therefore, also the maxim by which everyone makes this desire determine his will. For whereas in other cases a universal law of nature makes everything harmonious; here, on the contrary, if we attribute to the maxim the universality of a law, the extreme opposite of harmony will follow, the greatest opposition and the complete destruction of the maxim itself and its purpose. For, in that case, the will of all has not one and the same object, but everyone has his own (his private welfare), which may accidentally accord with the purposes of others which are equally selfish, but it is far from sufficing for a law; because the occasional exceptions which one is permitted to make are endless, and cannot be definitely embraced in one universal rule. In this manner, then, results a harmony like that which a certain satirical poem depicts as existing between a married couple bent on going to ruin, “O, marvellous harmony, what he wishes, she wishes also”; or like what is said of the pledge of Francis I to the Emperor Charles V, “What my brother Charles wishes that I wish also” (viz., Milan). Empirical principles of determination are not fit for any universal external legislation, but just as little for internal; for each man makes his own subject the foundation of his inclination, and in the same subject sometimes one inclination, sometimes another, has the preponderance. To discover a law which would govern them all under this condition, namely, bringing them all into harmony, is quite impossible.

V. PROBLEM I.

Supposing that the mere legislative form of maxims is alone the sufficient determining principle of a will, to find the nature of the will which can be determined by it alone.

Since the bare form of the law can only be conceived by reason, and is, therefore, not an object of the senses, and consequently does not belong to the class of phenomena, it follows that the idea of it, which determines the will, is distinct from all the principles that determine events in nature according to the law of causality, because in their case the determining principles must themselves be phenomena. Now, if no other determining principle can serve as a law for the will except that universal legislative form, such a will must be conceived as quite independent of the natural law of phenomena in their mutual relation, namely, the law of causality; such independence is called freedom in the strictest, that is, in the transcendental, sense; consequently, a will which can have its law in nothing but the mere legislative form of the maxim is a free will.

VI. PROBLEM II.

Supposing that a will is free, to find the law which alone is competent to determine it necessarily.

Since the matter of the practical law, i.e., an object of the maxim, can never be given otherwise than empirically, and the free will is independent on empirical conditions (that is, conditions belonging to the world of sense) and yet is determinable, consequently a free will must find its principle of determination in the law, and yet independently of the matter of the law. But, besides the matter of the law, nothing is contained in it except the legislative form. It is the legislative form, then, contained in the maxim, which

can alone constitute a principle of determination of the [free] will.

REMARK.

Thus freedom and an unconditional practical law reciprocally imply each other. Now I do not ask here whether they are in fact distinct, or whether an unconditioned law is not rather merely the consciousness of a pure practical reason and the latter identical with the positive concept of freedom; I only ask, whence begins our knowledge of the unconditionally practical, whether it is from freedom or from the practical law? Now it cannot begin from freedom, for of this we cannot be immediately conscious, since the first concept of it is negative; nor can we infer it from experience, for experience gives us the knowledge only of the law of phenomena, and hence of the mechanism of nature, the direct opposite of freedom. It is therefore the moral law, of which we become directly conscious (as soon as we trace for ourselves maxims of the will), that first presents itself to us, and leads directly to the concept of freedom, inasmuch as reason presents it as a principle of determination not to be outweighed by any sensible conditions, nay, wholly independent of them. But how is the consciousness, of that moral law possible? We can become conscious of pure practical laws just as we are conscious of pure theoretical principles, by attending to the necessity with which reason prescribes them and to the elimination of all empirical conditions, which it directs. The concept of a pure will arises out of the former, as that of a pure understanding arises out of the latter. That this is the true subordination of our concepts, and that it is morality that first discovers to us the notion of freedom, hence that it is practical reason which, with this concept, first proposes to speculative reason the most insoluble problem, thereby placing it in the greatest perplexity, is evident from the following consideration: Since nothing in phenomena can be explained by the concept of freedom, but the mechanism of nature must constitute the only clue; moreover, when pure reason tries to ascend in the series of causes to the unconditioned, it falls into an antinomy which is entangled in incomprehensibilities on the one side as much as the other; whilst the latter (namely, mechanism) is at least useful in the explanation of phenomena, therefore no one would ever have been so rash as to introduce freedom into science, had not the moral law, and with it practical reason, come in and forced this notion upon us. Experience, however, confirms this order of notions. Suppose some one asserts of his lustful appetite that, when the desired object and the opportunity are present, it is quite irresistible. [Ask him]- if a gallows were erected before the house where he finds this opportunity, in order that he should be hanged thereon immediately after the gratification of his lust, whether he could not then control his passion; we need not be long in doubt what he would reply. Ask him, however- if his sovereign ordered him, on pain of the same immediate execution, to bear false witness against an honourable man, whom the prince might wish to destroy under a plausible pretext, would he consider it possible in that case to overcome his love of life, however great it may be. He would perhaps not venture to affirm whether he would do so or not, but he must unhesitatingly admit that it is possible to do so. He judges, therefore, that he can do a certain thing because he is conscious that he ought, and he recognizes that he is free- a fact which but for the moral law he would never have known.

VII. FUNDAMENTAL LAW OF THE PURE PRACTICAL REASON.

Act so that the maxim of thy will can always at the same time hold good as a principle of universal legislation.

REMARK.

Pure geometry has postulates which are practical propositions, but contain nothing further than the assumption that we can do something if it is required that we should do it, and these are the only geometrical propositions that concern actual existence. They are, then, practical rules under a problematical condition of the will; but here the rule says: We absolutely must proceed in a certain manner. The practical rule is, therefore, unconditional, and hence it is conceived a priori as a categorically practical proposition by which the will is objectively determined absolutely and immediately (by the practical rule itself, which thus is in this case a law); for pure reason practical of itself is here directly legislative. The will is thought as independent on empirical conditions, and, therefore, as pure will determined by the mere form of the law, and this principle of determination is regarded as the supreme condition of all maxims. The thing is strange enough, and has no parallel in all the rest of our practical knowledge. For the a priori thought of a possible universal legislation which is therefore merely problematical, is unconditionally commanded as a law without borrowing anything from experience or from any external will. This, however, is not a precept to do something by which some desired effect can be attained (for then the will would depend on physical conditions), but a rule that determines the will a priori only so far as regards the forms of its maxims; and thus it is at least not impossible to conceive that a law, which only applies to the subjective form of principles, yet serves as a principle of determination by means of the objective form of law in general. We may call the consciousness of this fundamental law a fact of reason, because we cannot reason it out from antecedent data of reason, e.g., the consciousness of freedom (for this is not antecedently given), but it forces itself on us as a synthetic a priori proposition, which is not based on any intuition, either pure or empirical. It would, indeed, be analytical if the freedom of the will were presupposed, but to presuppose freedom as a positive concept would require an intellectual intuition, which cannot here be assumed; however, when we regard this law as given, it must be observed, in order not to fall into any misconception, that it is not an empirical fact, but the sole fact of the pure reason, which thereby announces itself as originally legislative (sic volo, sic jubeo).

COROLLARY.

Pure reason is practical of itself alone and gives (to man) a universal law which we call the moral law.

REMARK.

The fact just mentioned is undeniable. It is only necessary to analyse the judgement that men pass on the lawfulness of their actions, in order to find that, whatever inclination may say to the contrary, reason, incorruptible and self-constrained, always confronts the maxim of the will in any action with the pure will, that is, with itself, considering itself as a priori practical. Now this principle of morality, just on account of the universality of the legislation which makes it the formal supreme determining principle of the will, without regard to any subjective differences, is declared by the reason to be a law for all rational beings, in so far as they have a will, that is, a power to determine their causality by the conception of rules; and, therefore, so far as they are capable of acting according to principles, and consequently also according to practical a priori principles (for these alone have the necessity that reason requires in a principle). It is, therefore, not limited to men only, but applies to all finite beings that possess reason and will; nay, it even includes the Infinite Being as the supreme intelligence. In the former case, however, the law has the form of an imperative, because in them, as rational beings, we can suppose a pure will, but being creatures affected with wants and physical motives, not a holy will, that is, one which would be incapable of any maxim conflicting with the moral law. In their case, therefore, the moral law is an imperative, which commands categorically, because the law is unconditioned; the relation of

such a will to this law is dependence under the name of obligation, which implies a constraint to an action, though only by reason and its objective law; and this action is called duty, because an elective will, subject to pathological affections (though not determined by them, and, therefore, still free), implies a wish that arises from subjective causes and, therefore, may often be opposed to the pure objective determining principle; whence it requires the moral constraint of a resistance of the practical reason, which may be called an internal, but intellectual, compulsion. In the supreme intelligence the elective will is rightly conceived as incapable of any maxim which could not at the same time be objectively a law; and the notion of holiness, which on that account belongs to it, places it, not indeed above all practical laws, but above all practically restrictive laws, and consequently above obligation and duty. This holiness of will is, however, a practical idea, which must necessarily serve as a type to which finite rational beings can only approximate indefinitely, and which the pure moral law, which is itself on this account called holy, constantly and rightly holds before their eyes. The utmost that finite practical reason can effect is to be certain of this indefinite progress of one's maxims and of their steady disposition to advance. This is virtue, and virtue, at least as a naturally acquired faculty, can never be perfect, because assurance in such a case never becomes apodeictic certainty and, when it only amounts to persuasion, is very dangerous.

VIII. THEOREM IV.

The autonomy of the will is the sole principle of all moral laws and of all duties which conform to them; on the other hand, heteronomy of the elective will not only cannot be the basis of any obligation, but is, on the contrary, opposed to the principle thereof and to the morality of the will.

In fact the sole principle of morality consists in the independence on all matter of the law (namely, a desired object), and in the determination of the elective will by the mere universal legislative form of which its maxim must be capable. Now this independence is freedom in the negative sense, and this self-legislation of the pure, and therefore practical, reason is freedom in the positive sense. Thus the moral law expresses nothing else than the autonomy of the pure practical reason; that is, freedom; and this is itself the formal condition of all maxims, and on this condition only can they agree with the supreme practical law. If therefore the matter of the volition, which can be nothing else than the object of a desire that is connected with the law, enters into the practical law, as the condition of its possibility, there results heteronomy of the elective will, namely, dependence on the physical law that we should follow some impulse or inclination. In that case the will does not give itself the law, but only the precept how rationally to follow pathological law; and the maxim which, in such a case, never contains the universally legislative form, not only produces no obligation, but is itself opposed to the principle of a pure practical reason and, therefore, also to the moral disposition, even though the resulting action may be conformable to the law.

REMARK.

Hence a practical precept, which contains a material (and therefore empirical) condition, must never be reckoned a practical law. For the law of the pure will, which is free, brings the will into a sphere quite different from the empirical; and as the necessity involved in the law is not a physical necessity, it can only consist in the formal conditions of the possibility of a law in general. All the matter of practical rules rests on subjective conditions, which give them only a conditional universality (in case I desire this or that, what I must do in order to obtain it), and they all turn on the principle of private happiness. Now, it is indeed undeniable that every volition must have an object, and therefore a matter; but it does not follow that this is the determining principle and the condition of the maxim; for, if it is so, then this cannot be

exhibited in a universally legislative form, since in that case the expectation of the existence of the object would be the determining cause of the choice, and the volition must presuppose the dependence of the faculty of desire on the existence of something; but this dependence can only be sought in empirical conditions and, therefore, can never furnish a foundation for a necessary and universal rule. Thus, the happiness of others may be the object of the will of a rational being. But if it were the determining principle of the maxim, we must assume that we find not only a rational satisfaction in the welfare of others, but also a want such as the sympathetic disposition in some men occasions. But I cannot assume the existence of this want in every rational being (not at all in God). The matter, then, of the maxim may remain, but it must not be the condition of it, else the maxim could not be fit for a law. Hence, the mere form of law, which limits the matter, must also be a reason for adding this matter to the will, not for presupposing it. For example, let the matter be my own happiness. This (rule), if I attribute it to everyone (as, in fact, I may, in the case of every finite being), can become an objective practical law only if I include the happiness of others. Therefore, the law that we should promote the happiness of others does not arise from the assumption that this is an object of everyone's choice, but merely from this, that the form of universality which reason requires as the condition of giving to a maxim of self-love the objective validity of a law is the principle that determines the will. Therefore it was not the object (the happiness of others) that determined the pure will, but it was the form of law only, by which I restricted my maxim, founded on inclination, so as to give it the universality of a law, and thus to adapt it to the practical reason; and it is this restriction alone, and not the addition of an external spring, that can give rise to the notion of the obligation to extend the maxim of my self-love to the happiness of others.

REMARK II.

The direct opposite of the principle of morality is, when the principle of private happiness is made the determining principle of the will, and with this is to be reckoned, as I have shown above, everything that places the determining principle which is to serve as a law, anywhere but in the legislative form of the maxim. This contradiction, however, is not merely logical, like that which would arise between rules empirically conditioned, if they were raised to the rank of necessary principles of cognition, but is practical, and would ruin morality altogether were not the voice of reason in reference to the will so clear, so irrepressible, so distinctly audible, even to the commonest men. It can only, indeed, be maintained in the perplexing speculations of the schools, which are bold enough to shut their ears against that heavenly voice, in order to support a theory that costs no trouble.

Suppose that an acquaintance whom you otherwise liked were to attempt to justify himself to you for having borne false witness, first by alleging the, in his view, sacred duty of consulting his own happiness; then by enumerating the advantages which he had gained thereby, pointing out the prudence he had shown in securing himself against detection, even by yourself, to whom he now reveals the secret, only in order that he may be able to deny it at any time; and suppose he were then to affirm, in all seriousness, that he has fulfilled a true human duty; you would either laugh in his face, or shrink back from him with disgust; and yet, if a man has regulated his principles of action solely with a view to his own advantage, you would have nothing whatever to object against this mode of proceeding. Or suppose some one recommends you a man as steward, as a man to whom you can blindly trust all your affairs; and, in order to inspire you with confidence, extols him as a prudent man who thoroughly understands his own interest, and is so indefatigably active that he lets slip no opportunity of advancing it; lastly, lest you should be afraid of finding a vulgar selfishness in him, praises the good taste with which he lives; not seeking his pleasure in money-making, or in coarse wantonness, but in the enlargement of his knowledge, in instructive intercourse with a select circle, and even in relieving the needy; while as to the means (which, of course, derive all their value from the end), he is not particular, and is ready to use other people's

money for the purpose as if it were his own, provided only he knows that he can do so safely, and without discovery; you would either believe that the recommender was mocking you, or that he had lost his senses. So sharply and clearly marked are the boundaries of morality and self-love that even the commonest eye cannot fail to distinguish whether a thing belongs to the one or the other. The few remarks that follow may appear superfluous where the truth is so plain, but at least they may serve to give a little more distinctness to the judgement of common sense.

The principle of happiness may, indeed, furnish maxims, but never such as would be competent to be laws of the will, even if universal happiness were made the object. For since the knowledge of this rests on mere empirical data, since every man's judgement on it depends very much on his particular point of view, which is itself moreover very variable, it can supply only general rules, not universal; that is, it can give rules which on the average will most frequently fit, but not rules which must hold good always and necessarily; hence, no practical laws can be founded on it. Just because in this case an object of choice is the foundation of the rule and must therefore precede it, the rule can refer to nothing but what is [felt], and therefore it refers to experience and is founded on it, and then the variety of judgement must be endless. This principle, therefore, does not prescribe the same practical rules to all rational beings, although the rules are all included under a common title, namely, that of happiness. The moral law, however, is conceived as objectively necessary, only because it holds for everyone that has reason and will.

The maxim of self-love (prudence) only advises; the law of morality commands. Now there is a great difference between that which we are advised to do and that to which we are obliged.

The commonest intelligence can easily and without hesitation see what, on the principle of autonomy of the will, requires to be done; but on supposition of heteronomy of the will, it is hard and requires knowledge of the world to see what is to be done. That is to say, what duty is, is plain of itself to everyone; but what is to bring true durable advantage, such as will extend to the whole of one's existence, is always veiled in impenetrable obscurity; and much prudence is required to adapt the practical rule founded on it to the ends of life, even tolerably, by making proper exceptions. But the moral law commands the most punctual obedience from everyone; it must, therefore, not be so difficult to judge what it requires to be done, that the commonest unpractised understanding, even without worldly prudence, should fail to apply it rightly.

It is always in everyone's power to satisfy the categorical command of morality; whereas it is seldom possible, and by no means so to everyone, to satisfy the empirically conditioned precept of happiness, even with regard to a single purpose. The reason is that in the former case there is question only of the maxim, which must be genuine and pure; but in the latter case there is question also of one's capacity and physical power to realize a desired object. A command that everyone should try to make himself happy would be foolish, for one never commands anyone to do what he of himself infallibly wishes to do. We must only command the means, or rather supply them, since he cannot do everything that he wishes. But to command morality under the name of duty is quite rational; for, in the first place, not everyone is willing to obey its precepts if they oppose his inclinations; and as to the means of obeying this law, these need not in this case be taught, for in this respect whatever he wishes to do he can do.

He who has lost at play may be vexed at himself and his folly, but if he is conscious of having cheated at play (although he has gained thereby), he must despise himself as soon as he compares himself with the moral law. This must, therefore, be something different from the principle of private happiness. For a man must have a different criterion when he is compelled to say to himself: "I am a worthless fellow, though I have filled my purse"; and when he approves himself, and says: "I am a prudent man, for I have enriched my treasure."

Finally, there is something further in the idea of our practical reason, which accompanies the transgression of a moral law- namely, its ill desert. Now the notion of punishment, as such, cannot be united with that of becoming a partaker of happiness; for although he who inflicts the punishment may at

the same time have the benevolent purpose of directing this punishment to this end, yet it must first be justified in itself as punishment, i.e., as mere harm, so that if it stopped there, and the person punished could get no glimpse of kindness hidden behind this harshness, he must yet admit that justice was done him, and that his reward was perfectly suitable to his conduct. In every punishment, as such, there must first be justice, and this constitutes the essence of the notion. Benevolence may, indeed, be united with it, but the man who has deserved punishment has not the least reason to reckon upon this. Punishment, then, is a physical evil, which, though it be not connected with moral evil as a natural consequence, ought to be connected with it as a consequence by the principles of a moral legislation. Now, if every crime, even without regarding the physical consequence with respect to the actor, is in itself punishable, that is, forfeits happiness (at least partially), it is obviously absurd to say that the crime consisted just in this, that he has drawn punishment on himself, thereby injuring his private happiness (which, on the principle of self-love, must be the proper notion of all crime). According to this view, the punishment would be the reason for calling anything a crime, and justice would, on the contrary, consist in omitting all punishment, and even preventing that which naturally follows; for, if this were done, there would no longer be any evil in the action, since the harm which otherwise followed it, and on account of which alone the action was called evil, would now be prevented. To look, however, on all rewards and punishments as merely the machinery in the hand of a higher power, which is to serve only to set rational creatures striving after their final end (happiness), this is to reduce the will to a mechanism destructive of freedom; this is so evident that it need not detain us.

More refined, though equally false, is the theory of those who suppose a certain special moral sense, which sense and not reason determines the moral law, and in consequence of which the consciousness of virtue is supposed to be directly connected with contentment and pleasure; that of vice, with mental dissatisfaction and pain; thus reducing the whole to the desire of private happiness. Without repeating what has been said above, I will here only remark the fallacy they fall into. In order to imagine the vicious man as tormented with mental dissatisfaction by the consciousness of his transgressions, they must first represent him as in the main basis of his character, at least in some degree, morally good; just as he who is pleased with the consciousness of right conduct must be conceived as already virtuous. The notion of morality and duty must, therefore, have preceded any regard to this satisfaction, and cannot be derived from it. A man must first appreciate the importance of what we call duty, the authority of the moral law, and the immediate dignity which the following of it gives to the person in his own eyes, in order to feel that satisfaction in the consciousness of his conformity to it and the bitter remorse that accompanies the consciousness of its transgression. It is, therefore, impossible to feel this satisfaction or dissatisfaction prior to the knowledge of obligation, or to make it the basis of the latter. A man must be at least half honest in order even to be able to form a conception of these feelings. I do not deny that as the human will is, by virtue of liberty, capable of being immediately determined by the moral law, so frequent practice in accordance with this principle of determination can, at least, produce subjectively a feeling of satisfaction; on the contrary, it is a duty to establish and to cultivate this, which alone deserves to be called properly the moral feeling; but the notion of duty cannot be derived from it, else we should have to suppose a feeling for the law as such, and thus make that an object of sensation which can only be thought by the reason; and this, if it is not to be a flat contradiction, would destroy all notion of duty and put in its place a mere mechanical play of refined inclinations sometimes contending with the coarser.

If now we compare our formal supreme principle of pure practical reason (that of autonomy of the will) with all previous material principles of morality, we can exhibit them all in a table in which all possible cases are exhausted, except the one formal principle; and thus we can show visibly that it is vain to look for any other principle than that now proposed. In fact all possible principles of determination of the will are either merely subjective, and therefore empirical, or are also objective and rational; and both are either external or internal.

Practical Material Principles of Determination taken as the Foundation of Morality, are:

SUBJECTIVE.

EXTERNAL INTERNAL

Education Physical feeling
(Montaigne) (Epicurus)
The civil Moral feeling
Constitution (Hutcheson)
(Mandeville)

OBJECTIVE.

INTERNAL EXTERNAL

Perfection Will of God
(Wolf and the (Crusius and other
Stoics) theological Moralists)

Those of the upper table are all empirical and evidently incapable of furnishing the universal principle of morality; but those in the lower table are based on reason (for perfection as a quality of things, and the highest perfection conceived as substance, that is, God, can only be thought by means of rational concepts). But the former notion, namely, that of perfection, may either be taken in a theoretic signification, and then it means nothing but the completeness of each thing in its own kind (transcendental), or that of a thing merely as a thing (metaphysical); and with that we are not concerned here. But the notion of perfection in a practical sense is the fitness or sufficiency of a thing for all sorts of purposes. This perfection, as a quality of man and consequently internal, is nothing but talent and, what strengthens or completes this, skill. Supreme perfection conceived as substance, that is God, and consequently external (considered practically), is the sufficiency of this being for all ends. Ends then must first be given, relatively to which only can the notion of perfection (whether internal in ourselves or external in God) be the determining principle of the will. But an end- being an object which must precede the determination of the will by a practical rule and contain the ground of the possibility of this determination, and therefore contain also the matter of the will, taken as its determining principle- such an end is always empirical and, therefore, may serve for the Epicurean principle of the happiness theory, but not for the pure rational principle of morality and duty. Thus, talents and the improvement of them, because they contribute to the advantages of life; or the will of God, if agreement with it be taken as the object of the will, without any antecedent independent practical principle, can be motives only by reason of the happiness expected therefrom. Hence it follows, first, that all the principles here stated are material; secondly, that they include all possible material principles; and, finally, the conclusion, that since material principles are quite incapable of furnishing the supreme moral law (as has been shown), the formal practical principle of the pure reason (according to which the mere form of a universal legislation must constitute the supreme and immediate determining principle of the will) is the only one possible which is adequate to furnish categorical imperatives, that is, practical laws (which make actions a duty), and in general to serve as the principle of morality, both in criticizing conduct and also in its

application to the human will to determine it.

I. Of the Deduction of the Fundamental Principles of Pure Practical Reason.

This Analytic shows that pure reason can be practical, that is, can of itself determine the will independently of anything empirical; and this it proves by a fact in which pure reason in us proves itself actually practical, namely, the autonomy shown in the fundamental principle of morality, by which reason determines the will to action.

It shows at the same time that this fact is inseparably connected with the consciousness of freedom of the will, nay, is identical with it; and by this the will of a rational being, although as belonging to the world of sense it recognizes itself as necessarily subject to the laws of causality like other efficient causes; yet, at the same time, on another side, namely, as a being in itself, is conscious of existing in and being determined by an intelligible order of things; conscious not by virtue of a special intuition of itself, but by virtue of certain dynamical laws which determine its causality in the sensible world; for it has been elsewhere proved that if freedom is predicated of us, it transports us into an intelligible order of things.

Now, if we compare with this the analytical part of the critique of pure speculative reason, we shall see a remarkable contrast. There it was not fundamental principles, but pure, sensible intuition (space and time), that was the first datum that made a priori knowledge possible, though only of objects of the senses. Synthetical principles could not be derived from mere concepts without intuition; on the contrary, they could only exist with reference to this intuition, and therefore to objects of possible experience, since it is the concepts of the understanding, united with this intuition, which alone make that knowledge possible which we call experience. Beyond objects of experience, and therefore with regard to things as noumena, all positive knowledge was rightly disclaimed for speculative reason. This reason, however, went so far as to establish with certainty the concept of noumena; that is, the possibility, nay, the necessity, of thinking them; for example, it showed against all objections that the supposition of freedom, negatively considered, was quite consistent with those principles and limitations of pure theoretic reason. But it could not give us any definite enlargement of our knowledge with respect to such objects, but, on the contrary, cut off all view of them altogether.

On the other hand, the moral law, although it gives no view, yet gives us a fact absolutely inexplicable from any data of the sensible world, and the whole compass of our theoretical use of reason, a fact which points to a pure world of the understanding, nay, even defines it positively and enables us to know something of it, namely, a law.

This law (as far as rational beings are concerned) gives to the world of sense, which is a sensible system of nature, the form of a world of the understanding, that is, of a supersensible system of nature, without interfering with its mechanism. Now, a system of nature, in the most general sense, is the existence of things under laws. The sensible nature of rational beings in general is their existence under laws empirically conditioned, which, from the point of view of reason, is heteronomy. The supersensible nature of the same beings, on the other hand, is their existence according to laws which are independent of every empirical condition and, therefore, belong to the autonomy of pure reason. And, since the laws by which the existence of things depends on cognition are practical, supersensible nature, so far as we can form any notion of it, is nothing else than a system of nature under the autonomy of pure practical reason. Now, the law of this autonomy is the moral law, which, therefore, is the fundamental law of a supersensible nature, and of a pure world of understanding, whose counterpart must exist in the world of sense, but without interfering with its laws. We might call the former the archetypal world (natura archetypa), which we only know in the reason; and the latter the ectypal world (natura ectypa), because it contains the possible effect of the idea of the former which is the determining principle of the will. For

the moral law, in fact, transfers us ideally into a system in which pure reason, if it were accompanied with adequate physical power, would produce the summum bonum, and it determines our will to give the sensible world the form of a system of rational beings.

The least attention to oneself proves that this idea really serves as the model for the determinations of our will.

When the maxim which I am disposed to follow in giving testimony is tested by the practical reason, I always consider what it would be if it were to hold as a universal law of nature. It is manifest that in this view it would oblige everyone to speak the truth. For it cannot hold as a universal law of nature that statements should be allowed to have the force of proof and yet to be purposely untrue. Similarly, the maxim which I adopt with respect to disposing freely of my life is at once determined, when I ask myself what it should be, in order that a system, of which it is the law, should maintain itself. It is obvious that in such a system no one could arbitrarily put an end to his own life, for such an arrangement would not be a permanent order of things. And so in all similar cases. Now, in nature, as it actually is an object of experience, the free will is not of itself determined to maxims which could of themselves be the foundation of a natural system of universal laws, or which could even be adapted to a system so constituted; on the contrary, its maxims are private inclinations which constitute, indeed, a natural whole in conformity with pathological (physical) laws, but could not form part of a system of nature, which would only be possible through our will acting in accordance with pure practical laws. Yet we are, through reason, conscious of a law to which all our maxims are subject, as though a natural order must be originated from our will. This law, therefore, must be the idea of a natural system not given in experience, and yet possible through freedom; a system, therefore, which is supersensible, and to which we give objective reality, at least in a practical point of view, since we look on it as an object of our will as pure rational beings.

Hence the distinction between the laws of a natural system to which the will is subject, and of a natural system which is subject to a will (as far as its relation to its free actions is concerned), rests on this, that in the former the objects must be causes of the ideas which determine the will; whereas in the latter the will is the cause of the objects; so that its causality has its determining principle solely in the pure faculty of reason, which may therefore be called a pure practical reason.

There are therefore two very distinct problems: how, on the one side, pure reason can cognise objects a priori, and how on the other side it can be an immediate determining principle of the will, that is, of the causality of the rational being with respect to the reality of objects (through the mere thought of the universal validity of its own maxims as laws).

The former, which belongs to the critique of the pure speculative reason, requires a previous explanation, how intuitions without which no object can be given, and, therefore, none known synthetically, are possible a priori; and its solution turns out to be that these are all only sensible and, therefore, do not render possible any speculative knowledge which goes further than possible experience reaches; and that therefore all the principles of that pure speculative reason avail only to make experience possible; either experience of given objects or of those that may be given ad infinitum, but never are completely given.

The latter, which belongs to the critique of practical reason, requires no explanation how the objects of the faculty of desire are possible, for that being a problem of the theoretical knowledge of nature is left to the critique of the speculative reason, but only how reason can determine the maxims of the will; whether this takes place only by means of empirical ideas as principles of determination, or whether pure reason can be practical and be the law of a possible order of nature, which is not empirically knowable. The possibility of such a supersensible system of nature, the conception of which can also be the ground of its reality through our own free will, does not require any a priori intuition (of an intelligible world) which, being in this case supersensible, would be impossible for us. For the question is only as to the

determining principle of volition in its maxims, namely, whether it is empirical, or is a conception of the pure reason (having the legal character belonging to it in general), and how it can be the latter. It is left to the theoretic principles of reason to decide whether the causality of the will suffices for the realization of the objects or not, this being an inquiry into the possibility of the objects of the volition. Intuition of these objects is therefore of no importance to the practical problem. We are here concerned only with the determination of the will and the determining principles of its maxims as a free will, not at all with the result. For, provided only that the will conforms to the law of pure reason, then let its power in execution be what it may, whether according to these maxims of legislation of a possible system of nature any such system really results or not, this is no concern of the critique, which only inquires whether, and in what way, pure reason can be practical, that is directly determine the will.

In this inquiry criticism may and must begin with pure practical laws and their reality. But instead of intuition it takes as their foundation the conception of their existence in the intelligible world, namely, the concept of freedom. For this concept has no other meaning, and these laws are only possible in relation to freedom of the will; but freedom being supposed, they are necessary; or conversely freedom is necessary because those laws are necessary, being practical postulates. It cannot be further explained how this consciousness of the moral law, or, what is the same thing, of freedom, is possible; but that it is admissible is well established in the theoretical critique.

The exposition of the supreme principle of practical reason is now finished; that is to say, it has been shown first, what it contains, that it subsists for itself quite a priori and independent of empirical principles; and next in what it is distinguished from all other practical principles. With the deduction, that is, the justification of its objective and universal validity, and the discernment of the possibility of such a synthetical proposition a priori, we cannot expect to succeed so well as in the case of the principles of pure theoretical reason. For these referred to objects of possible experience, namely, to phenomena, and we could prove that these phenomena could be known as objects of experience only by being brought under the categories in accordance with these laws; and consequently that all possible experience must conform to these laws. But I could not proceed in this way with the deduction of the moral law. For this does not concern the knowledge of the properties of objects, which may be given to the reason from some other source; but a knowledge which can itself be the ground of the existence of the objects, and by which reason in a rational being has causality, i.e., pure reason, which can be regarded as a faculty immediately determining the will.

Now all our human insight is at an end as soon as we have arrived at fundamental powers or faculties, for the possibility of these cannot be understood by any means, and just as little should it be arbitrarily invented and assumed. Therefore, in the theoretic use of reason, it is experience alone that can justify us in assuming them. But this expedient of adducing empirical proofs, instead of a deduction from a priori sources of knowledge, is denied us here in respect to the pure practical faculty of reason. For whatever requires to draw the proof of its reality from experience must depend for the grounds of its possibility on principles of experience; and pure, yet practical, reason by its very notion cannot be regarded as such. Further, the moral law is given as a fact of pure reason of which we are a priori conscious, and which is apodeictically certain, though it be granted that in experience no example of its exact fulfilment can be found. Hence, the objective reality of the moral law cannot be proved by any deduction by any efforts of theoretical reason, whether speculative or empirically supported, and therefore, even if we renounced its apodeictic certainty, it could not be proved a posteriori by experience, and yet it is firmly established of itself.

But instead of this vainly sought deduction of the moral principle, something else is found which was quite unexpected, namely, that this moral principle serves conversely as the principle of the deduction of an inscrutable faculty which no experience could prove, but of which speculative reason was compelled at least to assume the possibility (in order to find amongst its cosmological ideas the unconditioned in the

chain of causality, so as not to contradict itself)- I mean the faculty of freedom. The moral law, which itself does not require a justification, proves not merely the possibility of freedom, but that it really belongs to beings who recognize this law as binding on themselves. The moral law is in fact a law of the causality of free agents and, therefore, of the possibility of a supersensible system of nature, just as the metaphysical law of events in the world of sense was a law of causality of the sensible system of nature; and it therefore determines what speculative philosophy was compelled to leave undetermined, namely, the law for a causality, the concept of which in the latter was only negative; and therefore for the first time gives this concept objective reality.

This sort of credential of the moral law, viz., that it is set forth as a principle of the deduction of freedom, which is a causality of pure reason, is a sufficient substitute for all a priori justification, since theoretic reason was compelled to assume at least the possibility of freedom, in order to satisfy a want of its own. For the moral law proves its reality, so as even to satisfy the critique of the speculative reason, by the fact that it adds a positive definition to a causality previously conceived only negatively, the possibility of which was incomprehensible to speculative reason, which yet was compelled to suppose it. For it adds the notion of a reason that directly determines the will (by imposing on its maxims the condition of a universal legislative form); and thus it is able for the first time to give objective, though only practical, reality to reason, which always became transcendent when it sought to proceed speculatively with its ideas. It thus changes the transcendent use of reason into an immanent use (so that reason is itself, by means of ideas, an efficient cause in the field of experience).

The determination of the causality of beings in the world of sense, as such, can never be unconditioned; and yet for every series of conditions there must be something unconditioned, and therefore there must be a causality which is determined wholly by itself. Hence, the idea of freedom as a faculty of absolute spontaneity was not found to be a want but, as far as its possibility is concerned, an analytic principle of pure speculative reason. But as it is absolutely impossible to find in experience any example in accordance with this idea, because amongst the causes of things as phenomena it would be impossible to meet with any absolutely unconditioned determination of causality, we were only able to defend our supposition that a freely acting cause might be a being in the world of sense, in so far as it is considered in the other point of view as a noumenon, showing that there is no contradiction in regarding all its actions as subject to physical conditions so far as they are phenomena, and yet regarding its causality as physically unconditioned, in so far as the acting being belongs to the world of understanding, and in thus making the concept of freedom the regulative principle of reason. By this principle I do not indeed learn what the object is to which that sort of causality is attributed; but I remove the difficulty, for, on the one side, in the explanation of events in the world, and consequently also of the actions of rational beings, I leave to the mechanism of physical necessity the right of ascending from conditioned to condition ad infinitum, while on the other side I keep open for speculative reason the place which for it is vacant, namely, the intelligible, in order to transfer the unconditioned thither. But I was not able to verify this supposition; that is, to change it into the knowledge of a being so acting, not even into the knowledge of the possibility of such a being. This vacant place is now filled by pure practical reason with a definite law of causality in an intelligible world (causality with freedom), namely, the moral law. Speculative reason does not hereby gain anything as regards its insight, but only as regards the certainty of its problematical notion of freedom, which here obtains objective reality, which, though only practical, is nevertheless undoubted. Even the notion of causality- the application, and consequently the signification, of which holds properly only in relation to phenomena, so as to connect them into experiences (as is shown by the Critique of Pure Reason)- is not so enlarged as to extend its use beyond these limits. For if reason sought to do this, it would have to show how the logical relation of principle and consequence can be used synthetically in a different sort of intuition from the sensible; that is how a causa noumenon is possible. This it can never do; and, as practical reason, it does not even concern itself with it, since it

only places the determining principle of causality of man as a sensible creature (which is given) in pure reason (which is therefore called practical); and therefore it employs the notion of cause, not in order to know objects, but to determine causality in relation to objects in general. It can abstract altogether from the application of this notion to objects with a view to theoretical knowledge (since this concept is always found a priori in the understanding even independently of any intuition). Reason, then, employs it only for a practical purpose, and hence we can transfer the determining principle of the will into the intelligible order of things, admitting, at the same time, that we cannot understand how the notion of cause can determine the knowledge of these things. But reason must cognise causality with respect to the actions of the will in the sensible world in a definite manner; otherwise, practical reason could not really produce any action. But as to the notion which it forms of its own causality as noumenon, it need not determine it theoretically with a view to the cognition of its supersensible existence, so as to give it significance in this way. For it acquires significance apart from this, though only for practical use, namely, through the moral law. Theoretically viewed, it remains always a pure a priori concept of the understanding, which can be applied to objects whether they have been given sensibly or not, although in the latter case it has no definite theoretical significance or application, but is only a formal, though essential, conception of the understanding relating to an object in general. The significance which reason gives it through the moral law is merely practical, inasmuch as the idea of the law of causality (of the will) has self causality, or is its determining principle.

II. Of the Right that Pure Reason in its Practical use has to an Extension which is not possible to it in its Speculative Use.

We have in the moral principle set forth a law of causality, the determining principle of which is set above all the conditions of the sensible world; we have it conceived how the will, as belonging to the intelligible world, is determinable, and therefore have its subject (man) not merely conceived as belonging to a world of pure understanding, and in this respect unknown (which the critique of speculative reason enabled us to do), but also defined as regards his causality by means of a law which cannot be reduced to any physical law of the sensible world; and therefore our knowledge is extended beyond the limits of that world, a pretension which the Critique of Pure Reason declared to be futile in all speculation. Now, how is the practical use of pure reason here to be reconciled with the theoretical, as to the determination of the limits of its faculty?

David Hume, of whom we may say that he commenced the assault on the claims of pure reason, which made a thorough investigation of it necessary, argued thus: The notion of cause is a notion that involves the necessity of the connexion of the existence of different things (and that, in so far as they are different), so that, given A, I know that something quite distinct there from, namely B, must necessarily also exist. Now necessity can be attributed to a connection, only in so far as it is known a priori, for experience would only enable us to know of such a connection that it exists, not that it necessarily exists. Now, it is impossible, says he, to know a priori and as necessary the connection between one thing and another (or between one attribute and another quite distinct) when they have not been given in experience. Therefore the notion of a cause is fictitious and delusive and, to speak in the mildest way, is an illusion, only excusable inasmuch as the custom (a subjective necessity) of perceiving certain things, or their attributes as often associated in existence along with or in succession to one another, is insensibly taken for an objective necessity of supposing such a connection in the objects themselves; and thus the notion of a cause has been acquired surreptitiously and not legitimately; nay, it can never be so acquired or authenticated, since it demands a connection in itself vain, chimerical, and untenable in presence of reason, and to which no object can ever correspond. In this way was empiricism first introduced as the sole source of principles, as far as all knowledge of the existence of things is concerned (mathematics

therefore remaining excepted); and with empiricism the most thorough scepticism, even with regard to the whole science of nature(as philosophy). For on such principles we can never conclude from given attributes of things as existing to a consequence (for this would require the notion of cause, which involves the necessity of such a connection); we can only, guided by imagination, expect similar cases- an expectation which is never certain, however often it has been fulfilled. Of no event could we say: a certain thing must have preceded it, on which it necessarily followed; that is, it must have a cause; and therefore, however frequent the cases we have known in which there was such an antecedent, so that a rule could be derived from them, yet we never could suppose it as always and necessarily so happening; we should, therefore, be obliged to leave its share to blind chance, with which all use of reason comes to an end; and this firmly establishes scepticism in reference to arguments ascending from effects to causes and makes it impregnable.

Mathematics escaped well, so far, because Hume thought that its propositions were analytical; that is, proceeded from one property to another, by virtue of identity and, consequently, according to the principle of contradiction. This, however, is not the case, since, on the contrary, they are synthetical; and although geometry, for example, has not to do with the existence of things, but only with their a priori properties in a possible intuition, yet it proceeds just as in the case of the causal notion, from one property (A) to another wholly distinct (B), as necessarily connected with the former. Nevertheless, mathematical science, so highly vaunted for its apodeictic certainty, must at last fall under this empiricism for the same reason for which Hume put custom in the place of objective necessity in the notion of cause and, in spite of all its pride, must consent to lower its bold pretension of claiming assent a priori and depend for assent to the universality of its propositions on the kindness of observers, who, when called as witnesses, would surely not hesitate to admit that what the geometer propounds as a theorem they have always perceived to be the fact, and, consequently, although it be not necessarily true, yet they would permit us to expect it to be true in the future. In this manner Hume's empiricism leads inevitably to scepticism, even with regard to mathematics, and consequently in every scientific theoretical use of reason (for this belongs either to philosophy or mathematics). Whether with such a terrible overthrow of the chief branches of knowledge, common reason will escape better, and will not rather become irrecoverably involved in this destruction of all knowledge, so that from the same principles a universal scepticism should follow (affecting, indeed, only the learned), this I will leave everyone to judge for himself.

As regards my own labours in the critical examination of pure reason, which were occasioned by Hume's sceptical teaching, but went much further and embraced the whole field of pure theoretical reason in its synthetic use and, consequently, the field of what is called metaphysics in general; I proceeded in the following manner with respect to the doubts raised by the Scottish philosopher touching the notion of causality. If Hume took the objects of experience for things in themselves (as is almost always done), he was quite right in declaring the notion of cause to be a deception and false illusion; for as to things in themselves, and their attributes as such, it is impossible to see why because A is given, B, which is different, must necessarily be also given, and therefore he could by no means admit such an a priori knowledge of things in themselves. Still less could this acute writer allow an empirical origin of this concept, since this is directly contradictory to the necessity of connection which constitutes the essence of the notion of causality, hence the notion was proscribed, and in its place was put custom in the observation of the course of perceptions.

It resulted, however, from my inquiries, that the objects with which we have to do in experience are by no means things in themselves, but merely phenomena; and that although in the case of things in themselves it is impossible to see how, if A is supposed, it should be contradictory that B, which is quite different from A, should not also be supposed (i.e., to see the necessity of the connection between A as cause and B as effect); yet it can very well be conceived that, as phenomena, they may be necessarily connected in one experience in a certain way (e.g., with regard to time-relations); so that they could not be separated

without contradicting that connection, by means of which this experience is possible in which they are objects and in which alone they are cognisable by us. And so it was found to be in fact; so that I was able not only to prove the objective reality of the concept of cause in regard to objects of experience, but also to deduce it as an a priori concept by reason of the necessity of the connection it implied; that is, to show the possibility of its origin from pure understanding without any empirical sources; and thus, after removing the source of empiricism, I was able also to overthrow the inevitable consequence of this, namely, scepticism, first with regard to physical science, and then with regard to mathematics (in which empiricism has just the same grounds), both being sciences which have reference to objects of possible experience; herewith overthrowing the thorough doubt of whatever theoretic reason professes to discern.

But how is it with the application of this category of causality (and all the others; for without them there can be no knowledge of anything existing) to things which are not objects of possible experience, but lie beyond its bounds? For I was able to deduce the objective reality of these concepts only with regard to objects of possible experience. But even this very fact, that I have saved them, only in case I have proved that objects may by means of them be thought, though not determined a priori; this it is that gives them a place in the pure understanding, by which they are referred to objects in general (sensible or not sensible). If anything is still wanting, it is that which is the condition of the application of these categories, and especially that of causality, to objects, namely, intuition; for where this is not given, the application with a view to theoretic knowledge of the object, as a noumenon, is impossible and, therefore, if anyone ventures on it, is (as in the Critique of Pure Reason) absolutely forbidden. Still, the objective reality of the concept (of causality) remains, and it can be used even of noumena, but without our being able in the least to define the concept theoretically so as to produce knowledge. For that this concept, even in reference to an object, contains nothing impossible, was shown by this, that, even while applied to objects of sense, its seat was certainly fixed in the pure understanding; and although, when referred to things in themselves (which cannot be objects of experience), it is not capable of being determined so as to represent a definite object for the purpose of theoretic knowledge; yet for any other purpose (for instance, a practical) it might be capable of being determined so as to have such application. This could not be the case if, as Hume maintained, this concept of causality contained something absolutely impossible to be thought.

In order now to discover this condition of the application of the said concept to noumena, we need only recall why we are not content with its application to objects of experience, but desire also to apply it to things in themselves. It will appear, then, that it is not a theoretic but a practical purpose that makes this a necessity. In speculation, even if we were successful in it, we should not really gain anything in the knowledge of nature, or generally with regard to such objects as are given, but we should make a wide step from the sensibly conditioned (in which we have already enough to do to maintain ourselves, and to follow carefully the chain of causes) to the supersensible, in order to complete our knowledge of principles and to fix its limits; whereas there always remains an infinite chasm unfilled between those limits and what we know; and we should have hearkened to a vain curiosity rather than a solid-desire of knowledge.

But, besides the relation in which the understanding stands to objects (in theoretical knowledge), it has also a relation to the faculty of desire, which is therefore called the will, and the pure will, inasmuch as pure understanding (in this case called reason) is practical through the mere conception of a law. The objective reality of a pure will, or, what is the same thing, of a pure practical reason, is given in the moral law a priori, as it were, by a fact, for so we may name a determination of the will which is inevitable, although it does not rest on empirical principles. Now, in the notion of a will the notion of causality is already contained, and hence the notion of a pure will contains that of a causality accompanied with freedom, that is, one which is not determinable by physical laws, and consequently is not capable of any empirical intuition in proof of its reality, but, nevertheless, completely justifies its objective reality a

priori in the pure practical law; not, indeed (as is easily seen) for the purposes of the theoretical, but of the practical use of reason. Now the notion of a being that has free will is the notion of a causa noumenon, and that this notion involves no contradiction, we are already assured by the fact- that inasmuch as the concept of cause has arisen wholly from pure understanding, and has its objective reality assured by the deduction, as it is moreover in its origin independent of any sensible conditions, it is, therefore, not restricted to phenomena (unless we wanted to make a definite theoretic use of it), but can be applied equally to things that are objects of the pure understanding. But, since this application cannot rest on any intuition (for intuition can only be sensible), therefore, causa noumenon, as regards the theoretic use of reason, although a possible and thinkable, is yet an empty notion. Now, I do not desire by means of this to understand theoretically the nature of a being, in so far as it has a pure will; it is enough for me to have thereby designated it as such, and hence to combine the notion of causality with that of freedom (and what is inseparable from it, the moral law, as its determining principle). Now, this right I certainly have by virtue of the pure, not-empirical origin of the notion of cause, since I do not consider myself entitled to make any use of it except in reference to the moral law which determines its reality, that is, only a practical use.

If, with Hume, I had denied to the notion of causality all objective reality in its [theoretic] use, not merely with regard to things in themselves (the supersensible), but also with regard to the objects of the senses, it would have lost all significance, and being a theoretically impossible notion would have been declared to be quite useless; and since what is nothing cannot be made any use of, the practical use of a concept theoretically null would have been absurd. But, as it is, the concept of a causality free from empirical conditions, although empty, i.e., without any appropriate intuition), is yet theoretically possible, and refers to an indeterminate object; but in compensation significance is given to it in the moral law and consequently in a practical sense. I have, indeed, no intuition which should determine its objective theoretic reality, but not the less it has a real application, which is exhibited in concreto in intentions or maxims; that is, it has a practical reality which can be specified, and this is sufficient to justify it even with a view to noumena.

Now, this objective reality of a pure concept of the understanding in the sphere of the supersensible, once brought in, gives an objective reality also to all the other categories, although only so far as they stand in necessary connexion with the determining principle of the will (the moral law); a reality only of practical application, which has not the least effect in enlarging our theoretical knowledge of these objects, or the discernment of their nature by pure reason. So we shall find also in the sequel that these categories refer only to beings as intelligences, and in them only to the relation of reason to the will; consequently, always only to the practical, and beyond this cannot pretend to any knowledge of these beings; and whatever other properties belonging to the theoretical representation of supersensible things may be brought into connexion with these categories, this is not to be reckoned as knowledge, but only as a right (in a practical point of view, however, it is a necessity) to admit and assume such beings, even in the case where we [conceive] supersensible beings (e.g., God) according to analogy, that is, a purely rational relation, of which we make a practical use with reference to what is sensible; and thus the application to the supersensible solely in a practical point of view does not give pure theoretic reason the least encouragement to run riot into the transcendent.

CHAPTER II. Of the Concept of an Object of Pure Practical Reason.

By a concept of the practical reason I understand the idea of an object as an effect possible to be produced through freedom. To be an object of practical knowledge, as such, signifies, therefore, only the relation of the will to the action by which the object or its opposite would be realized; and to decide whether something is an object of pure practical reason or not is only to discern the possibility or impossibility of willing the action by which, if we had the required power (about which experience must decide), a certain object would be realized. If the object be taken as the determining principle of our desire, it must first be known whether it is physically possible by the free use of our powers, before we decide whether it is an object of practical reason or not. On the other hand, if the law can be considered a priori as the determining principle of the action, and the latter therefore as determined by pure practical reason, the judgement whether a thing is an object of pure practical reason or not does not depend at all on the comparison with our physical power; and the question is only whether we should will an action that is directed to the existence of an object, if the object were in our power; hence the previous question is only as the moral possibility of the action, for in this case it is not the object, but the law of the will, that is the determining principle of the action. The only objects of practical reason are therefore those of good and evil. For by the former is meant an object necessarily desired according to a principle of reason; by the latter one necessarily shunned, also according to a principle of reason.

If the notion of good is not to be derived from an antecedent practical law, but, on the contrary, is to serve as its foundation, it can only be the notion of something whose existence promises pleasure, and thus determines the causality of the subject to produce it, that is to say, determines the faculty of desire. Now, since it is impossible to discern a priori what idea will be accompanied with pleasure and what with pain, it will depend on experience alone to find out what is primarily good or evil. The property of the subject, with reference to which alone this experiment can be made, is the feeling of pleasure and pain, a receptivity belonging to the internal sense; thus that only would be primarily good with which the sensation of pleasure is immediately connected, and that simply evil which immediately excites pain. Since, however, this is opposed even to the usage of language, which distinguishes the pleasant from the good, the unpleasant from the evil, and requires that good and evil shall always be judged by reason, and, therefore, by concepts which can be communicated to everyone, and not by mere sensation, which is limited to individual [subjects] and their susceptibility; and, since nevertheless, pleasure or pain cannot be connected with any idea of an object a priori, the philosopher who thought himself obliged to make a feeling of pleasure the foundation of his practical judgements would call that good which is a means to the pleasant, and evil, what is a cause of unpleasantness and pain; for the judgement on the relation of means to ends certainly belongs to reason. But, although reason is alone capable of discerning the connexion of means with their ends (so that the will might even be defined as the faculty of ends, since these are always determining principles of the desires), yet the practical maxims which would follow from the aforesaid principle of the good being merely a means, would never contain as the object of the will anything good in itself, but only something good for something; the good would always be merely the useful, and that for which it is useful must always lie outside the will, in sensation. Now if this as a pleasant sensation were to be distinguished from the notion of good, then there would be nothing primarily good at all, but the good would have to be sought only in the means to something else, namely, some pleasantness.

It is an old formula of the schools: Nihil appetimus nisi sub ratione boni; Nihil aversamur nisi sub ratione mali, and it is used often correctly, but often also in a manner injurious to philosophy, because the expressions boni and mali are ambiguous, owing to the poverty of language, in consequence of which they

admit a double sense, and, therefore, inevitably bring the practical laws into ambiguity; and philosophy, which in employing them becomes aware of the different meanings in the same word, but can find no special expressions for them, is driven to subtile distinctions about which there is subsequently no unanimity, because the distinction could not be directly marked by any suitable expression. *

* Besides this, the expression sub ratione boni is also ambiguous. For it may mean: “We represent something to ourselves as good, when and because we desire (will) it”; or “We desire something because we represent it to ourselves as good,” so that either the desire determines the notion of the object as a good, or the notion of good determines the desire (the will); so that in the first case sub ratione boni would mean, “We will something under the idea of the good”; in the second, “In consequence of this idea,” which, as determining the volition, must precede it.

The German language has the good fortune to possess expressions which do not allow this difference to be overlooked. It possesses two very distinct concepts and especially distinct expressions for that which the Latins express by a single word, bonum. For bonum it has das Gute [good], and das Wohl [well, weal], for malum das Bose [evil], and das Ubel [ill, bad], or das Well [woe]. So that we express two quite distinct judgements when we consider in an action the good and evil of it, or our weal and woe (ill). Hence it already follows that the above quoted psychological proposition is at least very doubtful if it is translated: “We desire nothing except with a view to our weal or woe”; on the other hand, if we render it thus: “Under the direction of reason we desire nothing except so far as we esteem it good or evil,” it is indubitably certain and at the same time quite clearly expressed.

Well or ill always implies only a reference to our condition, as pleasant or unpleasant, as one of pleasure or pain, and if we desire or avoid an object on this account, it is only so far as it is referred to our sensibility and to the feeling of pleasure or pain that it produces. But good or evil always implies a reference to the will, as determined by the law of reason, to make something its object; for it is never determined directly by the object and the idea of it, but is a faculty of taking a rule of reason for or motive of an action (by which an object may be realized). Good and evil therefore are properly referred to actions, not to the sensations of the person, and if anything is to be good or evil absolutely (i.e., in every respect and without any further condition), or is to be so esteemed, it can only be the manner of acting, the maxim of the will, and consequently the acting person himself as a good or evil man that can be so called, and not a thing.

However, then, men may laugh at the Stoic, who in the severest paroxysms of gout cried out: “Pain, however thou tormentest me, I will never admit that thou art an evil (kakov, malum)”: he was right. A bad thing it certainly was, and his cry betrayed that; but that any evil attached to him thereby, this he had no reason whatever to admit, for pain did not in the least diminish the worth of his person, but only that of his condition. If he had been conscious of a single lie, it would have lowered his pride, but pain served only to raise it, when he was conscious that he had not deserved it by any unrighteous action by which he had rendered himself worthy of punishment.

What we call good must be an object of desire in the judgement of every rational man, and evil an object of aversion in the eyes of everyone; therefore, in addition to sense, this judgement requires reason. So it is with truthfulness, as opposed to lying; so with justice, as opposed to violence, &c. But we may call a thing a bad [or ill] thing, which yet everyone must at the same time acknowledge to be good, sometimes directly, sometimes indirectly. The man who submits to a surgical operation feels it no doubt as a bad thing, but by their reason he and everyone acknowledge it to be good. If a man who delights in annoying and vexing peaceable people at last receives a right good beating, this is no doubt a bad thing; but everyone approves it and regards it as a good thing, even though nothing else resulted from it; nay, even the man who receives it must in his reason acknowledge that he has met justice, because he sees the proportion between good conduct and good fortune, which reason inevitably places before him, here put into practice.

No doubt our weal and woe are of very great importance in the estimation of our practical reason, and as far as our nature as sensible beings is concerned, our happiness is the only thing of consequence, provided it is estimated as reason especially requires, not by the transitory sensation, but by the influence that this has on our whole existence, and on our satisfaction therewith; but it is not absolutely the only thing of consequence. Man is a being who, as belonging to the world of sense, has wants, and so far his reason has an office which it cannot refuse, namely, to attend to the interest of his sensible nature, and to form practical maxims, even with a view to the happiness of this life, and if possible even to that of a future. But he is not so completely an animal as to be indifferent to what reason says on its own account, and to use it merely as an instrument for the satisfaction of his wants as a sensible being. For the possession of reason would not raise his worth above that of the brutes, if it is to serve him only for the same purpose that instinct serves in them; it would in that case be only a particular method which nature had employed to equip man for the same ends for which it has qualified brutes, without qualifying him for any higher purpose. No doubt once this arrangement of nature has been made for him he requires reason in order to take into consideration his weal and woe, but besides this he possesses it for a higher purpose also, namely, not only to take into consideration what is good or evil in itself, about which only pure reason, uninfluenced by any sensible interest, can judge, but also to distinguish this estimate thoroughly from the former and to make it the supreme condition thereof.

In estimating what is good or evil in itself, as distinguished from what can be so called only relatively, the following points are to be considered. Either a rational principle is already conceived, as of itself the determining principle of the will, without regard to possible objects of desire (and therefore by the more legislative form of the maxim), and in that case that principle is a practical a priori law, and pure reason is supposed to be practical of itself. The law in that case determines the will directly; the action conformed to it is good in itself; a will whose maxim always conforms to this law is good absolutely in every respect and is the supreme condition of all good. Or the maxim of the will is consequent on a determining principle of desire which presupposes an object of pleasure or pain, something therefore that pleases or displeases, and the maxim of reason that we should pursue the former and avoid the latter determines our actions as good relatively to our inclination, that is, good indirectly, (i.e., relatively to a different end to which they are means), and in that case these maxims can never be called laws, but may be called rational practical precepts. The end itself, the pleasure that we seek, is in the latter case not a good but a welfare; not a concept of reason, but an empirical concept of an object of sensation; but the use of the means thereto, that is, the action, is nevertheless called good (because rational deliberation is required for it), not however, good absolutely, but only relatively to our sensuous nature, with regard to its feelings of pleasure and displeasure; but the will whose maxim is affected thereby is not a pure will; this is directed only to that in which pure reason by itself can be practical.

This is the proper place to explain the paradox of method in a critique of practical reason, namely, that the concept of good and evil must not be determined before the moral law (of which it seems as if it must be the foundation), but only after it and by means of it. In fact, even if we did not know that the principle of morality is a pure a priori law determining the will, yet, that we may not assume principles quite gratuitously, we must, at least at first, leave it undecided, whether the will has merely empirical principles of determination, or whether it has not also pure a priori principles; for it is contrary to all rules of philosophical method to assume as decided that which is the very point in question. Supposing that we wished to begin with the concept of good, in order to deduce from it the laws of the will, then this concept of an object (as a good) would at the same time assign to us this object as the sole determining principle of the will. Now, since this concept had not any practical a priori law for its standard, the criterion of good or evil could not be placed in anything but the agreement of the object with our feeling of pleasure or pain; and the use of reason could only consist in determining in the first place this pleasure or pain in connexion with all the sensations of my existence, and in the second place the means of securing

to myself the object of the pleasure. Now, as experience alone can decide what conforms to the feeling of pleasure, and by hypothesis the practical law is to be based on this as a condition, it follows that the possibility of a priori practical laws would be at once excluded, because it was imagined to be necessary first of all to find an object the concept of which, as a good, should constitute the universal though empirical principle of determination of the will. But what it was necessary to inquire first of all was whether there is not an a priori determining principle of the will (and this could never be found anywhere but in a pure practical law, in so far as this law prescribes to maxims merely their form without regard to an object). Since, however, we laid the foundation of all practical law in an object determined by our conceptions of good and evil, whereas without a previous law that object could not be conceived by empirical concepts, we have deprived ourselves beforehand of the possibility of even conceiving a pure practical law. On the other hand, if we had first investigated the latter analytically, we should have found that it is not the concept of good as an object that determines the moral law and makes it possible, but that, on the contrary, it is the moral law that first determines the concept of good and makes it possible, so far as it deserves the name of good absolutely.

This remark, which only concerns the method of ultimate ethical inquiries, is of importance. It explains at once the occasion of all the mistakes of philosophers with respect to the supreme principle of morals. For they sought for an object of the will which they could make the matter and principle of a law (which consequently could not determine the will directly, but by means of that object referred to the feeling of pleasure or pain; whereas they ought first to have searched for a law that would determine the will a priori and directly, and afterwards determine the object in accordance with the will). Now, whether they placed this object of pleasure, which was to supply the supreme conception of goodness, in happiness, in perfection, in moral [feeling], or in the will of God, their principle in every case implied heteronomy, and they must inevitably come upon empirical conditions of a moral law, since their object, which was to be the immediate principle of the will, could not be called good or bad except in its immediate relation to feeling, which is always empirical. It is only a formal law- that is, one which prescribes to reason nothing more than the form of its universal legislation as the supreme condition of its maxims- that can be a priori a determining principle of practical reason. The ancients avowed this error without concealment by directing all their moral inquiries to the determination of the notion of the summum bonum, which they intended afterwards to make the determining principle of the will in the moral law; whereas it is only far later, when the moral law has been first established for itself, and shown to be the direct determining principle of the will, that this object can be presented to the will, whose form is now determined a priori; and this we shall undertake in the Dialectic of the pure practical reason. The moderns, with whom the question of the summum bonum has gone out of fashion, or at least seems to have become a secondary matter, hide the same error under vague (expressions as in many other cases). It shows itself, nevertheless, in their systems, as it always produces heteronomy of practical reason; and from this can never be derived a moral law giving universal commands.

Now, since the notions of good and evil, as consequences of the a priori determination of the will, imply also a pure practical principle, and therefore a causality of pure reason; hence they do not originally refer to objects (so as to be, for instance, special modes of the synthetic unity of the manifold of given intuitions in one consciousness) like the pure concepts of the understanding or categories of reason in its theoretic employment; on the contrary, they presuppose that objects are given; but they are all modes (modi) of a single category, namely, that of causality, the determining principle of which consists in the rational conception of a law, which as a law of freedom reason gives to itself, thereby a priori proving itself practical. However, as the actions on the one side come under a law which is not a physical law, but a law of freedom, and consequently belong to the conduct of beings in the world of intelligence, yet on the other side as events in the world of sense they belong to phenomena; hence the determinations of a practical reason are only possible in reference to the latter and, therefore, in accordance with the

categories of the understanding; not indeed with a view to any theoretic employment of it, i.e., so as to bring the manifold of (sensible) intuition under one consciousness a priori; but only to subject the manifold of desires to the unity of consciousness of a practical reason, giving it commands in the moral law, i.e., to a pure will a priori.

These categories of freedom- for so we choose to call them in contrast to those theoretic categories which are categories of physical nature- have an obvious advantage over the latter, inasmuch as the latter are only forms of thought which designate objects in an indefinite manner by means of universal concept of every possible intuition; the former, on the contrary, refer to the determination of a free elective will (to which indeed no exactly corresponding intuition can be assigned, but which has as its foundation a pure practical a priori law, which is not the case with any concepts belonging to the theoretic use of our cognitive faculties); hence, instead of the form of intuition (space and time), which does not lie in reason itself, but has to be drawn from another source, namely, the sensibility, these being elementary practical concepts have as their foundation the form of a pure will, which is given in reason and, therefore, in the thinking faculty itself. From this it happens that as all precepts of pure practical reason have to do only with the determination of the will, not with the physical conditions (of practical ability) of the execution of one's purpose, the practical a priori principles in relation to the supreme principle of freedom are at once cognitions, and have not to wait for intuitions in order to acquire significance, and that for this remarkable reason, because they themselves produce the reality of that to which they refer (the intention of the will), which is not the case with theoretical concepts. Only we must be careful to observe that these categories only apply to the practical reason; and thus they proceed in order from those which are as yet subject to sensible conditions and morally indeterminate to those which are free from sensible conditions and determined merely by the moral law.

Table of the Categories of Freedom relatively to the Notions of Good and Evil.

I. QUANTITY.

Subjective, according to maxims (practical opinions of the individual)

Objective, according to principles (Precepts)

A priori both objective and subjective principles of freedom (laws)

II. QUALITY.

Practical rules of action (praeceptivae)

Practical rules of omission (prohibitivae)

Practical rules of exceptions (exceptivae)

III. RELATION.

To personality

To the condition of the person.

Reciprocal, of one person to the others of the others.

IV. MODALITY.

The Permitted and the Forbidden

Duty and the contrary to duty.

Perfect and imperfect duty.

It will at once be observed that in this table freedom is considered as a sort of causality not subject to empirical principles of determination, in regard to actions possible by it, which are phenomena in the world of sense, and that consequently it is referred to the categories which concern its physical possibility, whilst yet each category is taken so universally that the determining principle of that causality can be placed outside the world of sense in freedom as a property of a being in the world of intelligence; and finally the categories of modality introduce the transition from practical principles generally to those of morality, but only problematically. These can be established dogmatically only by the moral law.

I add nothing further here in explanation of the present table, since it is intelligible enough of itself. A division of this kind based on principles is very useful in any science, both for the sake of thoroughness and intelligibility. Thus, for instance, we know from the preceding table and its first number what we must begin from in practical inquiries; namely, from the maxims which every one founds on his own inclinations; the precepts which hold for a species of rational beings so far as they agree in certain inclinations; and finally the law which holds for all without regard to their inclinations, etc. In this way we survey the whole plan of what has to be done, every question of practical philosophy that has to be answered, and also the order that is to be followed.

Of the Typic of the Pure Practical Judgement.

It is the notions of good and evil that first determine an object of the will. They themselves, however, are subject to a practical rule of reason which, if it is pure reason, determines the will a priori relatively to its object. Now, whether an action which is possible to us in the world of sense, comes under the rule or not, is a question to be decided by the practical judgement, by which what is said in the rule universally (in abstracto) is applied to an action in concreto. But since a practical rule of pure reason in the first place as practical concerns the existence of an object, and in the second place as a practical rule of pure reason implies necessity as regards the existence of the action and, therefore, is a practical law, not a physical law depending on empirical principles of determination, but a law of freedom by which the will is to be determined independently on anything empirical (merely by the conception of a law and its form), whereas all instances that can occur of possible actions can only be empirical, that is, belong to the experience of physical nature; hence, it seems absurd to expect to find in the world of sense a case which, while as such it depends only on the law of nature, yet admits of the application to it of a law of freedom, and to which we can apply the supersensible idea of the morally good which is to be exhibited in it in concreto. Thus, the judgement of the pure practical reason is subject to the same difficulties as that of the pure theoretical reason. The latter, however, had means at hand of escaping from these difficulties, because, in regard to the theoretical employment, intuitions were required to which pure concepts of the understanding could be applied, and such intuitions (though only of objects of the senses) can be given a priori and, therefore, as far as regards the union of the manifold in them, conforming to the pure a priori concepts of the understanding as schemata. On the other hand, the morally good is something whose object is supersensible; for which, therefore, nothing corresponding can be found in any sensible intuition. Judgement depending on laws of pure practical reason seems, therefore, to be subject to special difficulties arising from this, that a law of freedom is to be applied to actions, which are events taking place in the world of sense, and which, so far, belong to physical nature.

But here again is opened a favourable prospect for the pure practical judgement. When I subsume under a pure practical law an action possible to me in the world of sense, I am not concerned with the possibility of the action as an event in the world of sense. This is a matter that belongs to the decision of reason in its theoretic use according to the law of causality, which is a pure concept of the understanding, for which reason has a schema in the sensible intuition. Physical causality, or the condition under which it

takes place, belongs to the physical concepts, the schema of which is sketched by transcendental imagination. Here, however, we have to do, not with the schema of a case that occurs according to laws, but with the schema of a law itself (if the word is allowable here), since the fact that the will (not the action relatively to its effect) is determined by the law alone without any other principle, connects the notion of causality with quite different conditions from those which constitute physical connection.

The physical law being a law to which the objects of sensible intuition, as such, are subject, must have a schema corresponding to it- that is, a general procedure of the imagination (by which it exhibits a priori to the senses the pure concept of the understanding which the law determines). But the law of freedom (that is, of a causality not subject to sensible conditions), and consequently the concept of the unconditionally good, cannot have any intuition, nor consequently any schema supplied to it for the purpose of its application in concreto. Consequently the moral law has no faculty but the understanding to aid its application to physical objects (not the imagination); and the understanding for the purposes of the judgement can provide for an idea of the reason, not a schema of the sensibility, but a law, though only as to its form as law; such a law, however, as can be exhibited in concreto in objects of the senses, and therefore a law of nature. We can therefore call this law the type of the moral law.

The rule of the judgement according to laws of pure practical reason is this: ask yourself whether, if the action you propose were to take place by a law of the system of nature of which you were yourself a part, you could regard it as possible by your own will. Everyone does, in fact, decide by this rule whether actions are morally good or evil. Thus, people say: “If everyone permitted himself to deceive, when he thought it to his advantage; or thought himself justified in shortening his life as soon as he was thoroughly weary of it; or looked with perfect indifference on the necessity of others; and if you belonged to such an order of things, would you do so with the assent of your own will?” Now everyone knows well that if he secretly allows himself to deceive, it does not follow that everyone else does so; or if, unobserved, he is destitute of compassion, others would not necessarily be so to him; hence, this comparison of the maxim of his actions with a universal law of nature is not the determining principle of his will. Such a law is, nevertheless, a type of the estimation of the maxim on moral principles. If the maxim of the action is not such as to stand the test of the form of a universal law of nature, then it is morally impossible. This is the judgement even of common sense; for its ordinary judgements, even those of experience, are always based on the law of nature. It has it therefore always at hand, only that in cases where causality from freedom is to be criticised, it makes that law of nature only the type of a law of freedom, because, without something which it could use as an example in a case of experience, it could not give the law of a pure practical reason its proper use in practice.

It is therefore allowable to use the system of the world of sense as the type of a supersensible system of things, provided I do not transfer to the latter the intuitions, and what depends on them, but merely apply to it the form of law in general (the notion of which occurs even in the commonest use of reason, but cannot be definitely known a priori for any other purpose than the pure practical use of reason); for laws, as such, are so far identical, no matter from what they derive their determining principles.

Further, since of all the supersensible absolutely nothing [is known] except freedom (through the moral law), and this only so far as it is inseparably implied in that law, and moreover all supersensible objects to which reason might lead us, following the guidance of that law, have still no reality for us, except for the purpose of that law, and for the use of mere practical reason; and as reason is authorized and even compelled to use physical nature (in its pure form as an object of the understanding) as the type of the judgement; hence, the present remark will serve to guard against reckoning amongst concepts themselves that which belongs only to the typic of concepts. This, namely, as a typic of the judgement, guards against the empiricism of practical reason, which founds the practical notions of good and evil merely on experienced consequences (so-called happiness). No doubt happiness and the infinite advantages which would result from a will determined by self-love, if this will at the same time erected itself into a

universal law of nature, may certainly serve as a perfectly suitable type of the morally good, but it is not identical with it. The same typic guards also against the mysticism of practical reason, which turns what served only as a symbol into a schema, that is, proposes to provide for the moral concepts actual intuitions, which, however, are not sensible (intuitions of an invisible Kingdom of God), and thus plunges into the transcendent. What is befitting the use of the moral concepts is only the rationalism of the judgement, which takes from the sensible system of nature only what pure reason can also conceive of itself, that is, conformity to law, and transfers into the supersensible nothing but what can conversely be actually exhibited by actions in the world of sense according to the formal rule of a law of nature. However, the caution against empiricism of practical reason is much more important; for mysticism is quite reconcilable with the purity and sublimity of the moral law, and, besides, it is not very natural or agreeable to common habits of thought to strain one's imagination to supersensible intuitions; and hence the danger on this side is not so general. Empiricism, on the contrary, cuts up at the roots the morality of intentions (in which, and not in actions only, consists the high worth that men can and ought to give to themselves), and substitutes for duty something quite different, namely, an empirical interest, with which the inclinations generally are secretly leagued; and empiricism, moreover, being on this account allied with all the inclinations which (no matter what fashion they put on) degrade humanity when they are raised to the dignity of a supreme practical principle; and as these, nevertheless, are so favourable to everyone's feelings, it is for that reason much more dangerous than mysticism, which can never constitute a lasting condition of any great number of persons.

CHAPTER III. Of the Motives of Pure Practical Reason.

What is essential in the moral worth of actions is that the moral law should directly determine the will. If the determination of the will takes place in conformity indeed to the moral law, but only by means of a feeling, no matter of what kind, which has to be presupposed in order that the law may be sufficient to determine the will, and therefore not for the sake of the law, then the action will possess legality, but not morality. Now, if we understand by motive (elater animi) the subjective ground of determination of the will of a being whose reason does not necessarily conform to the objective law, by virtue of its own nature, then it will follow, first, that no motives can be attributed to the Divine will, and that the motives of the human will (as well as that of every created rational being) can never be anything else than the moral law, and consequently that the objective principle of determination must always and alone be also the subjectively sufficient determining principle of the action, if this is not merely to fulfil the letter of the law, without containing its spirit. *

* We may say of every action that conforms to the law, but is not done for the sake of the law, that it is morally good in the letter, not in the spirit (the intention).

Since, then, for the purpose of giving the moral law influence over the will, we must not seek for any other motives that might enable us to dispense with the motive of the law itself, because that would produce mere hypocrisy, without consistency; and it is even dangerous to allow other motives (for instance, that of interest) even to co-operate along with the moral law; hence nothing is left us but to determine carefully in what way the moral law becomes a motive, and what effect this has upon the faculty of desire. For as to the question how a law can be directly and of itself a determining principle of the will (which is the essence of morality), this is, for human reason, an insoluble problem and identical with the question: how a free will is possible. Therefore what we have to show a priori is not why the moral law in itself supplies a motive, but what effect it, as such, produces (or, more correctly speaking, must produce) on the mind.

The essential point in every determination of the will by the moral law is that being a free will it is determined simply by the moral law, not only without the co-operation of sensible impulses, but even to the rejection of all such, and to the checking of all inclinations so far as they might be opposed to that law. So far, then, the effect of the moral law as a motive is only negative, and this motive can be known a priori to be such. For all inclination and every sensible impulse is founded on feeling, and the negative effect produced on feeling (by the check on the inclinations) is itself feeling; consequently, we can see a priori that the moral law, as a determining principle of the will, must by thwarting all our inclinations produce a feeling which may be called pain; and in this we have the first, perhaps the only, instance in which we are able from a priori considerations to determine the relation of a cognition (in this case of pure practical reason) to the feeling of pleasure or displeasure. All the inclinations together (which can be reduced to a tolerable system, in which case their satisfaction is called happiness) constitute self-regard (solipsismus). This is either the self-love that consists in an excessive fondness for oneself (philautia), or satisfaction with oneself (arrogantia). The former is called particularly selfishness; the latter self-conceit. Pure practical reason only checks selfishness, looking on it as natural and active in us even prior to the moral law, so far as to limit it to the condition of agreement with this law, and then it is called rational self-love. But self-conceit reason strikes down altogether, since all claims to self-esteem which precede agreement with the moral law are vain and unjustifiable, for the certainty of a state of mind that coincides with this law is the first condition of personal worth (as we shall presently show more clearly), and prior to this conformity any pretension to worth is false and unlawful. Now the propensity to self-esteem is one of the inclinations which the moral law checks, inasmuch as that esteem rests only on

morality. Therefore the moral law breaks down self-conceit. But as this law is something positive in itself, namely, the form of an intellectual causality, that is, of freedom, it must be an object of respect; for, by opposing the subjective antagonism of the inclinations, it weakens self-conceit; and since it even breaks down, that is, humiliates, this conceit, it is an object of the highest respect and, consequently, is the foundation of a positive feeling which is not of empirical origin, but is known a priori. Therefore respect for the moral law is a feeling which is produced by an intellectual cause, and this feeling is the only one that we know quite a priori and the necessity of which we can perceive.

In the preceding chapter we have seen that everything that presents itself as an object of the will prior to the moral law is by that law itself, which is the supreme condition of practical reason, excluded from the determining principles of the will which we have called the unconditionally good; and that the mere practical form which consists in the adaptation of the maxims to universal legislation first determines what is good in itself and absolutely, and is the basis of the maxims of a pure will, which alone is good in every respect. However, we find that our nature as sensible beings is such that the matter of desire (objects of inclination, whether of hope or fear) first presents itself to us; and our pathologically affected self, although it is in its maxims quite unfit for universal legislation; yet, just as if it constituted our entire self, strives to put its pretensions forward first, and to have them acknowledged as the first and original. This propensity to make ourselves in the subjective determining principles of our choice serve as the objective determining principle of the will generally may be called self-love; and if this pretends to be legislative as an unconditional practical principle it may be called self-conceit. Now the moral law, which alone is truly objective (namely, in every respect), entirely excludes the influence of self-love on the supreme practical principle, and indefinitely checks the self-conceit that prescribes the subjective conditions of the former as laws. Now whatever checks our self-conceit in our own judgement humiliates; therefore the moral law inevitably humbles every man when he compares with it the physical propensities of his nature. That, the idea of which as a determining principle of our will humbles us in our self-consciousness, awakes respect for itself, so far as it is itself positive and a determining principle. Therefore the moral law is even subjectively a cause of respect. Now since everything that enters into self-love belongs to inclination, and all inclination rests on feelings, and consequently whatever checks all the feelings together in self-love has necessarily, by this very circumstance, an influence on feeling; hence we comprehend how it is possible to perceive a priori that the moral law can produce an effect on feeling, in that it excludes the inclinations and the propensity to make them the supreme practical condition, i.e., self-love, from all participation in the supreme legislation. This effect is on one side merely negative, but on the other side, relatively to the restricting principle of pure practical reason, it is positive. No special kind of feeling need be assumed for this under the name of a practical or moral feeling as antecedent to the moral law and serving as its foundation.

The negative effect on feeling (unpleasantness) is pathological, like every influence on feeling and like every feeling generally. But as an effect of the consciousness of the moral law, and consequently in relation to a supersensible cause, namely, the subject of pure practical reason which is the supreme lawgiver, this feeling of a rational being affected by inclinations is called humiliation (intellectual self-depreciation); but with reference to the positive source of this humiliation, the law, it is respect for it. There is indeed no feeling for this law; but inasmuch as it removes the resistance out of the way, this removal of an obstacle is, in the judgement of reason, esteemed equivalent to a positive help to its causality. Therefore this feeling may also be called a feeling of respect for the moral law, and for both reasons together a moral feeling.

While the moral law, therefore, is a formal determining principle of action by practical pure reason, and is moreover a material though only objective determining principle of the objects of action as called good and evil, it is also a subjective determining principle, that is, a motive to this action, inasmuch as it has influence on the morality of the subject and produces a feeling conducive to the influence of the law

on the will. There is here in the subject no antecedent feeling tending to morality. For this is impossible, since every feeling is sensible, and the motive of moral intention must be free from all sensible conditions. On the contrary, while the sensible feeling which is at the bottom of all our inclinations is the condition of that impression which we call respect, the cause that determines it lies in the pure practical reason; and this impression therefore, on account of its origin, must be called, not a pathological but a practical effect. For by the fact that the conception of the moral law deprives self-love of its influence, and self-conceit of its illusion, it lessens the obstacle to pure practical reason and produces the conception of the superiority of its objective law to the impulses of the sensibility; and thus, by removing the counterpoise, it gives relatively greater weight to the law in the judgement of reason (in the case of a will affected by the aforesaid impulses). Thus the respect for the law is not a motive to morality, but is morality itself subjectively considered as a motive, inasmuch as pure practical reason, by rejecting all the rival pretensions of self-love, gives authority to the law, which now alone has influence. Now it is to be observed that as respect is an effect on feeling, and therefore on the sensibility, of a rational being, it presupposes this sensibility, and therefore also the finiteness of such beings on whom the moral law imposes respect; and that respect for the law cannot be attributed to a supreme being, or to any being free from all sensibility, in whom, therefore, this sensibility cannot be an obstacle to practical reason.

This feeling (which we call the moral feeling) is therefore produced simply by reason. It does not serve for the estimation of actions nor for the foundation of the objective moral law itself, but merely as a motive to make this of itself a maxim. But what name could we more suitably apply to this singular feeling which cannot be compared to any pathological feeling? It is of such a peculiar kind that it seems to be at the disposal of reason only, and that pure practical reason.

Respect applies always to persons only- not to things. The latter may arouse inclination, and if they are animals (e.g., horses, dogs, etc.), even love or fear, like the sea, a volcano, a beast of prey; but never respect. Something that comes nearer to this feeling is admiration, and this, as an affection, astonishment, can apply to things also, e.g., lofty mountains, the magnitude, number, and distance of the heavenly bodies, the strength and swiftness of many animals, etc. But all this is not respect. A man also may be an object to me of love, fear, or admiration, even to astonishment, and yet not be an object of respect. His jocose humour, his courage and strength, his power from the rank he has amongst others, may inspire me with sentiments of this kind, but still inner respect for him is wanting. Fontenelle says, “I bow before a great man, but my mind does not bow.” I would add, before an humble plain man, in whom I perceive uprightness of character in a higher degree than I am conscious of in myself,- my mind bows whether I choose it or not, and though I bear my head never so high that he may not forget my superior rank. Why is this? Because his example exhibits to me a law that humbles my self-conceit when I compare it with my conduct: a law, the practicability of obedience to which I see proved by fact before my eyes. Now, I may even be conscious of a like degree of uprightness, and yet the respect remains. For since in man all good is defective, the law made visible by an example still humbles my pride, my standard being furnished by a man whose imperfections, whatever they may be, are not known to me as my own are, and who therefore appears to me in a more favourable light. Respect is a tribute which we cannot refuse to merit, whether we will or not; we may indeed outwardly withhold it, but we cannot help feeling it inwardly.

Respect is so far from being a feeling of pleasure that we only reluctantly give way to it as regards a man. We try to find out something that may lighten the burden of it, some fault to compensate us for the humiliation which such an example causes. Even the dead are not always secure from this criticism, especially if their example appears inimitable. Even the moral law itself in its solemn majesty is exposed to this endeavour to save oneself from yielding it respect. Can it be thought that it is for any other reason that we are so ready to reduce it to the level of our familiar inclination, or that it is for any other reason that we all take such trouble to make it out to be the chosen precept of our own interest well understood, but that we want to be free from the deterrent respect which shows us our own unworthiness with such

severity? Nevertheless, on the other hand, so little is there pain in it that if once one has laid aside self-conceit and allowed practical influence to that respect, he can never be satisfied with contemplating the majesty of this law, and the soul believes itself elevated in proportion as it sees the holy law elevated above it and its frail nature. No doubt great talents and activity proportioned to them may also occasion respect or an analogous feeling. It is very proper to yield it to them, and then it appears as if this sentiment were the same thing as admiration. But if we look closer we shall observe that it is always uncertain how much of the ability is due to native talent, and how much to diligence in cultivating it. Reason represents it to us as probably the fruit of cultivation, and therefore as meritorious, and this notably reduces our self-conceit, and either casts a reproach on us or urges us to follow such an example in the way that is suitable to us. This respect, then, which we show to such a person (properly speaking, to the law that his example exhibits) is not mere admiration; and this is confirmed also by the fact that when the common run of admirers think they have learned from any source the badness of such a man's character (for instance Voltaire's) they give up all respect for him; whereas the true scholar still feels it at least with regard to his talents, because he is himself engaged in a business and a vocation which make imitation of such a man in some degree a law.

Respect for the moral law is, therefore, the only and the undoubted moral motive, and this feeling is directed to no object, except on the ground of this law. The moral law first determines the will objectively and directly in the judgement of reason; and freedom, whose causality can be determined only by the law, consists just in this, that it restricts all inclinations, and consequently self-esteem, by the condition of obedience to its pure law. This restriction now has an effect on feeling, and produces the impression of displeasure which can be known a priori from the moral law. Since it is so far only a negative effect which, arising from the influence of pure practical reason, checks the activity of the subject, so far as it is determined by inclinations, and hence checks the opinion of his personal worth (which, in the absence of agreement with the moral law, is reduced to nothing); hence, the effect of this law on feeling is merely humiliation. We can, therefore, perceive this a priori, but cannot know by it the force of the pure practical law as a motive, but only the resistance to motives of the sensibility. But since the same law is objectively, that is, in the conception of pure reason, an immediate principle of determination of the will, and consequently this humiliation takes place only relatively to the purity of the law; hence, the lowering of the pretensions of moral self-esteem, that is, humiliation on the sensible side, is an elevation of the moral, i.e., practical, esteem for the law itself on the intellectual side; in a word, it is respect for the law, and therefore, as its cause is intellectual, a positive feeling which can be known a priori. For whatever diminishes the obstacles to an activity furthers this activity itself. Now the recognition of the moral law is the consciousness of an activity of practical reason from objective principles, which only fails to reveal its effect in actions because subjective (pathological) causes hinder it. Respect for the moral law then must be regarded as a positive, though indirect, effect of it on feeling, inasmuch as this respect weakens the impeding influence of inclinations by humiliating self-esteem; and hence also as a subjective principle of activity, that is, as a motive to obedience to the law, and as a principle of the maxims of a life conformable to it. From the notion of a motive arises that of an interest, which can never be attributed to any being unless it possesses reason, and which signifies a motive of the will in so far as it is conceived by the reason. Since in a morally good will the law itself must be the motive, the moral interest is a pure interest of practical reason alone, independent of sense. On the notion of an interest is based that of a maxim. This, therefore, is morally good only in case it rests simply on the interest taken in obedience to the law. All three notions, however, that of a motive, of an interest, and of a maxim, can be applied only to finite beings. For they all suppose a limitation of the nature of the being, in that the subjective character of his choice does not of itself agree with the objective law of a practical reason; they suppose that the being requires to be impelled to action by something, because an internal obstacle opposes itself. Therefore they cannot be applied to the Divine will.

There is something so singular in the unbounded esteem for the pure moral law, apart from all advantage, as it is presented for our obedience by practical reason, the voice of which makes even the boldest sinner tremble and compels him to hide himself from it, that we cannot wonder if we find this influence of a mere intellectual idea on the feelings quite incomprehensible to speculative reason and have to be satisfied with seeing so much of this a priori that such a feeling is inseparably connected with the conception of the moral law in every finite rational being. If this feeling of respect were pathological, and therefore were a feeling of pleasure based on the inner sense, it would be in vain to try to discover a connection of it with any idea a priori. But [it] is a feeling that applies merely to what is practical, and depends on the conception of a law, simply as to its form, not on account of any object, and therefore cannot be reckoned either as pleasure or pain, and yet produces an interest in obedience to the law, which we call the moral interest, just as the capacity of taking such an interest in the law (or respect for the moral law itself) is properly the moral feeling.

The consciousness of a free submission of the will to the law, yet combined with an inevitable constraint put upon all inclinations, though only by our own reason, is respect for the law. The law that demands this respect and inspires it is clearly no other than the moral (for no other precludes all inclinations from exercising any direct influence on the will). An action which is objectively practical according to this law, to the exclusion of every determining principle of inclination, is duty, and this by reason of that exclusion includes in its concept practical obligation, that is, a determination to actions, however reluctantly they may be done. The feeling that arises from the consciousness of this obligation is not pathological, as would be a feeling produced by an object of the senses, but practical only, that is, it is made possible by a preceding (objective) determination of the will and a causality of the reason. As submission to the law, therefore, that is, as a command (announcing constraint for the sensibly affected subject), it contains in it no pleasure, but on the contrary, so far, pain in the action. On the other hand, however, as this constraint is exercised merely by the legislation of our own reason, it also contains something elevating, and this subjective effect on feeling, inasmuch as pure practical reason is the sole cause of it, may be called in this respect self-approbation, since we recognize ourselves as determined thereto solely by the law without any interest, and are now conscious of a quite different interest subjectively produced thereby, and which is purely practical and free; and our taking this interest in an action of duty is not suggested by any inclination, but is commanded and actually brought about by reason through the practical law; whence this feeling obtains a special name, that of respect.

The notion of duty, therefore, requires in the action, objectively, agreement with the law, and, subjectively in its maxim, that respect for the law shall be the sole mode in which the will is determined thereby. And on this rests the distinction between the consciousness of having acted according to duty and from duty, that is, from respect for the law. The former (legality) is possible even if inclinations have been the determining principles of the will; but the latter (morality), moral worth, can be placed only in this, that the action is done from duty, that is, simply for the sake of the law. *

* If we examine accurately the notion of respect for persons as it has been already laid down, we shall perceive that it always rests on the consciousness of a duty which an example shows us, and that respect, therefore, can never have any but a moral ground, and that it is very good and even, in a psychological point of view, very useful for the knowledge of mankind, that whenever we use this expression we should attend to this secret and marvellous, yet often recurring, regard which men in their judgement pay to the moral law.

It is of the greatest importance to attend with the utmost exactness in all moral judgements to the subjective principle of all maxims, that all the morality of actions may be placed in the necessity of acting from duty and from respect for the law, not from love and inclination for that which the actions are to produce. For men and all created rational beings moral necessity is constraint, that is obligation, and every action based on it is to be conceived as a duty, not as a proceeding previously pleasing, or likely to

be pleasing to us of our own accord. As if indeed we could ever bring it about that without respect for the law, which implies fear, or at least apprehension of transgression, we of ourselves, like the independent Deity, could ever come into possession of holiness of will by the coincidence of our will with the pure moral law becoming as it were part of our nature, never to be shaken (in which case the law would cease to be a command for us, as we could never be tempted to be untrue to it).

The moral law is in fact for the will of a perfect being a law of holiness, but for the will of every finite rational being a law of duty, of moral constraint, and of the determination of its actions by respect for this law and reverence for its duty. No other subjective principle must be assumed as a motive, else while the action might chance to be such as the law prescribes, yet, as does not proceed from duty, the intention, which is the thing properly in question in this legislation, is not moral.

It is a very beautiful thing to do good to men from love to them and from sympathetic good will, or to be just from love of order; but this is not yet the true moral maxim of our conduct which is suitable to our position amongst rational beings as men, when we pretend with fanciful pride to set ourselves above the thought of duty, like volunteers, and, as if we were independent on the command, to want to do of our own good pleasure what we think we need no command to do. We stand under a discipline of reason and in all our maxims must not forget our subjection to it, nor withdraw anything therefrom, or by an egotistic presumption diminish aught of the authority of the law (although our own reason gives it) so as to set the determining principle of our will, even though the law be conformed to, anywhere else but in the law itself and in respect for this law. Duty and obligation are the only names that we must give to our relation to the moral law. We are indeed legislative members of a moral kingdom rendered possible by freedom, and presented to us by reason as an object of respect; but yet we are subjects in it, not the sovereign, and to mistake our inferior position as creatures, and presumptuously to reject the authority of the moral law, is already to revolt from it in spirit, even though the letter of it is fulfilled.

With this agrees very well the possibility of such a command as: Love God above everything, and thy neighbour as thyself. * For as a command it requires respect for a law which commands love and does not leave it to our own arbitrary choice to make this our principle. Love to God, however, considered as an inclination (pathological love), is impossible, for He is not an object of the senses. The same affection towards men is possible no doubt, but cannot be commanded, for it is not in the power of any man to love anyone at command; therefore it is only practical love that is meant in that pith of all laws. To love God means, in this sense, to like to do His commandments; to love one’s neighbour means to like to practise all duties towards him. But the command that makes this a rule cannot command us to have this disposition in actions conformed to duty, but only to endeavour after it. For a command to like to do a thing is in itself contradictory, because if we already know of ourselves what we are bound to do, and if further we are conscious of liking to do it, a command would be quite needless; and if we do it not willingly, but only out of respect for the law, a command that makes this respect the motive of our maxim would directly counteract the disposition commanded. That law of all laws, therefore, like all the moral precepts of the Gospel, exhibits the moral disposition in all its perfection, in which, viewed as an ideal of holiness, it is not attainable by any creature, but yet is the pattern which we should strive to approach, and in an uninterrupted but infinite progress become like to. In fact, if a rational creature could ever reach this point, that he thoroughly likes to do all moral laws, this would mean that there does not exist in him even the possibility of a desire that would tempt him to deviate from them; for to overcome such a desire always costs the subject some sacrifice and therefore requires self-compulsion, that is, inward constraint to something that one does not quite like to do; and no creature can ever reach this stage of moral disposition. For, being a creature, and therefore always dependent with respect to what he requires for complete satisfaction, he can never be quite free from desires and inclinations, and as these rest on physical causes, they can never of themselves coincide with the moral law, the sources of which are quite different; and therefore they make it necessary to found the mental disposition of one’s maxims on moral

obligation, not on ready inclination, but on respect, which demands obedience to the law, even though one may not like it; not on love, which apprehends no inward reluctance of the will towards the law. Nevertheless, this latter, namely, love to the law (which would then cease to be a command, and then morality, which would have passed subjectively into holiness, would cease to be virtue) must be the constant though unattainable goal of his endeavours. For in the case of what we highly esteem, but yet (on account of the consciousness of our weakness) dread, the increased facility of satisfying it changes the most reverential awe into inclination, and respect into love; at least this would be the perfection of a disposition devoted to the law, if it were possible for a creature to attain it.

* This law is in striking contrast with the principle of private happiness which some make the supreme principle of morality. This would be expressed thus: Love thyself above everything, and God and thy neighbour for thine own sake.

This reflection is intended not so much to clear up the evangelical command just cited, in order to prevent religious fanaticism in regard to love of God, but to define accurately the moral disposition with regard directly to our duties towards men, and to check, or if possible prevent, a merely moral fanaticism which infects many persons. The stage of morality on which man (and, as far as we can see, every rational creature) stands is respect for the moral law. The disposition that he ought to have in obeying this is to obey it from duty, not from spontaneous inclination, or from an endeavour taken up from liking and unbidden; and this proper moral condition in which he can always be is virtue, that is, moral disposition militant, and not holiness in the fancied possession of a perfect purity of the disposition of the will. It is nothing but moral fanaticism and exaggerated self-conceit that is infused into the mind by exhortation to actions as noble, sublime, and magnanimous, by which men are led into the delusion that it is not duty, that is, respect for the law, whose yoke (an easy yoke indeed, because reason itself imposes it on us) they must bear, whether they like it or not, that constitutes the determining principle of their actions, and which always humbles them while they obey it; fancying that those actions are expected from them, not from duty, but as pure merit. For not only would they, in imitating such deeds from such a principle, not have fulfilled the spirit of the law in the least, which consists not in the legality of the action (without regard to principle), but in the subjection of the mind to the law; not only do they make the motives pathological (seated in sympathy or self-love), not moral (in the law), but they produce in this way a vain, high-flying, fantastic way of thinking, flattering themselves with a spontaneous goodness of heart that needs neither spur nor bridle, for which no command is needed, and thereby forgetting their obligation, which they ought to think of rather than merit. Indeed actions of others which are done with great sacrifice, and merely for the sake of duty, may be praised as noble and sublime, but only so far as there are traces which suggest that they were done wholly out of respect for duty and not from excited feelings. If these, however, are set before anyone as examples to be imitated, respect for duty (which is the only true moral feeling) must be employed as the motive- this severe holy precept which never allows our vain self-love to dally with pathological impulses (however analogous they may be to morality), and to take a pride in meritorious worth. Now if we search we shall find for all actions that are worthy of praise a law of duty which commands, and does not leave us to choose what may be agreeable to our inclinations. This is the only way of representing things that can give a moral training to the soul, because it alone is capable of solid and accurately defined principles.

If fanaticism in its most general sense is a deliberate over stepping of the limits of human reason, then moral fanaticism is such an over stepping of the bounds that practical pure reason sets to mankind, in that it forbids us to place the subjective determining principle of correct actions, that is, their moral motive, in anything but the law itself, or to place the disposition which is thereby brought into the maxims in anything but respect for this law, and hence commands us to take as the supreme vital principle of all morality in men the thought of duty, which strikes down all arrogance as well as vain self-love.

If this is so, it is not only writers of romance or sentimental educators (although they may be zealous

opponents of sentimentalism), but sometimes even philosophers, nay, even the severest of all, the Stoics, that have brought in moral fanaticism instead of a sober but wise moral discipline, although the fanaticism of the latter was more heroic, that of the former of an insipid, effeminate character; and we may, without hypocrisy, say of the moral teaching of the Gospel, that it first, by the purity of its moral principle, and at the same time by its suitability to the limitations of finite beings, brought all the good conduct of men under the discipline of a duty plainly set before their eyes, which does not permit them to indulge in dreams of imaginary moral perfections; and that it also set the bounds of humility (that is, self-knowledge) to self-conceit as well as to self-love, both which are ready to mistake their limits.

Duty! Thou sublime and mighty name that dost embrace nothing charming or insinuating, but requirest submission, and yet seekest not to move the will by threatening aught that would arouse natural aversion or terror, but merely holdest forth a law which of itself finds entrance into the mind, and yet gains reluctant reverence (though not always obedience), a law before which all inclinations are dumb, even though they secretly counter-work it; what origin is there worthy of thee, and where is to be found the root of thy noble descent which proudly rejects all kindred with the inclinations; a root to be derived from which is the indispensable condition of the only worth which men can give themselves?

It can be nothing less than a power which elevates man above himself (as a part of the world of sense), a power which connects him with an order of things that only the understanding can conceive, with a world which at the same time commands the whole sensible world, and with it the empirically determinable existence of man in time, as well as the sum total of all ends (which totality alone suits such unconditional practical laws as the moral). This power is nothing but personality, that is, freedom and independence on the mechanism of nature, yet, regarded also as a faculty of a being which is subject to special laws, namely, pure practical laws given by its own reason; so that the person as belonging to the sensible world is subject to his own personality as belonging to the intelligible [supersensible] world. It is then not to be wondered at that man, as belonging to both worlds, must regard his own nature in reference to its second and highest characteristic only with reverence, and its laws with the highest respect.

On this origin are founded many expressions which designate the worth of objects according to moral ideas. The moral law is holy (inviolable). Man is indeed unholy enough, but he must regard humanity in his own person as holy. In all creation every thing one chooses and over which one has any power, may be used merely as means; man alone, and with him every rational creature, is an end in himself. By virtue of the autonomy of his freedom he is the subject of the moral law, which is holy. Just for this reason every will, even every person's own individual will, in relation to itself, is restricted to the condition of agreement with the autonomy of the rational being, that is to say, that it is not to be subject to any purpose which cannot accord with a law which might arise from the will of the passive subject himself; the latter is, therefore, never to be employed merely as means, but as itself also, concurrently, an end. We justly attribute this condition even to the Divine will, with regard to the rational beings in the world, which are His creatures, since it rests on their personality, by which alone they are ends in themselves.

This respect-inspiring idea of personality which sets before our eyes the sublimity of our nature (in its higher aspect), while at the same time it shows us the want of accord of our conduct with it and thereby strikes down self-conceit, is even natural to the commonest reason and easily observed. Has not every even moderately honourable man sometimes found that, where by an otherwise inoffensive lie he might either have withdrawn himself from an unpleasant business, or even have procured some advantages for a loved and well-deserving friend, he has avoided it solely lest he should despise himself secretly in his own eyes? When an upright man is in the greatest distress, which he might have avoided if he could only have disregarded duty, is he not sustained by the consciousness that he has maintained humanity in its proper dignity in his own person and honoured it, that he has no reason to be ashamed of himself in his own sight, or to dread the inward glance of self-examination? This consolation is not happiness, it is not

even the smallest part of it, for no one would wish to have occasion for it, or would, perhaps, even desire a life in such circumstances. But he lives, and he cannot endure that he should be in his own eyes unworthy of life. This inward peace is therefore merely negative as regards what can make life pleasant; it is, in fact, only the escaping the danger of sinking in personal worth, after everything else that is valuable has been lost. It is the effect of a respect for something quite different from life, something in comparison and contrast with which life with all its enjoyment has no value. He still lives only because it is his duty, not because he finds anything pleasant in life.

Such is the nature of the true motive of pure practical reason; it is no other than the pure moral law itself, inasmuch as it makes us conscious of the sublimity of our own supersensible existence and subjectively produces respect for their higher nature in men who are also conscious of their sensible existence and of the consequent dependence of their pathologically very susceptible nature. Now with this motive may be combined so many charms and satisfactions of life that even on this account alone the most prudent choice of a rational Epicurean reflecting on the greatest advantage of life would declare itself on the side of moral conduct, and it may even be advisable to join this prospect of a cheerful enjoyment of life with that supreme motive which is already sufficient of itself; but only as a counterpoise to the attractions which vice does not fail to exhibit on the opposite side, and not so as, even in the smallest degree, to place in this the proper moving power when duty is in question. For that would be just the same as to wish to taint the purity of the moral disposition in its source. The majesty of duty has nothing to do with enjoyment of life; it has its special law and its special tribunal, and though the two should be never so well shaken together to be given well mixed, like medicine, to the sick soul, yet they will soon separate of themselves; and if they do not, the former will not act; and although physical life might gain somewhat in force, the moral life would fade away irrecoverably.

Critical Examination of the Analytic of Pure Practical Reason.

By the critical examination of a science, or of a portion of it, which constitutes a system by itself, I understand the inquiry and proof why it must have this and no other systematic form, when we compare it with another system which is based on a similar faculty of knowledge. Now practical and speculative reason are based on the same faculty, so far as both are pure reason. Therefore the difference in their systematic form must be determined by the comparison of both, and the ground of this must be assigned.

The Analytic of pure theoretic reason had to do with the knowledge of such objects as may have been given to the understanding, and was obliged therefore to begin from intuition and consequently (as this is always sensible) from sensibility; and only after that could advance to concepts (of the objects of this intuition), and could only end with principles after both these had preceded. On the contrary, since practical reason has not to do with objects so as to know them, but with its own faculty of realizing them (in accordance with the knowledge of them), that is, with a will which is a causality, inasmuch as reason contains its determining principle; since, consequently, it has not to furnish an object of intuition, but as practical reason has to furnish only a law (because the notion of causality always implies the reference to a law which determines the existence of the many in relation to one another); hence a critical examination of the Analytic of reason, if this is to be practical reason (and this is properly the problem), must begin with the possibility of practical principles a priori. Only after that can it proceed to concepts of the objects of a practical reason, namely, those of absolute good and evil, in order to assign them in accordance with those principles (for prior to those principles they cannot possibly be given as good and evil by any faculty of knowledge), and only then could the section be concluded with the last chapter, that, namely, which treats of the relation of the pure practical reason to the sensibility and of its necessary influence thereon, which is a priori cognisable, that is, of the moral sentiment. Thus the Analytic of the practical pure reason has the whole extent of the conditions of its use in common with the theoretical, but in reverse order. The Analytic of pure theoretic reason was divided into transcendental Aesthetic and transcendental Logic, that of the practical reversely into Logic and Aesthetic of pure practical reason (if I

may, for the sake of analogy merely, use these designations, which are not quite suitable). This logic again was there divided into the Analytic of concepts and that of principles: here into that of principles and concepts. The Aesthetic also had in the former case two parts, on account of the two kinds of sensible intuition; here the sensibility is not considered as a capacity of intuition at all, but merely as feeling (which can be a subjective ground of desire), and in regard to it pure practical reason admits no further division.

It is also easy to see the reason why this division into two parts with its subdivision was not actually adopted here (as one might have been induced to attempt by the example of the former critique). For since it is pure reason that is here considered in its practical use, and consequently as proceeding from a priori principles, and not from empirical principles of determination, hence the division of the analytic of pure practical reason must resemble that of a syllogism; namely, proceeding from the universal in the major premiss (the moral principle), through a minor premiss containing a subsumption of possible actions (as good or evil) under the former, to the conclusion, namely, the subjective determination of the will (an interest in the possible practical good, and in the maxim founded on it). He who has been able to convince himself of the truth of the positions occurring in the Analytic will take pleasure in such comparisons; for they justly suggest the expectation that we may perhaps some day be able to discern the unity of the whole faculty of reason (theoretical as well as practical) and be able to derive all from one principle, which, is what human reason inevitably demands, as it finds complete satisfaction only in a perfectly systematic unity of its knowledge.

If now we consider also the contents of the knowledge that we can have of a pure practical reason, and by means of it, as shown by the Analytic, we find, along with a remarkable analogy between it and the theoretical, no less remarkable differences. As regards the theoretical, the faculty of a pure rational cognition a priori could be easily and evidently proved by examples from sciences (in which, as they put their principles to the test in so many ways by methodical use, there is not so much reason as in common knowledge to fear a secret mixture of empirical principles of cognition). But, that pure reason without the admixture of any empirical principle is practical of itself, this could only be shown from the commonest practical use of reason, by verifying the fact, that every man’s natural reason acknowledges the supreme practical principle as the supreme law of his will- a law completely a priori and not depending on any sensible data. It was necessary first to establish and verify the purity of its origin, even in the judgement of this common reason, before science could take it in hand to make use of it, as a fact, that is, prior to all disputation about its possibility, and all the consequences that may be drawn from it. But this circumstance may be readily explained from what has just been said; because practical pure reason must necessarily begin with principles, which therefore must be the first data, the foundation of all science, and cannot be derived from it. It was possible to effect this verification of moral principles as principles of a pure reason quite well, and with sufficient certainty, by a single appeal to the judgement of common sense, for this reason, that anything empirical which might slip into our maxims as a determining principle of the will can be detected at once by the feeling of pleasure or pain which necessarily attaches to it as exciting desire; whereas pure practical reason positively refuses to admit this feeling into its principle as a condition. The heterogeneity of the determining principles (the empirical and rational) is clearly detected by this resistance of a practically legislating reason against every admixture of inclination, and by a peculiar kind of sentiment, which, however, does not precede the legislation of the practical reason, but, on the contrary, is produced by this as a constraint, namely, by the feeling of a respect such as no man has for inclinations of whatever kind but for the law only; and it is detected in so marked and prominent a manner that even the most uninstructed cannot fail to see at once in an example presented to him, that empirical principles of volition may indeed urge him to follow their attractions, but that he can never be expected to obey anything but the pure practical law of reason alone.

The distinction between the doctrine of happiness and the doctrine of morality, in the former of which

empirical principles constitute the entire foundation, while in the second they do not form the smallest part of it, is the first and most important office of the Analytic of pure practical reason; and it must proceed in it with as much exactness and, so to speak, scrupulousness, as any geometer in his work. The philosopher, however, has greater difficulties to contend with here (as always in rational cognition by means of concepts merely without construction), because he cannot take any intuition as a foundation (for a pure noumenon). He has, however, this advantage that, like the chemist, he can at any time make an experiment with every man's practical reason for the purpose of distinguishing the moral (pure) principle of determination from the empirical; namely, by adding the moral law (as a determining principle) to the empirically affected will (e.g., that of the man who would be ready to lie because he can gain something thereby). It is as if the analyst added alkali to a solution of lime in hydrochloric acid, the acid at once forsakes the lime, combines with the alkali, and the lime is precipitated. Just in the same way, if to a man who is otherwise honest (or who for this occasion places himself only in thought in the position of an honest man), we present the moral law by which he recognises the worthlessness of the liar, his practical reason (in forming a judgement of what ought to be done) at once forsakes the advantage, combines with that which maintains in him respect for his own person (truthfulness), and the advantage after it has been separated and washed from every particle of reason (which is altogether on the side of duty) is easily weighed by everyone, so that it can enter into combination with reason in other cases, only not where it could be opposed to the moral law, which reason never forsakes, but most closely unites itself with.

But it does not follow that this distinction between the principle of happiness and that of morality is an opposition between them, and pure practical reason does not require that we should renounce all claim to happiness, but only that the moment duty is in question we should take no account of happiness. It may even in certain respects be a duty to provide for happiness; partly, because (including skill, wealth, riches) it contains means for the fulfilment of our duty; partly, because the absence of it (e.g., poverty) implies temptations to transgress our duty. But it can never be an immediate duty to promote our happiness, still less can it be the principle of all duty. Now, as all determining principles of the will, except the law of pure practical reason alone (the moral law), are all empirical and, therefore, as such, belong to the principle of happiness, they must all be kept apart from the supreme principle of morality and never be incorporated with it as a condition; since this would be to destroy all moral worth just as much as any empirical admixture with geometrical principles would destroy the certainty of mathematical evidence, which in Plato's opinion is the most excellent thing in mathematics, even surpassing their utility.

Instead, however, of the deduction of the supreme principle of pure practical reason, that is, the explanation of the possibility of such a knowledge a priori, the utmost we were able to do was to show that if we saw the possibility of the freedom of an efficient cause, we should also see not merely the possibility, but even the necessity, of the moral law as the supreme practical law of rational beings, to whom we attribute freedom of causality of their will; because both concepts are so inseparably united that we might define practical freedom as independence of the will on anything but the moral law. But we cannot perceive the possibility of the freedom of an efficient cause, especially in the world of sense; we are fortunate if only we can be sufficiently assured that there is no proof of its impossibility, and are now, by the moral law which postulates it, compelled and therefore authorized to assume it. However, there are still many who think that they can explain this freedom on empirical principles, like any other physical faculty, and treat it as a psychological property, the explanation of which only requires a more exact study of the nature of the soul and of the motives of the will, and not as a transcendental predicate of the causality of a being that belongs to the world of sense (which is really the point). They thus deprive us of the grand revelation which we obtain through practical reason by means of the moral law, the revelation, namely, of a supersensible world by the realization of the otherwise transcendent concept of freedom, and by this deprive us also of the moral law itself, which admits no empirical principle of determination. Therefore it will be necessary to add something here as a protection against this delusion and to exhibit

empiricism in its naked superficiality.

The notion of causality as physical necessity, in opposition to the same notion as freedom, concerns only the existence of things so far as it is determinable in time, and, consequently, as phenomena, in opposition to their causality as things in themselves. Now if we take the attributes of existence of things in time for attributes of things in themselves (which is the common view), then it is impossible to reconcile the necessity of the causal relation with freedom; they are contradictory. For from the former it follows that every event, and consequently every action that takes place at a certain point of time, is a necessary result of what existed in time preceding. Now as time past is no longer in my power, hence every action that I perform must be the necessary result of certain determining grounds which are not in my power, that is, at the moment in which I am acting I am never free. Nay, even if I assume that my whole existence is independent on any foreign cause (for instance, God), so that the determining principles of my causality, and even of my whole existence, were not outside myself, yet this would not in the least transform that physical necessity into freedom. For at every moment of time I am still under the necessity of being determined to action by that which is not in my power, and the series of events infinite a parte priori, which I only continue according to a pre-determined order and could never begin of myself, would be a continuous physical chain, and therefore my causality would never be freedom.

If, then, we would attribute freedom to a being whose existence is determined in time, we cannot except him from the law of necessity as to all events in his existence and, consequently, as to his actions also; for that would be to hand him over to blind chance. Now as this law inevitably applies to all the causality of things, so far as their existence is determinable in time, it follows that if this were the mode in which we had also to conceive the existence of these things in themselves, freedom must be rejected as a vain and impossible conception. Consequently, if we would still save it, no other way remains but to consider that the existence of a thing, so far as it is determinable in time, and therefore its causality, according to the law of physical necessity, belong to appearance, and to attribute freedom to the same being as a thing in itself. This is certainly inevitable, if we would retain both these contradictory concepts together; but in application, when we try to explain their combination in one and the same action, great difficulties present themselves which seem to render such a combination impracticable.

When I say of a man who commits a theft that, by the law of causality, this deed is a necessary result of the determining causes in preceding time, then it was impossible that it could not have happened; how then can the judgement, according to the moral law, make any change, and suppose that it could have been omitted, because the law says that it ought to have been omitted; that is, how can a man be called quite free at the same moment, and with respect to the same action in which he is subject to an inevitable physical necessity? Some try to evade this by saying that the causes that determine his causality are of such a kind as to agree with a comparative notion of freedom. According to this, that is sometimes called a free effect, the determining physical cause of which lies within the acting thing itself, e.g., that which a projectile performs when it is in free motion, in which case we use the word freedom, because while it is in flight it is not urged by anything external; or as we call the motion of a clock a free motion, because it moves its hands itself, which therefore do not require to be pushed by external force; so although the actions of man are necessarily determined by causes which precede in time, we yet call them free, because these causes are ideas produced by our own faculties, whereby desires are evoked on occasion of circumstances, and hence actions are wrought according to our own pleasure. This is a wretched subterfuge with which some persons still let themselves be put off, and so think they have solved, with a petty word- jugglery, that difficult problem, at the solution of which centuries have laboured in vain, and which can therefore scarcely be found so completely on the surface. In fact, in the question about the freedom which must be the foundation of all moral laws and the consequent responsibility, it does not matter whether the principles which necessarily determine causality by a physical law reside within the subject or without him, or in the former case whether these principles are instinctive or are conceived by

reason, if, as is admitted by these men themselves, these determining ideas have the ground of their existence in time and in the antecedent state, and this again in an antecedent, etc. Then it matters not that these are internal; it matters not that they have a psychological and not a mechanical causality, that is, produce actions by means of ideas and not by bodily movements; they are still determining principles of the causality of a being whose existence is determinable in time, and therefore under the necessitation of conditions of past time, which therefore, when the subject has to act, are no longer in his power. This may imply psychological freedom (if we choose to apply this term to a merely internal chain of ideas in the mind), but it involves physical necessity and, therefore, leaves no room for transcendental freedom, which must be conceived as independence on everything empirical, and, consequently, on nature generally, whether it is an object of the internal sense considered in time only, or of the external in time and space. Without this freedom (in the latter and true sense), which alone is practical a priori, no moral law and no moral imputation are possible. Just for this reason the necessity of events in time, according to the physical law of causality, may be called the mechanism of nature, although we do not mean by this that things which are subject to it must be really material machines. We look here only to the necessity of the connection of events in a time-series as it is developed according to the physical law, whether the subject in which this development takes place is called automaton materiale when the mechanical being is moved by matter, or with Leibnitz spirituale when it is impelled by ideas; and if the freedom of our will were no other than the latter (say the psychological and comparative, not also transcendental, that is, absolute), then it would at bottom be nothing better than the freedom of a turnspit, which, when once it is wound up, accomplishes its motions of itself.

Now, in order to remove in the supposed case the apparent contradiction between freedom and the mechanism of nature in one and the same action, we must remember what was said in the Critique of Pure Reason, or what follows therefrom; viz., that the necessity of nature, which cannot co-exist with the freedom of the subject, appertains only to the attributes of the thing that is subject to time-conditions, consequently only to those of the acting subject as a phenomenon; that therefore in this respect the determining principles of every action of the same reside in what belongs to past time and is no longer in his power (in which must be included his own past actions and the character that these may determine for him in his own eyes as a phenomenon). But the very same subject, being on the other side conscious of himself as a thing in himself, considers his existence also in so far as it is not subject to time-conditions, and regards himself as only determinable by laws which he gives himself through reason; and in this his existence nothing is antecedent to the determination of his will, but every action, and in general every modification of his existence, varying according to his internal sense, even the whole series of his existence as a sensible being is in the consciousness of his supersensible existence nothing but the result, and never to be regarded as the determining principle, of his causality as a noumenon. In this view now the rational being can justly say of every unlawful action that he performs, that he could very well have left it undone; although as appearance it is sufficiently determined in the past, and in this respect is absolutely necessary; for it, with all the past which determines it, belongs to the one single phenomenon of his character which he makes for himself, in consequence of which he imputes the causality of those appearances to himself as a cause independent on sensibility.

With this agree perfectly the judicial sentences of that wonderful faculty in us which we call conscience. A man may use as much art as he likes in order to paint to himself an unlawful act, that he remembers, as an unintentional error, a mere oversight, such as one can never altogether avoid, and therefore as something in which he was carried away by the stream of physical necessity, and thus to make himself out innocent, yet he finds that the advocate who speaks in his favour can by no means silence the accuser within, if only he is conscious that at the time when he did this wrong he was in his senses, that is, in possession of his freedom; and, nevertheless, he accounts for his error from some bad habits, which by gradual neglect of attention he has allowed to grow upon him to such a degree that he can regard his error

as its natural consequence, although this cannot protect him from the blame and reproach which he casts upon himself. This is also the ground of repentance for a long past action at every recollection of it; a painful feeling produced by the moral sentiment, and which is practically void in so far as it cannot serve to undo what has been done. (Hence Priestley, as a true and consistent fatalist, declares it absurd, and he deserves to be commended for this candour more than those who, while they maintain the mechanism of the will in fact, and its freedom in words only, yet wish it to be thought that they include it in their system of compromise, although they do not explain the possibility of such moral imputation.) But the pain is quite legitimate, because when the law of our intelligible [supersensible] existence (the moral law) is in question, reason recognizes no distinction of time, and only asks whether the event belongs to me, as my act, and then always morally connects the same feeling with it, whether it has happened just now or long ago. For in reference to the supersensible consciousness of its existence (i.e., freedom) the life of sense is but a single phenomenon, which, inasmuch as it contains merely manifestations of the mental disposition with regard to the moral law (i.e., of the character), must be judged not according to the physical necessity that belongs to it as phenomenon, but according to the absolute spontaneity of freedom. It may therefore be admitted that, if it were possible to have so profound an insight into a man's mental character as shown by internal as well as external actions as to know all its motives, even the smallest, and likewise all the external occasions that can influence them, we could calculate a man's conduct for the future with as great certainty as a lunar or solar eclipse; and nevertheless we may maintain that the man is free. In fact, if we were capable of a further glance, namely, an intellectual intuition of the same subject (which indeed is not granted to us, and instead of it we have only the rational concept), then we should perceive that this whole chain of appearances in regard to all that concerns the moral laws depends on the spontaneity of the subject as a thing in itself, of the determination of which no physical explanation can be given. In default of this intuition, the moral law assures us of this distinction between the relation of our actions as appearance to our sensible nature, and the relation of this sensible nature to the supersensible substratum in us. In this view, which is natural to our reason, though inexplicable, we can also justify some judgements which we passed with all conscientiousness, and which yet at first sight seem quite opposed to all equity. There are cases in which men, even with the same education which has been profitable to others, yet show such early depravity, and so continue to progress in it to years of manhood, that they are thought to be born villains, and their character altogether incapable of improvement; and nevertheless they are judged for what they do or leave undone, they are reproached for their faults as guilty; nay, they themselves (the children) regard these reproaches as well founded, exactly as if in spite of the hopeless natural quality of mind ascribed to them, they remained just as responsible as any other man. This could not happen if we did not suppose that whatever springs from a man's choice (as every action intentionally performed undoubtedly does) has as its foundation a free causality, which from early youth expresses its character in its manifestations (i.e., actions). These, on account of the uniformity of conduct, exhibit a natural connection, which however does not make the vicious quality of the will necessary, but on the contrary, is the consequence of the evil principles voluntarily adopted and unchangeable, which only make it so much the more culpable and deserving of punishment. There still remains a difficulty in the combination of freedom with the mechanism of nature in a being belonging to the world of sense; a difficulty which, even after all the foregoing is admitted, threatens freedom with complete destruction. But with this danger there is also a circumstance that offers hope of an issue still favourable to freedom; namely, that the same difficulty presses much more strongly (in fact as we shall presently see, presses only) on the system that holds the existence determinable in time and space to be the existence of things in themselves; it does not therefore oblige us to give up our capital supposition of the ideality of time as a mere form of sensible intuition, and consequently as a mere manner of representation which is proper to the subject as belonging to the world of sense; and therefore it only requires that this view be reconciled with this idea.

The difficulty is as follows: Even if it is admitted that the supersensible subject can be free with respect to a given action, although, as a subject also belonging to the world of sense, he is under mechanical conditions with respect to the same action, still, as soon as we allow that God as universal first cause is also the cause of the existence of substance (a proposition which can never be given up without at the same time giving up the notion of God as the Being of all beings, and therewith giving up his all sufficiency, on which everything in theology depends), it seems as if we must admit that a man's actions have their determining principle in something which is wholly out of his power- namely, in the causality of a Supreme Being distinct from himself and on whom his own existence and the whole determination of his causality are absolutely dependent. In point of fact, if a man's actions as belonging to his modifications in time were not merely modifications of him as appearance, but as a thing in itself, freedom could not be saved. Man would be a marionette or an automaton, like Vaucanson's, prepared and wound up by the Supreme Artist. Self-consciousness would indeed make him a thinking automaton; but the consciousness of his own spontaneity would be mere delusion if this were mistaken for freedom, and it would deserve this name only in a comparative sense, since, although the proximate determining causes of its motion and a long series of their determining causes are internal, yet the last and highest is found in a foreign hand. Therefore I do not see how those who still insist on regarding time and space as attributes belonging to the existence of things in themselves, can avoid admitting the fatality of actions; or if (like the otherwise acute Mendelssohn) they allow them to be conditions necessarily belonging to the existence of finite and derived beings, but not to that of the infinite Supreme Being, I do not see on what ground they can justify such a distinction, or, indeed, how they can avoid the contradiction that meets them, when they hold that existence in time is an attribute necessarily belonging to finite things in themselves, whereas God is the cause of this existence, but cannot be the cause of time (or space) itself (since this must be presupposed as a necessary a priori condition of the existence of things); and consequently as regards the existence of these things. His causality must be subject to conditions and even to the condition of time; and this would inevitably bring in everything contradictory to the notions of His infinity and independence. On the other hand, it is quite easy for us to draw the distinction between the attribute of the divine existence of being independent on all time-conditions, and that of a being of the world of sense, the distinction being that between the existence of a being in itself and that of a thing in appearance. Hence, if this ideality of time and space is not adopted, nothing remains but Spinozism, in which space and time are essential attributes of the Supreme Being Himself, and the things dependent on Him (ourselves, therefore, included) are not substances, but merely accidents inhering in Him; since, if these things as His effects exist in time only, this being the condition of their existence in themselves, then the actions of these beings must be simply His actions which He performs in some place and time. Thus, Spinozism, in spite of the absurdity of its fundamental idea, argues more consistently than the creation theory can, when beings assumed to be substances, and beings in themselves existing in time, are regarded as effects of a Supreme Cause, and yet as not [belonging] to Him and His action, but as separate substances.

The above-mentioned difficulty is resolved briefly and clearly as follows: If existence in time is a mere sensible mode of representation belonging to thinking beings in the world and consequently does not apply to them as things in themselves, then the creation of these beings is a creation of things in themselves, since the notion of creation does not belong to the sensible form of representation of existence or to causality, but can only be referred to noumena. Consequently, when I say of beings in the world of sense that they are created, I so far regard them as noumena. As it would be a contradiction, therefore, to say that God is a creator of appearances, so also it is a contradiction to say that as creator He is the cause of actions in the world of sense, and therefore as appearances, although He is the cause of the existence of the acting beings (which are noumena). If now it is possible to affirm freedom in spite of the natural mechanism of actions as appearances (by regarding existence in time as something that belongs only to appearances, not to things in themselves), then the circumstance that the acting beings are creatures cannot

make the slightest difference, since creation concerns their supersensible and not their sensible existence, and, therefore, cannot be regarded as the determining principle of the appearances. It would be quite different if the beings in the world as things in themselves existed in time, since in that case the creator of substance would be at the same time the author of the whole mechanism of this substance.

Of so great importance is the separation of time (as well as space) from the existence of things in themselves which was effected in the Critique of the Pure Speculative Reason.

It may be said that the solution here proposed involves great difficulty in itself and is scarcely susceptible of a lucid exposition. But is any other solution that has been attempted, or that may be attempted, easier and more intelligible? Rather might we say that the dogmatic teachers of metaphysics have shown more shrewdness than candour in keeping this difficult point out of sight as much as possible, in the hope that if they said nothing about it, probably no one would think of it. If science is to be advanced, all difficulties must be laid open, and we must even search for those that are hidden, for every difficulty calls forth a remedy, which cannot be discovered without science gaining either in extent or in exactness; and thus even obstacles become means of increasing the thoroughness of science. On the other hand, if the difficulties are intentionally concealed, or merely removed by palliatives, then sooner or later they burst out into incurable mischiefs, which bring science to ruin in an absolute scepticism.

Since it is, properly speaking, the notion of freedom alone amongst all the ideas of pure speculative reason that so greatly enlarges our knowledge in the sphere of the supersensible, though only of our practical knowledge, I ask myself why it exclusively possesses so great fertility, whereas the others only designate the vacant space for possible beings of the pure understanding, but are unable by any means to define the concept of them. I presently find that as I cannot think anything without a category, I must first look for a category for the rational idea of freedom with which I am now concerned; and this is the category of causality; and although freedom, a concept of the reason, being a transcendent concept, cannot have any intuition corresponding to it, yet the concept of the understanding- for the synthesis of which the former demands the unconditioned- (namely, the concept of causality) must have a sensible intuition given, by which first its objective reality is assured. Now, the categories are all divided into two classes- the mathematical, which concern the unity of synthesis in the conception of objects, and the dynamical, which refer to the unity of synthesis in the conception of the existence of objects. The former (those of magnitude and quality) always contain a synthesis of the homogeneous, and it is not possible to find in this the unconditioned antecedent to what is given in sensible intuition as conditioned in space and time, as this would itself have to belong to space and time, and therefore be again still conditioned. Whence it resulted in the Dialectic of Pure Theoretic Reason that the opposite methods of attaining the unconditioned and the totality of the conditions were both wrong. The categories of the second class (those of causality and of the necessity of a thing) did not require this homogeneity (of the conditioned and the condition in synthesis), since here what we have to explain is not how the intuition is compounded from a manifold in it, but only how the existence of the conditioned object corresponding to it is added to the existence of the condition (added, namely, in the understanding as connected therewith); and in that case it was allowable to suppose in the supersensible world the unconditioned antecedent to the altogether conditioned in the world of sense (both as regards the causal connection and the contingent existence of things themselves), although this unconditioned remained indeterminate, and to make the synthesis transcendent. Hence, it was found in the Dialectic of the Pure Speculative Reason that the two apparently opposite methods of obtaining for the conditioned the unconditioned were not really contradictory, e.g., in the synthesis of causality to conceive for the conditioned in the series of causes and effects of the sensible world, a causality which has no sensible condition, and that the same action which, as belonging to the world of sense, is always sensibly conditioned, that is, mechanically necessary, yet at the same time may be derived from a causality not sensibly conditioned- being the causality of the acting being as belonging to the supersensible world- and may consequently be conceived as free. Now, the only point in question was

to change this may be into is; that is, that we should be able to show in an actual case, as it were by a fact, that certain actions imply such a causality (namely, the intellectual, sensibly unconditioned), whether they are actual or only commanded, that is, objectively necessary in a practical sense. We could not hope to find this connexion in actions actually given in experience as events of the sensible world, since causality with freedom must always be sought outside the world of sense in the world of intelligence. But things of sense are the only things offered to our perception and observation. Hence, nothing remained but to find an incontestable objective principle of causality which excludes all sensible conditions: that is, a principle in which reason does not appeal further to something else as a determining ground of its causality, but contains this determining ground itself by means of that principle, and in which therefore it is itself as pure reason practical. Now, this principle had not to be searched for or discovered; it had long been in the reason of all men, and incorporated in their nature, and is the principle of morality. Therefore, that unconditioned causality, with the faculty of it, namely, freedom, is no longer merely indefinitely and problematically thought (this speculative reason could prove to be feasible), but is even as regards the law of its causality definitely and assertorially known; and with it the fact that a being (I myself), belonging to the world of sense, belongs also to the supersensible world, this is also positively known, and thus the reality of the supersensible world is established and in practical respects definitely given, and this definiteness, which for theoretical purposes would be transcendent, is for practical purposes immanent. We could not, however, make a similar step as regards the second dynamical idea, namely, that of a necessary being. We could not rise to it from the sensible world without the aid of the first dynamical idea. For if we attempted to do so, we should have ventured to leave at a bound all that is given to us, and to leap to that of which nothing is given us that can help us to effect the connection of such a supersensible being with the world of sense (since the necessary being would have to be known as given outside ourselves). On the other hand, it is now obvious that this connection is quite possible in relation to our own subject, inasmuch as I know myself to be on the one side as an intelligible [supersensible] being determined by the moral law (by means of freedom), and on the other side as acting in the world of sense. It is the concept of freedom alone that enables us to find the unconditioned and intelligible for the conditioned and sensible without going out of ourselves. For it is our own reason that by means of the supreme and unconditional practical law knows that itself and the being that is conscious of this law (our own person) belong to the pure world of understanding, and moreover defines the manner in which, as such, it can be active. In this way it can be understood why in the whole faculty of reason it is the practical reason only that can help us to pass beyond the world of sense and give us knowledge of a supersensible order and connection, which, however, for this very reason cannot be extended further than is necessary for pure practical purposes.

Let me be permitted on this occasion to make one more remark, namely, that every step that we make with pure reason, even in the practical sphere where no attention is paid to subtle speculation, nevertheless accords with all the material points of the Critique of the Theoretical Reason as closely and directly as if each step had been thought out with deliberate purpose to establish this confirmation. Such a thorough agreement, wholly unsought for and quite obvious (as anyone can convince himself, if he will only carry moral inquiries up to their principles), between the most important proposition of practical reason and the often seemingly too subtle and needless remarks of the Critique of the Speculative Reason, occasions surprise and astonishment, and confirms the maxim already recognized and praised by others, namely, that in every scientific inquiry we should pursue our way steadily with all possible exactness and frankness, without caring for any objections that may be raised from outside its sphere, but, as far as we can, to carry out our inquiry truthfully and completely by itself. Frequent observation has convinced me that, when such researches are concluded, that which in one part of them appeared to me very questionable, considered in relation to other extraneous doctrines, when I left this doubtfulness out of sight for a time and only attended to the business in hand until it was completed, at last was unexpectedly

found to agree perfectly with what had been discovered separately without the least regard to those doctrines, and without any partiality or prejudice for them. Authors would save themselves many errors and much labour lost (because spent on a delusion) if they could only resolve to go to work with more frankness.

BOOK II. Dialectic of Pure Practical Reason.

CHAPTER I. Of a Dialectic of Pure Practical Reason Generally.

Pure reason always has its dialetic, whether it is considered in its speculative or its practical employment; for it requires the absolute totality of the ‘conditions of what is given conditioned, and this can only be found in things in themselves. But as all conceptions of things in themselves must be referred to intuitions, and with us men these can never be other than sensible and hence can never enable us to know objects as things in themselves but only as appearances, and since the unconditioned can never be found in this chain of appearances which consists only of conditioned and conditions; thus from applying this rational idea of the totality of the conditions (in other words of the unconditioned) to appearances, there arises an inevitable illusion, as if these latter were things in themselves (for in the absence of a warning critique they are always regarded as such). This illusion would never be noticed as delusive if it did not betray itself by a conflict of reason with itself, when it applies to appearances its fundamental principle of presupposing the unconditioned to everything conditioned. By this, however, reason is compelled to trace this illusion to its source, and search how it can be removed, and this can only be done by a complete critical examination of the whole pure faculty of reason; so that the antinomy of the pure reason which is manifest in its dialectic is in fact the most beneficial error into which human reason could ever have fallen, since it at last drives us to search for the key to escape from this labyrinth; and when this key is found, it further discovers that which we did not seek but yet had need of, namely, a view into a higher and an immutable order of things, in which we even now are, and in which we are thereby enabled by definite precepts to continue to live according to the highest dictates of reason.

It may be seen in detail in the Critique of Pure Reason how in its speculative employment this natural dialectic is to be solved, and how the error which arises from a very natural illusion may be guarded against. But reason in its practical use is not a whit better off. As pure practical reason, it likewise seeks to find the unconditioned for the practically conditioned (which rests on inclinations and natural wants), and this is not as the determining principle of the will, but even when this is given (in the moral law) it seeks the unconditioned totality of the object of pure practical reason under the name of the summum bonum.

To define this idea practically, i.e., sufficiently for the maxims of our rational conduct, is the business of practical wisdom, and this again as a science is philosophy, in the sense in which the word was understood by the ancients, with whom it meant instruction in the conception in which the summum bonum was to be placed, and the conduct by which it was to be obtained. It would be well to leave this word in its ancient signification as a doctrine of the summum bonum, so far as reason endeavours to make this into a science. For on the one hand the restriction annexed would suit the Greek expression (which signifies the love of wisdom), and yet at the same time would be sufficient to embrace under the name of philosophy the love of science: that is to say, of all speculative rational knowledge, so far as it is serviceable to reason, both for that conception and also for the practical principle determining our conduct, without letting out of sight the main end, on account of which alone it can be called a doctrine of practical wisdom. On the other hand, it would be no harm to deter the self-conceit of one who ventures to claim the title of philosopher by holding before him in the very definition a standard of self-estimation which would very much lower his pretensions. For a teacher of wisdom would mean something more than a scholar who has not come so far as to guide himself, much less to guide others, with certain expectation of attaining so high an end: it would mean a master in the knowledge of wisdom, which implies more than a modest man would claim for himself. Thus philosophy as well as wisdom would always remain an ideal, which objectively is presented complete in reason alone, while subjectively for the person it is only the goal of his unceasing endeavours; and no one would be justified in professing to be in possession

of it so as to assume the name of philosopher who could not also show its infallible effects in his own person as an example (in his self-mastery and the unquestioned interest that he takes pre-eminently in the general good), and this the ancients also required as a condition of deserving that honourable title.

We have another preliminary remark to make respecting the dialectic of the pure practical reason, on the point of the definition of the summum bonum (a successful solution of which dialectic would lead us to expect, as in case of that of the theoretical reason, the most beneficial effects, inasmuch as the self-contradictions of pure practical reason honestly stated, and not concealed, force us to undertake a complete critique of this faculty).

The moral law is the sole determining principle of a pure will. But since this is merely formal (viz., as prescribing only the form of the maxim as universally legislative), it abstracts as a determining principle from all matter that is to say, from every object of volition. Hence, though the summum bonum may be the whole object of a pure practical reason, i.e., a pure will, yet it is not on that account to be regarded as its determining principle; and the moral law alone must be regarded as the principle on which that and its realization or promotion are aimed at. This remark is important in so delicate a case as the determination of moral principles, where the slightest misinterpretation perverts men's minds. For it will have been seen from the Analytic that, if we assume any object under the name of a good as a determining principle of the will prior to the moral law and then deduce from it the supreme practical principle, this would always introduce heteronomy and crush out the moral principle.

It is, however, evident that if the notion of the summum bonum includes that of the moral law as its supreme condition, then the summum bonum would not merely be an object, but the notion of it and the conception of its existence as possible by our own practical reason would likewise be the determining principle of the will, since in that case the will is in fact determined by the moral law which is already included in this conception, and by no other object, as the principle of autonomy requires. This order of the conceptions of determination of the will must not be lost sight of, as otherwise we should misunderstand ourselves and think we had fallen into a contradiction, while everything remains in perfect harmony.

CHAPTER II. Of the Dialectic of Pure Reason in defining the

Conception of the "Summum Bonum".

The conception of the summum itself contains an ambiguity which might occasion needless disputes if we did not attend to it. The summum may mean either the supreme (supremum) or the perfect (consummatum). The former is that condition which is itself unconditioned, i.e., is not subordinate to any other (originarium); the second is that whole which is not a part of a greater whole of the same kind (perfectissimum). It has been shown in the Analytic that virtue (as worthiness to be happy) is the supreme condition of all that can appear to us desirable, and consequently of all our pursuit of happiness, and is therefore the supreme good. But it does not follow that it is the whole and perfect good as the object of the desires of rational finite beings; for this requires happiness also, and that not merely in the partial eyes of the person who makes himself an end, but even in the judgement of an impartial reason, which regards persons in general as ends in themselves. For to need happiness, to deserve it, and yet at the same time not to participate in it, cannot be consistent with the perfect volition of a rational being possessed at the same time of all power, if, for the sake of experiment, we conceive such a being. Now inasmuch as virtue and happiness together constitute the possession of the summum bonum in a person, and the distribution of happiness in exact proportion to morality (which is the worth of the person, and his worthiness to be happy) constitutes the summum bonum of a possible world; hence this summum bonum expresses the whole, the perfect good, in which, however, virtue as the condition is always the supreme good, since it has no condition above it; whereas happiness, while it is pleasant to the possessor of it, is not of itself absolutely and in all respects good, but always presupposes morally right behaviour as its condition.

When two elements are necessarily united in one concept, they must be connected as reason and consequence, and this either so that their unity is considered as analytical (logical connection), or as synthetical (real connection) the former following the law of identity, the latter that of causality. The connection of virtue and happiness may therefore be understood in two ways: either the endeavour to be virtuous and the rational pursuit of happiness are not two distinct actions, but absolutely identical, in which case no maxim need be made the principle of the former, other than what serves for the latter; or the connection consists in this, that virtue produces happiness as something distinct from the consciousness of virtue, as a cause produces an effect.

The ancient Greek schools were, properly speaking, only two, and in determining the conception of the summum bonum these followed in fact one and the same method, inasmuch as they did not allow virtue and happiness to be regarded as two distinct elements of the summum bonum, and consequently sought the unity of the principle by the rule of identity; but they differed as to which of the two was to be taken as the fundamental notion. The Epicurean said: "To be conscious that one's maxims lead to happiness is virtue"; the Stoic said: "To be conscious of one's virtue is happiness." With the former, Prudence was equivalent to morality; with the latter, who chose a higher designation for virtue, morality alone was true wisdom.

While we must admire the men who in such early times tried all imaginable ways of extending the domain of philosophy, we must at the same time lament that their acuteness was unfortunately misapplied in trying to trace out identity between two extremely heterogeneous notions, those of happiness and virtue. But it agrees with the dialectical spirit of their times (and subtle minds are even now sometimes misled in the same way) to get rid of irreconcilable differences in principle by seeking to change them into a mere contest about words, and thus apparently working out the identity of the notion under different names, and this usually occurs in cases where the combination of heterogeneous principles lies so deep or so high, or would require so complete a transformation of the doctrines assumed in the rest of the philosophical system, that men are afraid to penetrate deeply into the real difference and prefer treating it as a difference

in questions of form.

While both schools sought to trace out the identity of the practical principles of virtue and happiness, they were not agreed as to the way in which they tried to force this identity, but were separated infinitely from one another, the one placing its principle on the side of sense, the other on that of reason; the one in the consciousness of sensible wants, the other in the independence of practical reason on all sensible grounds of determination. According to the Epicurean, the notion of virtue was already involved in the maxim: “To promote one’s own happiness”; according to the Stoics, on the other hand, the feeling of happiness was already contained in the consciousness of virtue. Now whatever is contained in another notion is identical with part of the containing notion, but not with the whole, and moreover two wholes may be specifically distinct, although they consist of the same parts; namely if the parts are united into a whole in totally different ways. The Stoic maintained that the virtue was the whole summum bonum, and happiness only the consciousness of possessing it, as making part of the state of the subject. The Epicurean maintained that happiness was the whole summum bonum, and virtue only the form of the maxim for its pursuit; viz., the rational use of the means for attaining it.

Now it is clear from the Analytic that the maxims of virtue and those of private happiness are quite heterogeneous as to their supreme practical principle, and, although they belong to one summum bonum which together they make possible, yet they are so far from coinciding that they restrict and check one another very much in the same subject. Thus the question: “How is the summum bonum practically possible?” still remains an unsolved problem, notwithstanding all the attempts at coalition that have hitherto been made. The Analytic has, however, shown what it is that makes the problem difficult to solve; namely, that happiness and morality are two specifically distinct elements of the summum bonum and, therefore, their combination cannot be analytically cognised (as if the man that seeks his own happiness should find by mere analysis of his conception that in so acting he is virtuous, or as if the man that follows virtue should in the consciousness of such conduct find that he is already happy ipso facto), but must be a synthesis of concepts. Now since this combination is recognised as a priori, and therefore as practically necessary, and consequently not as derived from experience, so that the possibility of the summum bonum does not rest on any empirical principle, it follows that the deduction [legitimation] of this concept must be transcendental. It is a priori (morally) necessary to produce the summum bonum by freedom of will: therefore the condition of its possibility must rest solely on a priori principles of cognition.

I. The Antinomy of Practical Reason.

In the summum bonum which is practical for us, i.e., to be realized by our will, virtue and happiness are thought as necessarily combined, so that the one cannot be assumed by pure practical reason without the other also being attached to it. Now this combination (like every other) is either analytical or synthetical. It has been shown that it cannot be analytical; it must then be synthetical and, more particularly, must be conceived as the connection of cause and effect, since it concerns a practical good, i.e., one that is possible by means of action; consequently either the desire of happiness must be the motive to maxims of virtue, or the maxim of virtue must be the efficient cause of happiness. The first is absolutely impossible, because (as was proved in the Analytic) maxims which place the determining principle of the will in the desire of personal happiness are not moral at all, and no virtue can be founded on them. But the second is also impossible, because the practical connection of causes and effects in the world, as the result of the determination of the will, does not depend upon the moral dispositions of the will, but on the knowledge of the laws of nature and the physical power to use them for one’s purposes; consequently we cannot expect in the world by the most punctilious observance of the moral laws any necessary connection of happiness with virtue adequate to the summum bonum. Now, as the promotion of this summum bonum, the conception of which contains this connection, is a priori a necessary object of our will and inseparably attached to the moral law, the impossibility of the former must prove the falsity of the latter. If then the supreme good is not possible by practical rules, then the moral law also which

commands us to promote it is directed to vain imaginary ends and must consequently be false.

II. Critical Solution of the Antinomy of Practical Reason.

The antinomy of pure speculative reason exhibits a similar conflict between freedom and physical necessity in the causality of events in the world. It was solved by showing that there is no real contradiction when the events and even the world in which they occur are regarded (as they ought to be) merely as appearances; since one and the same acting being, as an appearance (even to his own inner sense), has a causality in the world of sense that always conforms to the mechanism of nature, but with respect to the same events, so far as the acting person regards himself at the same time as a noumenon (as pure intelligence in an existence not dependent on the condition of time), he can contain a principle by which that causality acting according to laws of nature is determined, but which is itself free from all laws of nature.

It is just the same with the foregoing antinomy of pure practical reason. The first of the two propositions, "That the endeavour after happiness produces a virtuous mind," is absolutely false; but the second, "That a virtuous mind necessarily produces happiness," is not absolutely false, but only in so far as virtue is considered as a form of causality in the sensible world, and consequently only if I suppose existence in it to be the only sort of existence of a rational being; it is then only conditionally false. But as I am not only justified in thinking that I exist also as a noumenon in a world of the understanding, but even have in the moral law a purely intellectual determining principle of my causality (in the sensible world), it is not impossible that morality of mind should have a connection as cause with happiness (as an effect in the sensible world) if not immediate yet mediate (viz., through an intelligent author of nature), and moreover necessary; while in a system of nature which is merely an object of the senses, this combination could never occur except contingently and, therefore, could not suffice for the summum bonum.

Thus, notwithstanding this seeming conflict of practical reason with itself, the summum bonum, which is the necessary supreme end of a will morally determined, is a true object thereof; for it is practically possible, and the maxims of the will which as regards their matter refer to it have objective reality, which at first was threatened by the antinomy that appeared in the connection of morality with happiness by a general law; but this was merely from a misconception, because the relation between appearances was taken for a relation of the things in themselves to these appearances.

When we find ourselves obliged to go so far, namely, to the connection with an intelligible world, to find the possibility of the summum bonum, which reason points out to all rational beings as the goal of all their moral wishes, it must seem strange that, nevertheless, the philosophers both of ancient and modern times have been able to find happiness in accurate proportion to virtue even in this life (in the sensible world), or have persuaded themselves that they were conscious thereof. For Epicurus as well as the Stoics extolled above everything the happiness that springs from the consciousness of living virtuously; and the former was not so base in his practical precepts as one might infer from the principles of his theory, which he used for explanation and not for action, or as they were interpreted by many who were misled by his using the term pleasure for contentment; on the contrary, he reckoned the most disinterested practice of good amongst the ways of enjoying the most intimate delight, and his scheme of pleasure (by which he meant constant cheerfulness of mind) included the moderation and control of the inclinations, such as the strictest moral philosopher might require. He differed from the Stoics chiefly in making this pleasure the motive, which they very rightly refused to do. For, on the one hand, the virtuous Epicurus, like many well-intentioned men of this day who do not reflect deeply enough on their principles, fell into the error of presupposing the virtuous disposition in the persons for whom he wished to provide the springs to virtue (and indeed the upright man cannot be happy if he is not first conscious of his uprightness; since with such a character the reproach that his habit of thought would oblige him to make against himself in case of transgression and his moral self-condemnation would rob him of all enjoyment of the pleasantness which his condition might otherwise contain). But the question is: How is such a

disposition possible in the first instance, and such a habit of thought in estimating the worth of one's existence, since prior to it there can be in the subject no feeling at all for moral worth? If a man is virtuous without being conscious of his integrity in every action, he will certainly not enjoy life, however favourable fortune may be to him in its physical circumstances; but can we make him virtuous in the first instance, in other words, before he esteems the moral worth of his existence so highly, by praising to him the peace of mind that would result from the consciousness of an integrity for which he has no sense?

On the other hand, however, there is here an occasion of a vitium subreptionis, and as it were of an optical illusion, in the self-consciousness of what one does as distinguished from what one feels- an illusion which even the most experienced cannot altogether avoid. The moral disposition of mind is necessarily combined with a consciousness that the will is determined directly by the law. Now the consciousness of a determination of the faculty of desire is always the source of a satisfaction in the resulting action; but this pleasure, this satisfaction in oneself, is not the determining principle of the action; on the contrary, the determination of the will directly by reason is the source of the feeling of pleasure, and this remains a pure practical not sensible determination of the faculty of desire. Now as this determination has exactly the same effect within in impelling to activity, that a feeling of the pleasure to be expected from the desired action would have had, we easily look on what we ourselves do as something which we merely passively feel, and take the moral spring for a sensible impulse, just as it happens in the so-called illusion of the senses (in this case the inner sense). It is a sublime thing in human nature to be determined to actions immediately by a purely rational law; sublime even is the illusion that regards the subjective side of this capacity of intellectual determination as something sensible and the effect of a special sensible feeling (for an intellectual feeling would be a contradiction). It is also of great importance to attend to this property of our personality and as much as possible to cultivate the effect of reason on this feeling. But we must beware lest by falsely extolling this moral determining principle as a spring, making its source lie in particular feelings of pleasure (which are in fact only results), we degrade and disfigure the true genuine spring, the law itself, by putting as it were a false foil upon it. Respect, not pleasure or enjoyment of happiness, is something for which it is not possible that reason should have any antecedent feeling as its foundation (for this would always be sensible and pathological); and consciousness of immediate obligation of the will by the law is by no means analogous to the feeling of pleasure, although in relation to the faculty of desire it produces the same effect, but from different sources: it is only by this mode of conception, however, that we can attain what we are seeking, namely, that actions be done not merely in accordance with duty (as a result of pleasant feelings), but from duty, which must be the true end of all moral cultivation.

Have we not, however, a word which does not express enjoyment, as happiness does, but indicates a satisfaction in one's existence, an analogue of the happiness which must necessarily accompany the consciousness of virtue? Yes this word is self-contentment which in its proper signification always designates only a negative satisfaction in one's existence, in which one is conscious of needing nothing. Freedom and the consciousness of it as a faculty of following the moral law with unyielding resolution is independence of inclinations, at least as motives determining (though not as affecting) our desire, and so far as I am conscious of this freedom in following my moral maxims, it is the only source of an unaltered contentment which is necessarily connected with it and rests on no special feeling. This may be called intellectual contentment. The sensible contentment (improperly so-called) which rests on the satisfaction of the inclinations, however delicate they may be imagined to be, can never be adequate to the conception of it. For the inclinations change, they grow with the indulgence shown them, and always leave behind a still greater void than we had thought to fill. Hence they are always burdensome to a rational being, and, although he cannot lay them aside, they wrest from him the wish to be rid of them. Even an inclination to what is right (e.g., to beneficence), though it may much facilitate the efficacy of the moral maxims, cannot produce any. For in these all must be directed to the conception of the law as a determining principle, if

the action is to contain morality and not merely legality. Inclination is blind and slavish, whether it be of a good sort or not, and, when morality is in question, reason must not play the part merely of guardian to inclination, but disregarding it altogether must attend simply to its own interest as pure practical reason. This very feeling of compassion and tender sympathy, if it precedes the deliberation on the question of duty and becomes a determining principle, is even annoying to right thinking persons, brings their deliberate maxims into confusion, and makes them wish to be delivered from it and to be subject to lawgiving reason alone.

From this we can understand how the consciousness of this faculty of a pure practical reason produces by action (virtue) a consciousness of mastery over one's inclinations, and therefore of independence of them, and consequently also of the discontent that always accompanies them, and thus a negative satisfaction with one's state, i.e., contentment, which is primarily contentment with one's own person. Freedom itself becomes in this way (namely, indirectly) capable of an enjoyment which cannot be called happiness, because it does not depend on the positive concurrence of a feeling, nor is it, strictly speaking, bliss, since it does not include complete independence of inclinations and wants, but it resembles bliss in so far as the determination of one's will at least can hold itself free from their influence; and thus, at least in its origin, this enjoyment is analogous to the self-sufficiency which we can ascribe only to the Supreme Being.

From this solution of the antinomy of practical pure reason, it follows that in practical principles we may at least conceive as possible a natural and necessary connection between the consciousness of morality and the expectation of a proportionate happiness as its result, though it does not follow that we can know or perceive this connection; that, on the other hand, principles of the pursuit of happiness cannot possibly produce morality; that, therefore, morality is the supreme good (as the first condition of the summum bonum), while happiness constitutes its second element, but only in such a way that it is the morally conditioned, but necessary consequence of the former. Only with this subordination is the summum bonum the whole object of pure practical reason, which must necessarily conceive it as possible, since it commands us to contribute to the utmost of our power to its realization. But since the possibility of such connection of the conditioned with its condition belongs wholly to the supersensual relation of things and cannot be given according to the laws of the world of sense, although the practical consequences of the idea belong to the world of sense, namely, the actions that aim at realizing the summum bonum; we will therefore endeavour to set forth the grounds of that possibility, first, in respect of what is immediately in our power, and then, secondly, in that which is not in our power, but which reason presents to us as the supplement of our impotence, for the realization of the summum bonum (which by practical principles is necessary).

III. Of the Primacy of Pure Practical Reason in its

Union with the Speculative Reason.

By primacy between two or more things connected by reason, I understand the prerogative, belonging to one, of being the first determining principle in the connection with all the rest. In a narrower practical sense it means the prerogative of the interest of one in so far as the interest of the other is subordinated to it, while it is not postponed to any other. To every faculty of the mind we can attribute an interest, that is, a principle, that contains the condition on which alone the former is called into exercise. Reason, as the faculty of principles, determines the interest of all the powers of the mind and is determined by its own. The interest of its speculative employment consists in the cognition of the object pushed to the highest a priori principles: that of its practical employment, in the determination of the will in respect of the final and complete end. As to what is necessary for the possibility of any employment of reason at all, namely, that its principles and affirmations should not contradict one another, this constitutes no part of its interest, but is the condition of having reason at all; it is only its development, not mere consistency with itself, that is reckoned as its interest.

If practical reason could not assume or think as given anything further than what speculative reason of itself could offer it from its own insight, the latter would have the primacy. But supposing that it had of itself original a priori principles with which certain theoretical positions were inseparably connected, while these were withdrawn from any possible insight of speculative reason (which, however, they must not contradict); then the question is: Which interest is the superior (not which must give way, for they are not necessarily conflicting), whether speculative reason, which knows nothing of all that the practical offers for its acceptance, should take up these propositions and (although they transcend it) try to unite them with its own concepts as a foreign possession handed over to it, or whether it is justified in obstinately following its own separate interest and, according to the canonic of Epicurus, rejecting as vain subtlety everything that cannot accredit its objective reality by manifest examples to be shown in experience, even though it should be never so much interwoven with the interest of the practical (pure) use of reason, and in itself not contradictory to the theoretical, merely because it infringes on the interest of the speculative reason to this extent, that it removes the bounds which this latter had set to itself, and gives it up to every nonsense or delusion of imagination?

In fact, so far as practical reason is taken as dependent on pathological conditions, that is, as merely regulating the inclinations under the sensible principle of happiness, we could not require speculative reason to take its principles from such a source. Mohammed's paradise, or the absorption into the Deity of the theosophists and mystics would press their monstrosities on the reason according to the taste of each, and one might as well have no reason as surrender it in such fashion to all sorts of dreams. But if pure reason of itself can be practical and is actually so, as the consciousness of the moral law proves, then it is still only one and the same reason which, whether in a theoretical or a practical point of view, judges according to a priori principles; and then it is clear that although it is in the first point of view incompetent to establish certain propositions positively, which, however, do not contradict it, then, as soon as these propositions are inseparably attached to the practical interest of pure reason, it must accept them, though it be as something offered to it from a foreign source, something that has not grown on its own ground, but yet is sufficiently authenticated; and it must try to compare and connect them with everything that it has in its power as speculative reason. It must remember, however, that these are not additions to its insight, but yet are extensions of its employment in another, namely, a practical aspect; and this is not in the least opposed to its interest, which consists in the restriction of wild speculation.

Thus, when pure speculative and pure practical reason are combined in one cognition, the latter has the primacy, provided, namely, that this combination is not contingent and arbitrary, but founded a priori on reason itself and therefore necessary. For without this subordination there would arise a conflict of reason with itself; since, if they were merely co-ordinate, the former would close its boundaries strictly and admit nothing from the latter into its domain, while the latter would extend its bounds over everything and when its needs required would seek to embrace the former within them. Nor could we reverse the order and require pure practical reason to be subordinate to the speculative, since all interest is ultimately practical, and even that of speculative reason is conditional, and it is only in the practical employment of reason that it is complete.

IV. The Immortality of the Soul as a Postulate of
Pure Practical Reason.

The realization of the summum bonum in the world is the necessary object of a will determinable by the moral law. But in this will the perfect accordance of the mind with the moral law is the supreme condition of the summum bonum. This then must be possible, as well as its object, since it is contained in the command to promote the latter. Now, the perfect accordance of the will with the moral law is holiness, a perfection of which no rational being of the sensible world is capable at any moment of his existence. Since, nevertheless, it is required as practically necessary, it can only be found in a progress in infinitum towards that perfect accordance, and on the principles of pure practical reason it is necessary to assume

such a practical progress as the real object of our will.

Now, this endless progress is only possible on the supposition of an endless duration of the existence and personality of the same rational being (which is called the immortality of the soul). The summum bonum, then, practically is only possible on the supposition of the immortality of the soul; consequently this immortality, being inseparably connected with the moral law, is a postulate of pure practical reason (by which I mean a theoretical proposition, not demonstrable as such, but which is an inseparable result of an unconditional a priori practical law.

This principle of the moral destination of our nature, namely, that it is only in an endless progress that we can attain perfect accordance with the moral law, is of the greatest use, not merely for the present purpose of supplementing the impotence of speculative reason, but also with respect to religion. In default of it, either the moral law is quite degraded from its holiness, being made out to be indulgent and conformable to our convenience, or else men strain their notions of their vocation and their expectation to an unattainable goal, hoping to acquire complete holiness of will, and so they lose themselves in fanatical theosophic dreams, which wholly contradict self-knowledge. In both cases the unceasing effort to obey punctually and thoroughly a strict and inflexible command of reason, which yet is not ideal but real, is only hindered. For a rational but finite being, the only thing possible is an endless progress from the lower to higher degrees of moral perfection. The Infinite Being, to whom the condition of time is nothing, sees in this to us endless succession a whole of accordance with the moral law; and the holiness which his command inexorably requires, in order to be true to his justice in the share which He assigns to each in the summum bonum, is to be found in a single intellectual intuition of the whole existence of rational beings. All that can be expected of the creature in respect of the hope of this participation would be the consciousness of his tried character, by which from the progress he has hitherto made from the worse to the morally better, and the immutability of purpose which has thus become known to him, he may hope for a further unbroken continuance of the same, however long his existence may last, even beyond this life, * and thus he may hope, not indeed here, nor in any imaginable point of his future existence, but only in the endlessness of his duration (which God alone can survey) to be perfectly adequate to his will (without indulgence or excuse, which do not harmonize with justice).

* It seems, nevertheless, impossible for a creature to have the conviction of his unwavering firmness of mind in the progress towards goodness. On this account the Christian religion makes it come only from the same Spirit that works sanctification, that is, this firm purpose, and with it the consciousness of steadfastness in the moral progress. But naturally one who is conscious that he has persevered through a long portion of his life up to the end in the progress to the better, and this genuine moral motives, may well have the comforting hope, though not the certainty, that even in an existence prolonged beyond this life he will continue in these principles; and although he is never justified here in his own eyes, nor can ever hope to be so in the increased perfection of his nature, to which he looks forward, together with an increase of duties, nevertheless in this progress which, though it is directed to a goal infinitely remote, yet is in God's sight regarded as equivalent to possession, he may have a prospect of a blessed future; for this is the word that reason employs to designate perfect well-being independent of all contingent causes of the world, and which, like holiness, is an idea that can be contained only in an endless progress and its totality, and consequently is never fully attained by a creature.

V. The Existence of God as a Postulate of Pure Practical Reason.

In the foregoing analysis the moral law led to a practical problem which is prescribed by pure reason alone, without the aid of any sensible motives, namely, that of the necessary completeness of the first and principle element of the summum bonum, viz., morality; and, as this can be perfectly solved only in eternity, to the postulate of immortality. The same law must also lead us to affirm the possibility of the second element of the summum bonum, viz., happiness proportioned to that morality, and this on grounds as disinterested as before, and solely from impartial reason; that is, it must lead to the supposition of the

existence of a cause adequate to this effect; in other words, it must postulate the existence of God, as the necessary condition of the possibility of the summum bonum (an object of the will which is necessarily connected with the moral legislation of pure reason). We proceed to exhibit this connection in a convincing manner.

Happiness is the condition of a rational being in the world with whom everything goes according to his wish and will; it rests, therefore, on the harmony of physical nature with his whole end and likewise with the essential determining principle of his will. Now the moral law as a law of freedom commands by determining principles, which ought to be quite independent of nature and of its harmony with our faculty of desire (as springs). But the acting rational being in the world is not the cause of the world and of nature itself. There is not the least ground, therefore, in the moral law for a necessary connection between morality and proportionate happiness in a being that belongs to the world as part of it, and therefore dependent on it, and which for that reason cannot by his will be a cause of this nature, nor by his own power make it thoroughly harmonize, as far as his happiness is concerned, with his practical principles. Nevertheless, in the practical problem of pure reason, i.e., the necessary pursuit of the summum bonum, such a connection is postulated as necessary: we ought to endeavour to promote the summum bonum, which, therefore, must be possible. Accordingly, the existence of a cause of all nature, distinct from nature itself and containing the principle of this connection, namely, of the exact harmony of happiness with morality, is also postulated. Now this supreme cause must contain the principle of the harmony of nature, not merely with a law of the will of rational beings, but with the conception of this law, in so far as they make it the supreme determining principle of the will, and consequently not merely with the form of morals, but with their morality as their motive, that is, with their moral character. Therefore, the summum bonum is possible in the world only on the supposition of a Supreme Being having a causality corresponding to moral character. Now a being that is capable of acting on the conception of laws is an intelligence (a rational being), and the causality of such a being according to this conception of laws is his will; therefore the supreme cause of nature, which must be presupposed as a condition of the summum bonum is a being which is the cause of nature by intelligence and will, consequently its author, that is God. It follows that the postulate of the possibility of the highest derived good (the best world) is likewise the postulate of the reality of a highest original good, that is to say, of the existence of God. Now it was seen to be a duty for us to promote the summum bonum; consequently it is not merely allowable, but it is a necessity connected with duty as a requisite, that we should presuppose the possibility of this summum bonum; and as this is possible only on condition of the existence of God, it inseparably connects the supposition of this with duty; that is, it is morally necessary to assume the existence of God.

It must be remarked here that this moral necessity is subjective, that is, it is a want, and not objective, that is, itself a duty, for there cannot be a duty to suppose the existence of anything (since this concerns only the theoretical employment of reason). Moreover, it is not meant by this that it is necessary to suppose the existence of God as a basis of all obligation in general (for this rests, as has been sufficiently proved, simply on the autonomy of reason itself). What belongs to duty here is only the endeavour to realize and promote the summum bonum in the world, the possibility of which can therefore be postulated; and as our reason finds it not conceivable except on the supposition of a supreme intelligence, the admission of this existence is therefore connected with the consciousness of our duty, although the admission itself belongs to the domain of speculative reason. Considered in respect of this alone, as a principle of explanation, it may be called a hypothesis, but in reference to the intelligibility of an object given us by the moral law (the summum bonum), and consequently of a requirement for practical purposes, it may be called faith, that is to say a pure rational faith, since pure reason (both in its theoretical and practical use) is the sole source from which it springs.

From this deduction it is now intelligible why the Greek schools could never attain the solution of their problem of the practical possibility of the summum bonum, because they made the rule of the use which

the will of man makes of his freedom the sole and sufficient ground of this possibility, thinking that they had no need for that purpose of the existence of God. No doubt they were so far right that they established the principle of morals of itself independently of this postulate, from the relation of reason only to the will, and consequently made it the supreme practical condition of the summum bonum; but it was not therefore the whole condition of its possibility. The Epicureans had indeed assumed as the supreme principle of morality a wholly false one, namely that of happiness, and had substituted for a law a maxim of arbitrary choice according to every man's inclination; they proceeded, however, consistently enough in this, that they degraded their summum bonum likewise, just in proportion to the meanness of their fundamental principle, and looked for no greater happiness than can be attained by human prudence (including temperance and moderation of the inclinations), and this as we know would be scanty enough and would be very different according to circumstances; not to mention the exceptions that their maxims must perpetually admit and which make them incapable of being laws. The Stoics, on the contrary, had chosen their supreme practical principle quite rightly, making virtue the condition of the summum bonum; but when they represented the degree of virtue required by its pure law as fully attainable in this life, they not only strained the moral powers of the man whom they called the wise beyond all the limits of his nature, and assumed a thing that contradicts all our knowledge of men, but also and principally they would not allow the second element of the summum bonum, namely, happiness, to be properly a special object of human desire, but made their wise man, like a divinity in his consciousness of the excellence of his person, wholly independent of nature (as regards his own contentment); they exposed him indeed to the evils of life, but made him not subject to them (at the same time representing him also as free from moral evil). They thus, in fact, left out the second element of the summum bonum namely, personal happiness, placing it solely in action and satisfaction with one's own personal worth, thus including it in the consciousness of being morally minded, in which they Might have been sufficiently refuted by the voice of their own nature.

The doctrine of Christianity, * even if we do not yet consider it as a religious doctrine, gives, touching this point, a conception of the summum bonum (the kingdom of God), which alone satisfies the strictest demand of practical reason. The moral law is holy (unyielding) and demands holiness of morals, although all the moral perfection to which man can attain is still only virtue, that is, a rightful disposition arising from respect for the law, implying consciousness of a constant propensity to transgression, or at least a want of purity, that is, a mixture of many spurious (not moral) motives of obedience to the law, consequently a self-esteem combined with humility. In respect, then, of the holiness which the Christian law requires, this leaves the creature nothing but a progress in infinitum, but for that very reason it justifies him in hoping for an endless duration of his existence. The worth of a character perfectly accordant with the moral law is infinite, since the only restriction on all possible happiness in the judgement of a wise and all powerful distributor of it is the absence of conformity of rational beings to their duty. But the moral law of itself does not promise any happiness, for according to our conceptions of an order of nature in general, this is not necessarily connected with obedience to the law. Now Christian morality supplies this defect (of the second indispensable element of the summum bonum) by representing the world in which rational beings devote themselves with all their soul to the moral law, as a kingdom of God, in which nature and morality are brought into a harmony foreign to each of itself, by a holy Author who makes the derived summum bonum possible. Holiness of life is prescribed to them as a rule even in this life, while the welfare proportioned to it, namely, bliss, is represented as attainable only in an eternity; because the former must always be the pattern of their conduct in every state, and progress towards it is already possible and necessary in this life; while the latter, under the name of happiness, cannot be attained at all in this world (so far as our own power is concerned), and therefore is made simply an object of hope. Nevertheless, the Christian principle of morality itself is not theological (so as to be heteronomy), but is autonomy of pure practical reason, since it does not make the knowledge of God

and His will the foundation of these laws, but only of the attainment of the summum bonum, on condition of following these laws, and it does not even place the proper spring of this obedience in the desired results, but solely in the conception of duty, as that of which the faithful observance alone constitutes the worthiness to obtain those happy consequences.

* It is commonly held that the Christian precept of morality has no advantage in respect of purity over the moral conceptions of the Stoics; the distinction between them is, however, very obvious. The Stoic system made the consciousness of strength of mind the pivot on which all moral dispositions should turn; and although its disciples spoke of duties and even defined them very well, yet they placed the spring and proper determining principle of the will in an elevation of the mind above the lower springs of the senses, which owe their power only to weakness of mind. With them therefore, virtue was a sort of heroism in the wise man raising himself above the animal nature of man, is sufficient for Himself, and, while he prescribes duties to others, is himself raised above them, and is not subject to any temptation to transgress the moral law. All this, however, they could not have done if they had conceived this law in all its purity and strictness, as the precept of the Gospel does. When I give the name idea to a perfection to which nothing adequate can be given in experience, it does not follow that the moral ideas are thing transcendent, that is something of which we could not even determine the concept adequately, or of which it is uncertain whether there is any object corresponding to it at all, as is the case with the ideas of speculative reason; on the contrary, being types of practical perfection, they serve as the indispensable rule of conduct and likewise as the standard of comparison. Now if I consider Christian morals on their philosophical side, then compared with the ideas of the Greek schools, they would appear as follows: the ideas of the Cynics, the Epicureans, the Stoics, and the Christians are: simplicity of nature, prudence, wisdom, and holiness. In respect of the way of attaining them, the Greek schools were distinguished from one another thus that the Cynics only required common sense, the others the path of science, but both found the mere use of natural powers sufficient for the purpose. Christian morality, because its precept is framed (as a moral precept must be) so pure and unyielding, takes from man all confidence that he can be fully adequate to it, at least in this life, but again sets it up by enabling us to hope that if we act as well as it is in our power to do, then what is not in our power will come in to our aid from another source, whether we know how this may be or not. Aristotle and Plato differed only as to the origin of our moral conceptions.

In this manner, the moral laws lead through the conception of the summum bonum as the object and final end of pure practical reason to religion, that is, to the recognition of all duties as divine commands, not as sanctions, that is to say, arbitrary ordinances of a foreign and contingent in themselves, but as essential laws of every free will in itself, which, nevertheless, must be regarded as commands of the Supreme Being, because it is only from a morally perfect (holy and good) and at the same time all-powerful will, and consequently only through harmony with this will, that we can hope to attain the summum bonum which the moral law makes it our duty to take as the object of our endeavours. Here again, then, all remains disinterested and founded merely on duty; neither fear nor hope being made the fundamental springs, which if taken as principles would destroy the whole moral worth of actions. The moral law commands me to make the highest possible good in a world the ultimate object of all my conduct. But I cannot hope to effect this otherwise than by the harmony of my will with that of a holy and good Author of the world; and although the conception of the summum bonum as a whole, in which the greatest happiness is conceived as combined in the most exact proportion with the highest degree of moral perfection (possible in creatures), includes my own happiness, yet it is not this that is the determining principle of the will which is enjoined to promote the summum bonum, but the moral law, which, on the contrary, limits by strict conditions my unbounded desire of happiness.

Hence also morality is not properly the doctrine how we should make ourselves happy, but how we should become worthy of happiness. It is only when religion is added that there also comes in the hope of

participating some day in happiness in proportion as we have endeavoured to be not unworthy of it.

A man is worthy to possess a thing or a state when his possession of it is in harmony with the summum bonum. We can now easily see that all worthiness depends on moral conduct, since in the conception of the summum bonum this constitutes the condition of the rest (which belongs to one's state), namely, the participation of happiness. Now it follows from this that morality should never be treated as a doctrine of happiness, that is, an instruction how to become happy; for it has to do simply with the rational condition (conditio sine qua non) of happiness, not with the means of attaining it. But when morality has been completely expounded (which merely imposes duties instead of providing rules for selfish desires), then first, after the moral desire to promote the summum bonum (to bring the kingdom of God to us) has been awakened, a desire founded on a law, and which could not previously arise in any selfish mind, and when for the behoof of this desire the step to religion has been taken, then this ethical doctrine may be also called a doctrine of happiness because the hope of happiness first begins with religion only.

We can also see from this that, when we ask what is God's ultimate end in creating the world, we must not name the happiness of the rational beings in it, but the summum bonum, which adds a further condition to that wish of such beings, namely, the condition of being worthy of happiness, that is, the morality of these same rational beings, a condition which alone contains the rule by which only they can hope to share in the former at the hand of a wise Author. For as wisdom, theoretically considered, signifies the knowledge of the summum bonum and, practically, the accordance of the will with the summum bonum, we cannot attribute to a supreme independent wisdom an end based merely on goodness. For we cannot conceive the action of this goodness (in respect of the happiness of rational beings) as suitable to the highest original good, except under the restrictive conditions of harmony with the holiness * of his will. Therefore, those who placed the end of creation in the glory of God (provided that this is not conceived anthropomorphically as a desire to be praised) have perhaps hit upon the best expression. For nothing glorifies God more than that which is the most estimable thing in the world, respect for his command, the observance of the holy duty that his law imposes on us, when there is added thereto his glorious plan of crowning such a beautiful order of things with corresponding happiness. If the latter (to speak humanly) makes Him worthy of love, by the former He is an object of adoration. Even men can never acquire respect by benevolence alone, though they may gain love, so that the greatest beneficence only procures them honour when it is regulated by worthiness.

* In order to make these characteristics of these conceptions clear, I add the remark that whilst we ascribe to God various attributes, the quality of which we also find applicable to creatures, only that in Him they are raised to the highest degree, e.g., power, knowledge, presence, goodness, etc., under the designations of omnipotence, omniscience, omnipresence, etc., there are three that are ascribed to God exclusively, and yet without the addition of greatness, and which are all moral He is the only holy, the only blessed, the only wise, because these conceptions already imply the absence of limitation. In the order of these attributes He is also the holy lawgiver (and creator), the good governor (and preserver) and the just judge, three attributes which include everything by which God is the object of religion, and in conformity with which the metaphysical perfections are added of themselves in the reason.

That in the order of ends, man (and with him every rational being) is an end in himself, that is, that he can never be used merely as a means by any (not even by God) without being at the same time an end also himself, that therefore humanity in our person must be holy to ourselves, this follows now of itself because he is the subject of the moral law, in other words, of that which is holy in itself, and on account of which and in agreement with which alone can anything be termed holy. For this moral law is founded on the autonomy of his will, as a free will which by its universal laws must necessarily be able to agree with that to which it is to submit itself.

VI. Of the Postulates of Pure Practical Reason Generally.

They all proceed from the principle of morality, which is not a postulate but a law, by which reason

determines the will directly, which will, because it is so determined as a pure will, requires these necessary conditions of obedience to its precept. These postulates are not theoretical dogmas but, suppositions practically necessary; while then they do [not] extend our speculative knowledge, they give objective reality to the ideas of speculative reason in general (by means of their reference to what is practical), and give it a right to concepts, the possibility even of which it could not otherwise venture to affirm.

These postulates are those of immortality, freedom positively considered (as the causality of a being so far as he belongs to the intelligible world), and the existence of God. The first results from the practically necessary condition of a duration adequate to the complete fulfilment of the moral law; the second from the necessary supposition of independence of the sensible world, and of the faculty of determining one's will according to the law of an intelligible world, that is, of freedom; the third from the necessary condition of the existence of the summum bonum in such an intelligible world, by the supposition of the supreme independent good, that is, the existence of God.

Thus the fact that respect for the moral law necessarily makes the summum bonum an object of our endeavours, and the supposition thence resulting of its objective reality, lead through the postulates of practical reason to conceptions which speculative reason might indeed present as problems, but could never solve. Thus it leads: 1. To that one in the solution of which the latter could do nothing but commit paralogisms (namely, that of immortality), because it could not lay hold of the character of permanence, by which to complete the psychological conception of an ultimate subject necessarily ascribed to the soul in self-consciousness, so as to make it the real conception of a substance, a character which practical reason furnishes by the postulate of a duration required for accordance with the moral law in the summum bonum, which is the whole end of practical reason. 2. It leads to that of which speculative reason contained nothing but antinomy, the solution of which it could only found on a notion problematically conceivable indeed, but whose objective reality it could not prove or determine, namely, the cosmological idea of an intelligible world and the consciousness of our existence in it, by means of the postulate of freedom (the reality of which it lays down by virtue of the moral law), and with it likewise the law of an intelligible world, to which speculative reason could only point, but could not define its conception. 3. What speculative reason was able to think, but was obliged to leave undetermined as a mere transcendental ideal, viz., the theological conception of the first Being, to this it gives significance (in a practical view, that is, as a condition of the possibility of the object of a will determined by that law), namely, as the supreme principle of the summum bonum in an intelligible world, by means of moral legislation in it invested with sovereign power.

Is our knowledge, however, actually extended in this way by pure practical reason, and is that immanent in practical reason which for the speculative was only transcendent? Certainly, but only in a practical point of view. For we do not thereby take knowledge of the nature of our souls, nor of the intelligible world, nor of the Supreme Being, with respect to what they are in themselves, but we have merely combined the conceptions of them in the practical concept of the summum bonum as the object of our will, and this altogether a priori, but only by means of the moral law, and merely in reference to it, in respect of the object which it commands. But how freedom is possible, and how we are to conceive this kind of causality theoretically and positively, is not thereby discovered; but only that there is such a causality is postulated by the moral law and in its behoof. It is the same with the remaining ideas, the possibility of which no human intelligence will ever fathom, but the truth of which, on the other hand, no sophistry will ever wrest from the conviction even of the commonest man.

VII. How is it possible to conceive an Extension of Pure Reason in a Practical point of view, without its Knowledge as Speculative being enlarged at the same time?

In order not to be too abstract, we will answer this question at once in its application to the present case. In order to extend a pure cognition practically, there must be an a priori purpose given, that is, an end as object (of the will), which independently of all theological principle is presented as practically necessary by an imperative which determines the will directly (a categorical imperative), and in this case that is the summum bonum. This, however, is not possible without presupposing three theoretical conceptions (for which, because they are mere conceptions of pure reason, no corresponding intuition can be found, nor consequently by the path of theory any objective reality); namely, freedom, immortality, and God. Thus by the practical law which commands the existence of the highest good possible in a world, the possibility of those objects of pure speculative reason is postulated, and the objective reality which the latter could not assure them. By this the theoretical knowledge of pure reason does indeed obtain an accession; but it consists only in this, that those concepts which otherwise it had to look upon as problematical (merely thinkable) concepts, are now shown assertorially to be such as actually have objects; because practical reason indispensably requires their existence for the possibility of its object, the summum bonum, which practically is absolutely necessary, and this justifies theoretical reason in assuming them. But this extension of theoretical reason is no extension of speculative, that is, we cannot make any positive use of it in a theoretical point of view. For as nothing is accomplished in this by practical reason, further than that these concepts are real and actually have their (possible) objects, and nothing in the way of intuition of them is given thereby (which indeed could not be demanded), hence the admission of this reality does not render any synthetical proposition possible. Consequently, this discovery does not in the least help us to extend this knowledge of ours in a speculative point of view, although it does in respect of the practical employment of pure reason. The above three ideas of speculative reason are still in themselves not cognitions; they are however (transcendent) thoughts, in which there is nothing impossible. Now, by help of an apodeictic practical law, being necessary conditions of that which it commands to be made an object, they acquire objective reality; that is, we learn from it that they have objects, without being able to point out how the conception of them is related to an object, and this, too, is still not a cognition of these objects; for we cannot thereby form any synthetical judgement about them, nor determine their application theoretically; consequently, we can make no theoretical rational use of them at all, in which use all speculative knowledge of reason consists. Nevertheless, the theoretical knowledge, not indeed of these objects, but of reason generally, is so far enlarged by this, that by the practical postulates objects were given to those ideas, a merely problematical thought having by this means first acquired objective reality. There is therefore no extension of the knowledge of given supersensible objects, but an extension of theoretical reason and of its knowledge in respect of the supersensible generally; inasmuch as it is compelled to admit that there are such objects, although it is not able to define them more closely, so as itself to extend this knowledge of the objects (which have now been given it on practical grounds, and only for practical use). For this accession, then, pure theoretical reason, for which all those ideas are transcendent and without object, has simply to thank its practical faculty. In this they become immanent and constitutive, being the source of the possibility of realizing the necessary object of pure practical reason (the summum bonum); whereas apart from this they are transcendent, and merely regulative principles of speculative reason, which do not require it to assume a new object beyond experience, but only to bring its use in experience nearer to completeness. But when once reason is in possession of this accession, it will go to work with these ideas as speculative reason (properly only to assure the certainty of its practical use) in a negative manner: that is, not extending but clearing up its knowledge so as on one side to keep off anthropomorphism, as the source of superstition, or seeming extension of these conceptions by supposed experience; and on the other side fanaticism, which promises the same by means of supersensible intuition or feelings of the like kind. All these are hindrances to the practical use of pure reason, so that the removal of them may certainly be considered an extension of our knowledge in a practical point of view, without contradicting the

admission that for speculative purposes reason has not in the least gained by this.

Every employment of reason in respect of an object requires pure concepts of the understanding (categories), without which no object can be conceived. These can be applied to the theoretical employment of reason, i.e., to that kind of knowledge, only in case an intuition (which is always sensible) is taken as a basis, and therefore merely in order to conceive by means of- them an object of possible experience. Now here what have to be thought by means of the categories in order to be known are ideas of reason, which cannot be given in any experience. Only we are not here concerned with the theoretical knowledge of the objects of these ideas, but only with this, whether they have objects at all. This reality is supplied by pure practical reason, and theoretical reason has nothing further to do in this but to think those objects by means of categories. This, as we have elsewhere clearly shown, can be done well enough without needing any intuition (either sensible or supersensible) because the categories have their seat and origin in the pure understanding, simply as the faculty of thought, before and independently of any intuition, and they always only signify an object in general, no matter in what way it may be given to us. Now when the categories are to be applied to these ideas, it is not possible to give them any object in intuition; but that such an object actually exists, and consequently that the category as a mere form of thought is here not empty but has significance, this is sufficiently assured them by an object which practical reason presents beyond doubt in the concept of the summum bonum, the reality of the conceptions which are required for the possibility of the summum bonum; without, however, effecting by this accession the least extension of our knowledge on theoretical principles.

When these ideas of God, of an intelligible world (the kingdom of God), and of immortality are further determined by predicates taken from our own nature, we must not regard this determination as a sensualizing of those pure rational ideas (anthropomorphism), nor as a transcendent knowledge of supersensible objects; for these predicates are no others than understanding and will, considered too in the relation to each other in which they must be conceived in the moral law, and therefore, only so far as a pure practical use is made of them. As to all the rest that belongs to these conceptions psychologically, that is, so far as we observe these faculties of ours empirically in their exercise (e.g., that the understanding of man is discursive, and its notions therefore not intuitions but thoughts, that these follow one another in time, that his will has its satisfaction always dependent on the existence of its object, etc., which cannot be the case in the Supreme Being), from all this we abstract in that case, and then there remains of the notions by which we conceive a pure intelligence nothing more than just what is required for the possibility of conceiving a moral law. There is then a knowledge of God indeed, but only for practical purposes, and, if we attempt to extend it to a theoretical knowledge, we find an understanding that has intuitions, not thoughts, a will that is directed to objects on the existence of which its satisfaction does not in the least depend (not to mention the transcendental predicates, as, for example, a magnitude of existence, that is duration, which, however, is not in time, the only possible means we have of conceiving existence as magnitude). Now these are all attributes of which we can form no conception that would help to the knowledge of the object, and we learn from this that they can never be used for a theory of supersensible beings, so that on this side they are quite incapable of being the foundation of a speculative knowledge, and their use is limited simply to the practice of the moral law.

This last is so obvious, and can be proved so clearly by fact, that we may confidently challenge all pretended natural theologians (a singular name) * to specify (over and above the merely ontological predicates) one single attribute, whether of the understanding or of the will, determining this object of theirs, of which we could not show incontrovertibly that, if we abstract from it everything anthropomorphic, nothing would remain to us but the mere word, without our being able to connect with it the smallest notion by which we could hope for an extension of theoretical knowledge. But as to the practical, there still remains to us of the attributes of understanding and will the conception of a relation to which objective reality is given by the practical law (which determines a priori precisely this relation

of the understanding to the will). When once this is done, then reality is given to the conception of the object of a will morally determined (the conception of the summum bonum), and with it to the conditions of its possibility, the ideas of God, freedom, and immortality, but always only relatively to the practice of the moral law (and not for any speculative purpose).

* Learning is properly only the whole content of the historical sciences. Consequently it is only the teacher of revealed theology that can be called a learned theologian. If, however, we choose to call a man learned who is in possession of the rational sciences (mathematics and philosophy), although even this would be contrary to the signification of the word (which always counts as learning only that which one must be "learned" and which, therefore, he cannot discover of himself by reason), even in that case the philosopher would make too poor a figure with his knowledge of God as a positive science to let himself be called on that account a learned man.

According to these remarks it is now easy to find the answer to the weighty question whether the notion of God is one belonging to physics (and therefore also to metaphysics, which contains the pure a priori principles of the former in their universal import) or to morals. If we have recourse to God as the Author of all things, in order to explain the arrangements of nature or its changes, this is at least not a physical explanation, and is a complete confession that our philosophy has come to an end, since we are obliged to assume something of which in itself we have otherwise no conception, in order to be able to frame a conception of the possibility of what we see before our eyes. Metaphysics, however, cannot enable us to attain by certain inference from the knowledge of this world to the conception of God and to the proof of His existence, for this reason, that in order to say that this world could be produced only by a God (according to the conception implied by this word) we should know this world as the most perfect whole possible; and for this purpose should also know all possible worlds (in order to be able to compare them with this); in other words, we should be omniscient. It is absolutely impossible, however, to know the existence of this Being from mere concepts, because every existential proposition, that is, every proposition that affirms the existence of a being of which I frame a concept, is a synthetic proposition, that is, one by which I go beyond that conception and affirm of it more than was thought in the conception itself; namely, that this concept in the understanding has an object corresponding to it outside the understanding, and this it is obviously impossible to elicit by any reasoning. There remains, therefore, only one single process possible for reason to attain this knowledge, namely, to start from the supreme principle of its pure practical use (which in every case is directed simply to the existence of something as a consequence of reason) and thus determine its object. Then its inevitable problem, namely, the necessary direction of the will to the summum bonum, discovers to us not only the necessity of assuming such a First Being in reference to the possibility of this good in the world, but, what is most remarkable, something which reason in its progress on the path of physical nature altogether failed to find, namely, an accurately defined conception of this First Being. As we can know only a small part of this world, and can still less compare it with all possible worlds, we may indeed from its order, design, and greatness, infer a wise, good, powerful, etc., Author of it, but not that He is all-wise, all-good, all-powerful, etc. It may indeed very well be granted that we should be justified in supplying this inevitable defect by a legitimate and reasonable hypothesis; namely, that when wisdom, goodness, etc, are displayed in all the parts that offer themselves to our nearer knowledge, it is just the same in all the rest, and that it would therefore be reasonable to ascribe all possible perfections to the Author of the world, but these are not strict logical inferences in which we can pride ourselves on our insight, but only permitted conclusions in which we may be indulged and which require further recommendation before we can make use of them. On the path of empirical inquiry then (physics), the conception of God remains always a conception of the perfection of the First Being not accurately enough determined to be held adequate to the conception of Deity. (With metaphysic in its transcendental part nothing whatever can be accomplished.)

When I now try to test this conception by reference to the object of practical reason, I find that the

moral principle admits as possible only the conception of an Author of the world possessed of the highest perfection. He must be omniscient, in order to know my conduct up to the inmost root of my mental state in all possible cases and into all future time; omnipotent, in order to allot to it its fitting consequences; similarly He must be omnipresent, eternal, etc. Thus the moral law, by means of the conception of the summum bonum as the object of a pure practical reason, determines the concept of the First Being as the Supreme Being; a thing which the physical (and in its higher development the metaphysical), in other words, the whole speculative course of reason, was unable to effect. The conception of God, then, is one that belongs originally not to physics, i.e., to speculative reason, but to morals. The same may be said of the other conceptions of reason of which we have treated above as postulates of it in its practical use.

In the history of Grecian philosophy we find no distinct traces of a pure rational theology earlier than Anaxagoras; but this is not because the older philosophers had not intelligence or penetration enough to raise themselves to it by the path of speculation, at least with the aid of a thoroughly reasonable hypothesis. What could have been easier, what more natural, than the thought which of itself occurs to everyone, to assume instead of several causes of the world, instead of an indeterminate degree of perfection, a single rational cause having all perfection? But the evils in the world seemed to them to be much too serious objections to allow them to feel themselves justified in such a hypothesis. They showed intelligence and penetration then in this very point, that they did not allow themselves to adopt it, but on the contrary looked about amongst natural causes to see if they could not find in them the qualities and power required for a First Being. But when this acute people had advanced so far in their investigations of nature as to treat even moral questions philosophically, on which other nations had never done anything but talk, then first they found a new and practical want, which did not fail to give definiteness to their conception of the First Being: and in this the speculative reason played the part of spectator, or at best had the merit of embellishing a conception that had not grown on its own ground, and of applying a series of confirmations from the study of nature now brought forward for the first time, not indeed to strengthen the authority of this conception (which was already established), but rather to make a show with a supposed discovery of theoretical reason.

From these remarks, the reader of the Critique of Pure Speculative Reason will be thoroughly convinced how highly necessary that laborious deduction of the categories was, and how fruitful for theology and morals. For if, on the one hand, we place them in pure understanding, it is by this deduction alone that we can be prevented from regarding them, with Plato, as innate, and founding on them extravagant pretensions to theories of the supersensible, to which we can see no end, and by which we should make theology a magic lantern of chimeras; on the other hand, if we regard them as acquired, this deduction saves us from restricting, with Epicurus, all and every use of them, even for practical purposes, to the objects and motives of the senses. But now that the Critique has shown by that deduction, first, that they are not of empirical origin, but have their seat and source a priori in the pure understanding; secondly, that as they refer to objects in general independently of the intuition of them, hence, although they cannot effect theoretical knowledge, except in application to empirical objects, yet when applied to an object given by pure practical reason they enable us to conceive the supersensible definitely, only so far, however, as it is defined by such predicates as are necessarily connected with the pure practical purpose given a priori and with its possibility. The speculative restriction of pure reason and its practical extension bring it into that relation of equality in which reason in general can be employed suitably to its end, and this example proves better than any other that the path to wisdom, if it is to be made sure and not to be impassable or misleading, must with us men inevitably pass through science; but it is not till this is complete that we can be convinced that it leads to this goal.

VIII. Of Belief from a Requirement of Pure Reason.

A want or requirement of pure reason in its speculative use leads only to a hypothesis; that of pure practical reason to a postulate; for in the former case I ascend from the result as high as I please in the

series of causes, not in order to give objective reality to the result (e.g., the causal connection of things and changes in the world), but in order thoroughly to satisfy my inquiring reason in respect of it. Thus I see before me order and design in nature, and need not resort to speculation to assure myself of their reality, but to explain them I have to presuppose a Deity as their cause; and then since the inference from an effect to a definite cause is always uncertain and doubtful, especially to a cause so precise and so perfectly defined as we have to conceive in God, hence the highest degree of certainty to which this pre-supposition can be brought is that it is the most rational opinion for us men. * On the other hand, a requirement of pure practical reason is based on a duty, that of making something (the summum bonum) the object of my will so as to promote it with all my powers; in which case I must suppose its possibility and, consequently, also the conditions necessary thereto, namely, God, freedom, and immortality; since I cannot prove these by my speculative reason, although neither can I refute them. This duty is founded on something that is indeed quite independent of these suppositions and is of itself apodeictically certain, namely, the moral law; and so far it needs no further support by theoretical views as to the inner constitution of things, the secret final aim of the order of the world, or a presiding ruler thereof, in order to bind me in the most perfect manner to act in unconditional conformity to the law. But the subjective effect of this law, namely, the mental disposition conformed to it and made necessary by it, to promote the practically possible summum bonum, this pre-supposes at least that the latter is possible, for it would be practically impossible to strive after the object of a conception which at bottom was empty and had no object. Now the above-mentioned postulates concern only the physical or metaphysical conditions of the possibility of the summum bonum; in a word, those which lie in the nature of things; not, however, for the sake of an arbitrary speculative purpose, but of a practically necessary end of a pure rational will, which in this case does not choose, but obeys an inexorable command of reason, the foundation of which is objective, in the constitution of things as they must be universally judged by pure reason, and is not based on inclination; for we are in nowise justified in assuming, on account of what we wish on merely subjective grounds, that the means thereto are possible or that its object is real. This, then, is an absolutely necessary requirement, and what it pre-supposes is not merely justified as an allowable hypothesis, but as a postulate in a practical point of view; and admitting that the pure moral law inexorably binds every man as a command (not as a rule of prudence), the righteous man may say: "I will that there be a God, that my existence in this world be also an existence outside the chain of physical causes and in a pure world of the understanding, and lastly, that my duration be endless; I firmly abide by this, and will not let this faith be taken from me; for in this instance alone my interest, because I must not relax anything of it, inevitably determines my judgement, without regarding sophistries, however unable I may be to answer them or to oppose them with others more plausible. *(2)

* But even here we should not be able to allege a requirement of reason, if we had not before our eyes a problematical, but yet inevitable, conception of reason, namely, that of an absolutely necessary being. This conception now seeks to be defined, and this, in addition to the tendency to extend itself, is the objective ground of a requirement of speculative reason, namely, to have a more precise definition of the conception of a necessary being which is to serve as the first cause of other beings, so as to make these latter knowable by some means. Without such antecedent necessary problems there are no requirements- at least not of pure reason- the rest are requirements of inclination.

*(2) In the Deutsches Museum, February, 1787, there is a dissertation by a very subtle and clear-headed man, the late Wizenmann, whose early death is to be lamented, in which he disputes the right to argue from a want to the objective reality of its object, and illustrates the point by the example of a man in love, who having fooled himself into an idea of beauty, which is merely a chimera of his own brain, would fain conclude that such an object really exists somewhere. I quite agree with him in this, in all cases where the want is founded on inclination, which cannot necessarily postulate the existence of its object even for the man that is affected by it, much less can it contain a demand valid for everyone, and

therefore it is merely a subjective ground of the wish. But in the present case we have a want of reason springing from an objective determining principle of the will, namely, the moral law, which necessarily binds every rational being, and therefore justifies him in assuming a priori in nature the conditions proper for it, and makes the latter inseparable from the complete practical use of reason. It is a duty to realize the summum bonum to the utmost of our power, therefore it must be possible, consequently it is unavoidable for every rational being in the world to assume what is necessary for its objective possibility. The assumption is as necessary as the moral law, in connection with which alone it is valid.

In order to prevent misconception in the use of a notion as yet so unusual as that of a faith of pure practical reason, let me be permitted to add one more remark. It might almost seem as if this rational faith were here announced as itself a command, namely, that we should assume the summum bonum as possible. But a faith that is commanded is nonsense. Let the preceding analysis, however, be remembered of what is required to be supposed in the conception of the summum bonum, and it will be seen that it cannot be commanded to assume this possibility, and no practical disposition of mind is required to admit it; but that speculative reason must concede it without being asked, for no one can affirm that it is impossible in itself that rational beings in the world should at the same time be worthy of happiness in conformity with the moral law and also possess this happiness proportionately. Now in respect of the first element of the summum bonum, namely, that which concerns morality, the moral law gives merely a command, and to doubt the possibility of that element would be the same as to call in question the moral law itself. But as regards the second element of that object, namely, happiness perfectly proportioned to that worthiness, it is true that there is no need of a command to admit its possibility in general, for theoretical reason has nothing to say against it; but the manner in which we have to conceive this harmony of the laws of nature with those of freedom has in it something in respect of which we have a choice, because theoretical reason decides nothing with apodeictic certainty about it, and in respect of this there may be a moral interest which turns the scale.

I had said above that in a mere course of nature in the world an accurate correspondence between happiness and moral worth is not to be expected and must be regarded as impossible, and that therefore the possibility of the summum bonum cannot be admitted from this side except on the supposition of a moral Author of the world. I purposely reserved the restriction of this judgement to the subjective conditions of our reason, in order not to make use of it until the manner of this belief should be defined more precisely. The fact is that the impossibility referred to is merely subjective, that is, our reason finds it impossible for it to render conceivable in the way of a mere course of nature a connection so exactly proportioned and so thoroughly adapted to an end, between two sets of events happening according to such distinct laws; although, as with everything else in nature that is adapted to an end, it cannot prove, that is, show by sufficient objective reason, that it is not possible by universal laws of nature.

Now, however, a deciding principle of a different kind comes into play to turn the scale in this uncertainty of speculative reason. The command to promote the summum bonum is established on an objective basis (in practical reason); the possibility of the same in general is likewise established on an objective basis (in theoretical reason, which has nothing to say against it). But reason cannot decide objectively in what way we are to conceive this possibility; whether by universal laws of nature without a wise Author presiding over nature, or only on supposition of such an Author. Now here there comes in a subjective condition of reason, the only way theoretically possible for it, of conceiving the exact harmony of the kingdom of nature with the kingdom of morals, which is the condition of the possibility of the summum bonum; and at the same time the only one conducive to morality (which depends on an objective law of reason). Now since the promotion of this summum bonum, and therefore the supposition of its possibility, are objectively necessary (though only as a result of practical reason), while at the same time the manner in which we would conceive it rests with our own choice, and in this choice a free interest of pure practical reason decides for the assumption of a wise Author of the world; it is clear that the

principle that herein determines our judgement, though as a want it is subjective, yet at the same time being the means of promoting what is objectively (practically) necessary, is the foundation of a maxim of belief in a moral point of view, that is, a faith of pure practical reason. This, then, is not commanded, but being a voluntary determination of our judgement, conducive to the moral (commanded) purpose, and moreover harmonizing with the theoretical requirement of reason, to assume that existence and to make it the foundation of our further employment of reason, it has itself sprung from the moral disposition of mind; it may therefore at times waver even in the well-disposed, but can never be reduced to unbelief.

IX. Of the Wise Adaptation of Man's Cognitive Faculties
to his Practical Destination.

If human nature is destined to endeavour after the summum bonum, we must suppose also that the measure of its cognitive faculties, and particularly their relation to one another, is suitable to this end. Now the Critique of Pure Speculative Reason proves that this is incapable of solving satisfactorily the most weighty problems that are proposed to it, although it does not ignore the natural and important hints received from the same reason, nor the great steps that it can make to approach to this great goal that is set before it, which, however, it can never reach of itself, even with the help of the greatest knowledge of nature. Nature then seems here to have provided us only in a step-motherly fashion with the faculty required for our end.

Suppose, now, that in this matter nature had conformed to our wish and had given us that capacity of discernment or that enlightenment which we would gladly possess, or which some imagine they actually possess, what would in all probability be the consequence? Unless our whole nature were at the same time changed, our inclinations, which always have the first word, would first of all demand their own satisfaction, and, joined with rational reflection, the greatest possible and most lasting satisfaction, under the name of happiness; the moral law would afterwards speak, in order to keep them within their proper bounds, and even to subject them all to a higher end, which has no regard to inclination. But instead of the conflict that the moral disposition has now to carry on with the inclinations, in which, though after some defeats, moral strength of mind may be gradually acquired, God and eternity with their awful majesty would stand unceasingly before our eyes (for what we can prove perfectly is to us as certain as that of which we are assured by the sight of our eyes). Transgression of the law, would, no doubt, be avoided; what is commanded would be done; but the mental disposition, from which actions ought to proceed, cannot be infused by any command, and in this case the spur of action is ever active and external, so that reason has no need to exert itself in order to gather strength to resist the inclinations by a lively representation of the dignity of the law: hence most of the actions that conformed to the law would be done from fear, a few only from hope, and none at all from duty, and the moral worth of actions, on which alone in the eyes of supreme wisdom the worth of the person and even that of the world depends, would cease to exist. As long as the nature of man remains what it is, his conduct would thus be changed into mere mechanism, in which, as in a puppet-show, everything would gesticulate well, but there would be no life in the figures. Now, when it is quite otherwise with us, when with all the effort of our reason we have only a very obscure and doubtful view into the future, when the Governor of the world allows us only to conjecture his existence and his majesty, not to behold them or prove them clearly; and on the other hand, the moral law within us, without promising or threatening anything with certainty, demands of us disinterested respect; and only when this respect has become active and dominant, does it allow us by means of it a prospect into the world of the supersensible, and then only with weak glances: all this being so, there is room for true moral disposition, immediately devoted to the law, and a rational creature can become worthy of sharing in the summum bonum that corresponds to the worth of his person and not merely to his actions. Thus what the study of nature and of man teaches us sufficiently elsewhere may well be true here also; that the unsearchable wisdom by which we exist is not less worthy of admiration in what it has denied than in what it has granted.

SECOND PART.

Methodology of Pure Practical Reason.

By the methodology of pure practical reason we are not to understand the mode of proceeding with pure practical principles (whether in study or in exposition), with a view to a scientific knowledge of them, which alone is what is properly called method elsewhere in theoretical philosophy (for popular knowledge requires a manner, science a method, i.e., a process according to principles of reason by which alone the manifold of any branch of knowledge can become a system). On the contrary, by this methodology is understood the mode in which we can give the laws of pure practical reason access to the human mind and influence on its maxims, that is, by which we can make the objectively practical reason subjectively practical also.

Now it is clear enough that those determining principles of the will which alone make maxims properly moral and give them a moral worth, namely, the direct conception of the law and the objective necessity of obeying it as our duty, must be regarded as the proper springs of actions, since otherwise legality of actions might be produced, but not morality of character. But it is not so clear; on the contrary, it must at first sight seem to every one very improbable that even subjectively that exhibition of pure virtue can have more power over the human mind, and supply a far stronger spring even for effecting that legality of actions, and can produce more powerful resolutions to prefer the law, from pure respect for it, to every other consideration, than all the deceptive allurements of pleasure or of all that may be reckoned as happiness, or even than all threatenings of pain and misfortune. Nevertheless, this is actually the case, and if human nature were not so constituted, no mode of presenting the law by roundabout ways and indirect recommendations would ever produce morality of character. All would be simple hypocrisy; the law would be hated, or at least despised, while it was followed for the sake of one’s own advantage. The letter of the law (legality) would be found in our actions, but not the spirit of it in our minds (morality); and as with all our efforts we could not quite free ourselves from reason in our judgement, we must inevitably appear in our own eyes worthless, depraved men, even though we should seek to compensate ourselves for this mortification before the inner tribunal, by enjoying the pleasure that a supposed natural or divine law might be imagined to have connected with it a sort of police machinery, regulating its operations by what was done without troubling itself about the motives for doing it.

It cannot indeed be denied that in order to bring an uncultivated or degraded mind into the track of moral goodness some preparatory guidance is necessary, to attract it by a view of its own advantage, or to alarm it by fear of loss; but as soon as this mechanical work, these leading-strings have produced some effect, then we must bring before the mind the pure moral motive, which, not only because it is the only one that can be the foundation of a character (a practically consistent habit of mind with unchangeable maxims), but also because it teaches a man to feel his own dignity, gives the mind a power unexpected even by himself, to tear himself from all sensible attachments so far as they would fain have the rule, and to find a rich compensation for the sacrifice he offers, in the independence of his rational nature and the greatness of soul to which he sees that he is destined. We will therefore show, by such observations as every one can make, that this property of our minds, this receptivity for a pure moral interest, and consequently the moving force of the pure conception of virtue, when it is properly applied to the human heart, is the most powerful spring and, when a continued and punctual observance of moral maxims is in question, the only spring of good conduct. It must, however, be remembered that if these observations only prove the reality of such a feeling, but do not show any moral improvement brought about by it, this is no argument against the only method that exists of making the objectively practical laws of pure reason

subjectively practical, through the mere force of the conception of duty; nor does it prove that this method is a vain delusion. For as it has never yet come into vogue, experience can say nothing of its results; one can only ask for proofs of the receptivity for such springs, and these I will now briefly present, and then sketch the method of founding and cultivating genuine moral dispositions.

When we attend to the course of conversation in mixed companies, consisting not merely of learned persons and subtle reasoners, but also of men of business or of women, we observe that, besides story-telling and jesting, another kind of entertainment finds a place in them, namely, argument; for stories, if they are to have novelty and interest, are soon exhausted, and jesting is likely to become insipid. Now of all argument there is none in which persons are more ready to join who find any other subtle discussion tedious, none that brings more liveliness into the company, than that which concerns the moral worth of this or that action by which the character of some person is to be made out. Persons, to whom in other cases anything subtle and speculative in theoretical questions is dry and irksome, presently join in when the question is to make out the moral import of a good or bad action that has been related, and they display an exactness, a refinement, a subtlety, in excogitating everything that can lessen the purity of purpose, and consequently the degree of virtue in it, which we do not expect from them in any other kind of speculation. In these criticisms, persons who are passing judgement on others often reveal their own character: some, in exercising their judicial office, especially upon the dead, seem inclined chiefly to defend the goodness that is related of this or that deed against all injurious charges of insincerity, and ultimately to defend the whole moral worth of the person against the reproach of dissimulation and secret wickedness; others, on the contrary, turn their thoughts more upon attacking this worth by accusation and fault finding. We cannot always, however, attribute to these latter the intention of arguing away virtue altogether out of all human examples in order to make it an empty name; often, on the contrary, it is only well-meant strictness in determining the true moral import of actions according to an uncompromising law. Comparison with such a law, instead of with examples, lowers self-conceit in moral matters very much, and not merely teaches humility, but makes every one feel it when he examines himself closely. Nevertheless, we can for the most part observe, in those who defend the purity of purpose in giving examples that where there is the presumption of uprightness they are anxious to remove even the least spot, lest, if all examples had their truthfulness disputed, and if the purity of all human virtue were denied, it might in the end be regarded as a mere phantom, and so all effort to attain it be made light of as vain affectation and delusive conceit.

I do not know why the educators of youth have not long since made use of this propensity of reason to enter with pleasure upon the most subtle examination of the practical questions that are thrown up; and why they have not, after first laying the foundation of a purely moral catechism, searched through the biographies of ancient and modern times with the view of having at hand instances of the duties laid down, in which, especially by comparison of similar actions under different circumstances, they might exercise the critical judgement of their scholars in remarking their greater or less moral significance. This is a thing in which they would find that even early youth, which is still unripe for speculation of other kinds, would soon Become very acute and not a little interested, because it feels the progress of its faculty of judgement; and, what is most important, they could hope with confidence that the frequent practice of knowing and approving good conduct in all its purity, and on the other hand of remarking with regret or contempt the least deviation from it, although it may be pursued only as a sport in which children may compete with one another, yet will leave a lasting impression of esteem on the one hand and disgust on the other; and so, by the mere habit of looking on such actions as deserving approval or blame, a good foundation would be laid for uprightness in the future course of life. Only I wish they would spare them the example of so-called noble (super-meritorious) actions, in which our sentimental books so much abound, and would refer all to duty merely, and to the worth that a man can and must give himself in his own eyes by the consciousness of not having transgressed it, since whatever runs up into empty wishes and longings after inaccessible perfection produces mere heroes of romance, who, while they pique

themselves on their feeling for transcendent greatness, release themselves in return from the observance of common and every-day obligations, which then seem to them petty and insignificant. *

* It is quite proper to extol actions that display a great, unselfish, sympathizing mind or humanity. But, in this case, we must fix attention not so much on the elevation of soul, which is very fleeting and transitory, as on the subjection of the heart to duty, from which a more enduring impression may be expected, because this implies principle (whereas the former only implies ebullitions). One need only reflect a little and he will always find a debt that he has by some means incurred towards the human race (even if it were only this, by the inequality of men in the civil constitution, enjoys advantages on account of which others must be the more in want), which will prevent the thought of duty from being repressed by the self-complacent imagination of merit.

But if it is asked: “What, then, is really pure morality, by which as a touchstone we must test the moral significance of every action,” then I must admit that it is only philosophers that can make the decision of this question doubtful, for to common sense it has been decided long ago, not indeed by abstract general formulae, but by habitual use, like the distinction between the right and left hand. We will then point out the criterion of pure virtue in an example first, and, imagining that it is set before a boy, of say ten years old, for his judgement, we will see whether he would necessarily judge so of himself without being guided by his teacher. Tell him the history of an honest man whom men want to persuade to join the calumniators of an innocent and powerless person (say Anne Boleyn, accused by Henry VIII of England). He is offered advantages, great gifts, or high rank; he rejects them. This will excite mere approbation and applause in the mind of the hearer. Now begins the threatening of loss. Amongst these traducers are his best friends, who now renounce his friendship; near kinsfolk, who threaten to disinherit him (he being without fortune); powerful persons, who can persecute and harass him in all places and circumstances; a prince, who threatens him with loss of freedom, yea, loss of life. Then to fill the measure of suffering, and that he may feel the pain that only the morally good heart can feel very deeply, let us conceive his family threatened with extreme distress and want, entreating him to yield; conceive himself, though upright, yet with feelings not hard or insensible either to compassion or to his own distress; conceive him, I say, at the moment when he wishes that he had never lived to see the day that exposed him to such unutterable anguish, yet remaining true to his uprightness of purpose, without wavering or even doubting; then will my youthful hearer be raised gradually from mere approval to admiration, from that to amazement, and finally to the greatest veneration, and a lively wish that he himself could be such a man (though certainly not in such circumstances). Yet virtue is here worth so much only because it costs so much, not because it brings any profit. All the admiration, and even the endeavour to resemble this character, rest wholly on the purity of the moral principle, which can only be strikingly shown by removing from the springs of action everything that men may regard as part of happiness. Morality, then, must have the more power over the human heart the more purely it is exhibited. Whence it follows that, if the law of morality and the image of holiness and virtue are to exercise any influence at all on our souls, they can do so only so far as they are laid to heart in their purity as motives, unmixed with any view to prosperity, for it is in suffering that they display themselves most nobly. Now that whose removal strengthens the effect of a moving force must have been a hindrance, consequently every admixture of motives taken from our own happiness is a hindrance to the influence of the moral law on the heart. I affirm further that even in that admired action, if the motive from which it was done was a high regard for duty, then it is just this respect for the law that has the greatest influence on the mind of the spectator, not any pretension to a supposed inward greatness of mind or noble meritorious sentiments; consequently duty, not merit, must have not only the most definite, but, when it is represented in the true light of its inviolability, the most penetrating, influence on the mind.

It is more necessary than ever to direct attention to this method in our times, when men hope to produce more effect on the mind with soft, tender feelings, or high-flown, puffing-up pretensions, which rather

wither the heart than strengthen it, than by a plain and earnest representation of duty, which is more suited to human imperfection and to progress in goodness. To set before children, as a pattern, actions that are called noble, magnanimous, meritorious, with the notion of captivating them by infusing enthusiasm for such actions, is to defeat our end. For as they are still so backward in the observance of the commonest duty, and even in the correct estimation of it, this means simply to make them fantastical romancers betimes. But, even with the instructed and experienced part of mankind, this supposed spring has, if not an injurious, at least no genuine, moral effect on the heart, which, however, is what it was desired to produce.

All feelings, especially those that are to produce unwonted exertions, must accomplish their effect at the moment they are at their height and before the calm down; otherwise they effect nothing; for as there was nothing to strengthen the heart, but only to excite it, it naturally returns to its normal moderate tone and, thus, falls back into its previous languor. Principles must be built on conceptions; on any other basis there can only be paroxysms, which can give the person no moral worth, nay, not even confidence in himself, without which the highest good in man, consciousness of the morality of his mind and character, cannot exist. Now if these conceptions are to become subjectively practical, we must not rest satisfied with admiring the objective law of morality, and esteeming it highly in reference to humanity, but we must consider the conception of it in relation to man as an individual, and then this law appears in a form indeed that is highly deserving of respect, but not so pleasant as if it belonged to the element to which he is naturally accustomed; but on the contrary as often compelling him to quit this element, not without self-denial, and to betake himself to a higher, in which he can only maintain himself with trouble and with unceasing apprehension of a relapse. In a word, the moral law demands obedience, from duty not from predilection, which cannot and ought not to be presupposed at all.

Let us now see, in an example, whether the conception of an action, as a noble and magnanimous one, has more subjective moving power than if the action is conceived merely as duty in relation to the solemn law of morality. The action by which a man endeavours at the greatest peril of life to rescue people from shipwreck, at last losing his life in the attempt, is reckoned on one side as duty, but on the other and for the most part as a meritorious action, but our esteem for it is much weakened by the notion of duty to himself which seems in this case to be somewhat infringed. More decisive is the magnanimous sacrifice of life for the safety of one's country; and yet there still remains some scruple whether it is a perfect duty to devote one's self to this purpose spontaneously and unbidden, and the action has not in itself the full force of a pattern and impulse to imitation. But if an indispensable duty be in question, the transgression of which violates the moral law itself, and without regard to the welfare of mankind, and as it were tramples on its holiness (such as are usually called duties to God, because in Him we conceive the ideal of holiness in substance), then we give our most perfect esteem to the pursuit of it at the sacrifice of all that can have any value for the dearest inclinations, and we find our soul strengthened and elevated by such an example, when we convince ourselves by contemplation of it that human nature is capable of so great an elevation above every motive that nature can oppose to it. Juvenal describes such an example in a climax which makes the reader feel vividly the force of the spring that is contained in the pure law of duty, as duty:

Esto bonus miles, tutor bonus, arbiter idem
Integer; ambiguae si quando citabere testis
Incertaeque rei, Phalaris licet imperet ut sis
Falsus, et admoto dictet periuria tauro,
Summum crede nefas animam praeferre pudori,
Et propter vitam vivendi perdere causas. *

* [Juvenal, Satirae, “Be you a good soldier, a faithful tutor, an uncorrupted umpire also; if you are summoned as a witness in a doubtful and uncertain thing, though Phalaris should command that you should be false, and should dictate perjuries with the bull brought to you, believe it the highest impiety to prefer life to reputation, and for the sake of life, to lose the causes of living.”]

When we can bring any flattering thought of merit into our action, then the motive is already somewhat alloyed with self-love and has therefore some assistance from the side of the sensibility. But to postpone everything to the holiness of duty alone, and to be conscious that we can because our own reason recognises this as its command and says that we ought to do it, this is, as it were, to raise ourselves altogether above the world of sense, and there is inseparably involved in the same a consciousness of the law, as a spring of a faculty that controls the sensibility; and although this is not always attended with effect, yet frequent engagement with this spring, and the at first minor attempts at using it, give hope that this effect may be wrought, and that by degrees the greatest, and that a purely moral interest in it may be produced in us.

The method then takes the following course. At first we are only concerned to make the judging of actions by moral laws a natural employment accompanying all our own free actions, as well as the observation of those of others, and to make it as it were a habit, and to sharpen this judgement, asking first whether the action conforms objectively to the moral law, and to what law; and we distinguish the law that merely furnishes a principle of obligation from that which is really obligatory (leges obligandi a legibus obligantibus); as, for instance, the law of what men’s wants require from me, as contrasted with that which their rights demand, the latter of which prescribes essential, the former only non-essential duties; and thus we teach how to distinguish different kinds of duties which meet in the same action. The other point to which attention must be directed is the question whether the action was also (subjectively) done for the sake of the moral law, so that it not only is morally correct as a deed, but also, by the maxim from which it is done, has moral worth as a disposition. Now there is no doubt that this practice, and the resulting culture of our reason in judging merely of the practical, must gradually produce a certain interest even in the law of reason, and consequently in morally good actions. For we ultimately take a liking for a thing, the contemplation of which makes us feel that the use of our cognitive faculties is extended; and this extension is especially furthered by that in which we find moral correctness, since it is only in such an order of things that reason, with its faculty of determining a priori on principle what ought to be done, can find satisfaction. An observer of nature takes liking at last to objects that at first offended his senses, when he discovers in them the great adaptation of their organization to design, so that his reason finds food in its contemplation. So Leibnitz spared an insect that he had carefully examined with the microscope, and replaced it on its leaf, because he had found himself instructed by the view of it and had, as it were, received a benefit from it.

But this employment of the faculty of judgement, which makes us feel our own cognitive powers, is not yet the interest in actions and in their morality itself. It merely causes us to take pleasure in engaging in such criticism, and it gives to virtue or the disposition that conforms to moral laws a form of beauty, which is admired, but not on that account sought after (laudatur et alget); as everything the contemplation of which produces a consciousness of the harmony of our powers of conception, and in which we feel the whole of our faculty of knowledge (understanding and imagination) strengthened, produces a satisfaction, which may also be communicated to others, while nevertheless the existence of the object remains indifferent to us, being only regarded as the occasion of our becoming aware of the capacities in us which are elevated above mere animal nature. Now, however, the second exercise comes in, the living exhibition of morality of character by examples, in which attention is directed to purity of will, first only as a negative perfection, in so far as in an action done from duty no motives of inclination have any influence in determining it. By this the pupil’s attention is fixed upon the consciousness of his freedom, and although this renunciation at first excites a feeling of pain, nevertheless, by its withdrawing the pupil

from the constraint of even real wants, there is proclaimed to him at the same time a deliverance from the manifold dissatisfaction in which all these wants entangle him, and the mind is made capable of receiving the sensation of satisfaction from other sources. The heart is freed and lightened of a burden that always secretly presses on it, when instances of pure moral resolutions reveal to the man an inner faculty of which otherwise he has no right knowledge, the inward freedom to release himself from the boisterous importunity of inclinations, to such a degree that none of them, not even the dearest, shall have any influence on a resolution, for which we are now to employ our reason. Suppose a case where I alone know that the wrong is on my side, and although a free confession of it and the offer of satisfaction are so strongly opposed by vanity, selfishness, and even an otherwise not illegitimate antipathy to the man whose rights are impaired by me, I am nevertheless able to discard all these considerations; in this there is implied a consciousness of independence on inclinations and circumstances, and of the possibility of being sufficient for myself, which is salutary to me in general for other purposes also. And now the law of duty, in consequence of the positive worth which obedience to it makes us feel, finds easier access through the respect for ourselves in the consciousness of our freedom. When this is well established, when a man dreads nothing more than to find himself, on self-examination, worthless and contemptible in his own eyes, then every good moral disposition can be grafted on it, because this is the best, nay, the only guard that can keep off from the mind the pressure of ignoble and corrupting motives.

I have only intended to point out the most general maxims of the methodology of moral cultivation and exercise. As the manifold variety of duties requires special rules for each kind, and this would be a prolix affair, I shall be readily excused if in a work like this, which is only preliminary, I content myself with these outlines.

CONCLUSION.

Two things fill the mind with ever new and increasing admiration and awe, the oftener and the more steadily we reflect on them: the starry heavens above and the moral law within. I have not to search for them and conjecture them as though they were veiled in darkness or were in the transcendent region beyond my horizon; I see them before me and connect them directly with the consciousness of my existence. The former begins from the place I occupy in the external world of sense, and enlarges my connection therein to an unbounded extent with worlds upon worlds and systems of systems, and moreover into limitless times of their periodic motion, its beginning and continuance. The second begins from my invisible self, my personality, and exhibits me in a world which has true infinity, but which is traceable only by the understanding, and with which I discern that I am not in a merely contingent but in a universal and necessary connection, as I am also thereby with all those visible worlds. The former view of a countless multitude of worlds annihilates as it were my importance as an animal creature, which after it has been for a short time provided with vital power, one knows not how, must again give back the matter of which it was formed to the planet it inhabits (a mere speck in the universe). The second, on the contrary, infinitely elevates my worth as an intelligence by my personality, in which the moral law reveals to me a life independent of animality and even of the whole sensible world, at least so far as may be inferred from the destination assigned to my existence by this law, a destination not restricted to conditions and limits of this life, but reaching into the infinite.

But though admiration and respect may excite to inquiry, they cannot supply the want of it. What, then, is to be done in order to enter on this in a useful manner and one adapted to the loftiness of the subject? Examples may serve in this as a warning and also for imitation. The contemplation of the world began from the noblest spectacle that the human senses present to us, and that our understanding can bear to follow in their vast reach; and it ended- in astrology. Morality began with the noblest attribute of human nature, the development and cultivation of which give a prospect of infinite utility; and ended- in fanaticism or superstition. So it is with all crude attempts where the principal part of the business depends on the use of reason, a use which does not come of itself, like the use of the feet, by frequent exercise, especially when attributes are in question which cannot be directly exhibited in common experience. But after the maxim had come into vogue, though late, to examine carefully beforehand all the steps that reason purposes to take, and not to let it proceed otherwise than in the track of a previously well considered method, then the study of the structure of the universe took quite a different direction, and thereby attained an incomparably happier result. The fall of a stone, the motion of a sling, resolved into their elements and the forces that are manifested in them, and treated mathematically, produced at last that clear and henceforward unchangeable insight into the system of the world which, as observation is continued, may hope always to extend itself, but need never fear to be compelled to retreat.

This example may suggest to us to enter on the same path in treating of the moral capacities of our nature, and may give us hope of a like good result. We have at hand the instances of the moral judgement of reason. By analysing these into their elementary conceptions, and in default of mathematics adopting a process similar to that of chemistry, the separation of the empirical from the rational elements that may be found in them, by repeated experiments on common sense, we may exhibit both pure, and learn with certainty what each part can accomplish of itself, so as to prevent on the one hand the errors of a still crude untrained judgement, and on the other hand (what is far more necessary) the extravagances of genius, by which, as by the adepts of the philosopher's stone, without any methodical study or knowledge of nature, visionary treasures are promised and the true are thrown away. In one word, science (critically undertaken and methodically directed) is the narrow gate that leads to the true doctrine of practical

wisdom, if we understand by this not merely what one ought to do, but what ought to serve teachers as a guide to construct well and clearly the road to wisdom which everyone should travel, and to secure others from going astray. Philosophy must always continue to be the guardian of this science; and although the public does not take any interest in its subtle investigations, it must take an interest in the resulting doctrines, which such an examination first puts in a clear light.

THE END

CRITIQUE OF JUDGEMENT

Translated by J. H. Bernard

Published in 1790, the third Critique, *Critique of Judgement,* follows the *Critique of Pure Reason* (1781) and the *Critique of Practical Reason* (1788). The book is divided into two main sections: the Critique of Aesthetic Judgment and the Critique of Teleological Judgment, and also includes a large overview of the entirety of Kant's Critical system, arranged in its final form. The First Introduction was not published during Kant's lifetime, for Kant wrote a replacement for publication.

The *Critique of Judgment* constitutes a discussion of the place of Judgment itself, which must overlap both the Understanding (which operates from within a deterministic framework) and Reason (which operates on the grounds of freedom). The first part of the book, the Critique of Aesthetic Judgment, discusses the four possible "reflective judgments": the agreeable, the beautiful, the sublime, and the good. Kant makes it clear that these are the only four possible reflective judgments, as he relates them to the Table of Judgments from the *Critique of Pure Reason*.

The central concept of Kant's analysis of the judgment of beauty is what he called the ″free play″ between the cognitive powers of imagination and understanding. We call an object beautiful, because its form fits our cognitive powers and enables such a ″free play″ (§22) the experience of which is pleasurable to us. The judgment that something is beautiful is a claim that it possesses the "form of finality" — that is, that it appears to have been designed with a purpose, even though it does not have any apparent practical function. We also do not need to have a determinate concept for an object in order to find it beautiful (§9). In this regard, Kant further distinguishes between free and adherent beauty. Whereas judgments of free beauty are made without having one determinate concept for the object being judged (e.g. an ornament or well-formed line), a judgment of beauty is adherent if we do have such a determined concept in mind (e.g. a well-built horse that is recognized as such). The main difference between these two judgments is that purpose or use of the object plays no role in the case of free beauty. In contrast, adherent judgments of beauty are only possible if the object is not ill-suited for its purpose.

Critik

der

Urtheilskraft

von

Immanuel Kant.

Berlin und Libau,
bey Lagarde und Friederich
1790.

The first edition’s title page

CONTENTS

EDITOR’S INTRODUCTION
GLOSSARY OF KANT’S PHILOSOPHICAL TERMS
PREFACE
INTRODUCTION

PART I. CRITIQUE OF THE AESTHETICAL JUDGEMENT
FIRST DIVISION. ANALYTIC OF THE AESTHETICAL JUDGEMENT

FIRST BOOK. ANALYTIC OF THE BEAUTIFUL
FIRST MOMENT.
SECOND MOMENT
THIRD MOMENT
FOURTH MOMENT
GENERAL REMARK ON THE FIRST SECTION OF THE ANALYTIC

SECOND BOOK. ANALYTIC OF THE SUBLIME
SECOND DIVISION

PART II
FIRST DIVISION
SECOND DIVISION
ENDNOTES

Contemporary etching of Kant

EDITOR'S INTRODUCTION

There are not wanting indications that public interest in the Critical Philosophy has been quickened of recent days in these countries, as well as in America. To lighten the toil of penetrating through the wilderness of Kant's long sentences, the English student has now many aids, which those who began their studies fifteen or twenty years ago did not enjoy. Translations, paraphrases, criticisms, have been published in considerable numbers; so that if it is not yet true that "he who runs may read," it may at least be said that a patient student of ordinary industry and intelligence has his way made plain before him. And yet the very number of aids is dangerous. Whatever may be the value of short and easy handbooks in other departments of science, it is certain that no man will become a philosopher, no man will even acquire a satisfactory knowledge of the history of philosophy, without personal and prolonged study of the *ipsissima verba* of the great masters of human thought. "Above all," said Schopenhauer, "my truth-seeking young friends, beware of letting our professors tell you what is contained in the Critique of the Pure Reason"; and the advice has not become less wholesome with the lapse of years. The fact, however, that many persons have not sufficient familiarity with German to enable them to study German Philosophy in the original with ease, makes translations an educational necessity; and this translation of Kant's Critique of the faculty of Judgement has been undertaken in the hope that it may promote a more general study of that masterpiece. If any reader wishes to follow Schopenhauer's advice, he has only to omit the whole of this prefatory matter and proceed at once to the Author's laborious Introduction.

It is somewhat surprising that the Critique of Judgement has never yet been made accessible to the English reader. Dr. Watson has indeed translated a few selected passages, so also has Dr. Caird in his valuable account of the Kantian philosophy, and I have found their renderings of considerable service; but the space devoted by both writers to the Critique of Judgement is very small in comparison with that given to the Critiques of Pure and Practical Reason. And yet the work is not an unimportant one. Kant himself regarded it as the coping-stone of his critical edifice; it even formed the point of departure for his successors, Fichte, Schelling and Hegel, in the construction of their respective systems. Possibly the reason of its comparative neglect lies in its repulsive style. Kant was never careful of style, and in his later years he became more and more enthralled by those technicalities and refined distinctions which deter so many from the Critical Philosophy even in its earlier sections. These "symmetrical architectonic amusements," as Schopenhauer called them, encumber every page of Kant's later writings, and they are a constant source of embarrassment to his unhappy translator. For, as every translator knows, no single word in one language exactly covers any single word in another; and yet if Kant's distinctions are to be preserved it is necessary to select with more or less arbitrariness English equivalents for German technical terms, and retain them all through. Instances of this will be given later on; I only remark here on the fact that Kant's besetting sin of over-technicality is especially conspicuous in this treatise.

Another fault — an old fault of Kant — apparent after reading even a few pages, is that repetitions are very frequent of the same thought in but slightly varied language. Arguments are repeated over and over again until they become quite wearisome; and then when the reader's attention has flagged, and he is glancing cursorily down the page, some important new point is introduced without emphasis, as if the author were really anxious to keep his meaning to himself at all hazards. A book written in such fashion rarely attracts a wide circle of readers. And yet, not only did Goethe think highly of it, but it received a large measure of attention in France as well as in Germany on its first appearance. Originally published at Berlin in 1790, a Second Edition was called for in 1793; and a French translation was made by Imhoff in 1796. Other French versions are those by Keratry and Weyland in 1823, and by Barni in 1846. This last I have had before me while performing my task, but I have not found it of much service; the older French

translations I have not seen. The existence of these French versions, when taken in connexion with the absence until very recently of any systematic account of the Critique of Judgement in English, may be perhaps explained by the lively interest that was taken on the Continent in the Philosophy of Art in the early part of the century; whereas scientific studies on this subject received little attention in England during the same period.

The student of the Critique of Pure Reason will remember how closely, in his Transcendental Logic, Kant follows the lines of the ordinary logic of the schools. He finds his whole plan ready made for him, as it were; and he proceeds to work out the metaphysical principles which underlie the process of syllogistic reasoning. And as there are three propositions in every syllogism, he points out that, in correspondence with this triplicity, the higher faculties of the soul may be regarded as threefold. The Understanding or the faculty of concepts gives us our major premise, as it supplies us in the first instance with a general notion. By means of the Judgement we see that a particular case comes under the general rule, and by the Reason we draw our conclusion. These, as three distinct movements in the process of reasoning, are regarded by Kant as indicating three distinct faculties, with which the Analytic of Concepts, the Analytic of Principles, and the Dialectic are respectively concerned. The full significance of this important classification does not seem, however, to have occurred to Kant at the time, as we may see from the order in which he wrote his great books.[1*] The first problem which arrests the attention of all modern philosophers is, of course, the problem of knowledge, its conditions and its proper objects. And in the Critique of Pure Reason this is discussed, and the conclusion is reached that nature as phenomenon is the only object of which we can hope to acquire any exact knowledge. But it is apparent that there are other problems which merit consideration; a complete philosophy includes practice as well as theory; it has to do not only with logic, but with life. And thus the Critique of Practical Reason was written, in which is unfolded the doctrine of man's freedom standing in sharp contrast with the necessity of natural law. Here, then, it seems at first sight as if we had covered the whole field of human activity. For we have investigated the sources of knowledge, and at the same time have pointed out the conditions of practical life, and have seen that the laws of freedom are just as true in their own sphere as are the laws of nature.

But as we reflect on our mental states we find that here no proper account has been given of the phenomena of *feeling*, which play so large a part in experience. And this Kant saw before he had proceeded very far with the Critique of Practical Reason; and in consequence he adopted a threefold classification of the higher mental faculties based on that given by previous psychologists. Knowledge, feeling, desire, these are the three ultimate modes of consciousness, of which the second has not yet been described. And when we compare this with the former triple division which we took up from the Aristotelian logic, we see that the parallelism is significant. Understanding is *par excellence* the faculty of knowledge, and Reason the faculty of desire (these points are developed in Kant's first two Critiques). And this suggests that the Judgement corresponds to the feeling of pleasure and pain; it occupies a position intermediate between Understanding and Reason, just as, roughly speaking, the feeling of pleasure is intermediate between our perception of an object and our desire to possess it.

And so the Critique of Judgement completes the whole undertaking of criticism; its endeavour is to show that there are *a priori* principles at the basis of Judgement just as there are in the case of Understanding and of Reason; that these principles, like the principles of Reason, are not constitutive but only regulative of experience, i.e. that they do not teach us anything positive about the characteristics of objects, but only indicate the conditions under which we find it necessary to view them; and lastly, that we are thus furnished with an *a priori* philosophy of pleasure.

The fundamental principle underlying the procedure of the Judgement is seen to be that of the purposiveness of Nature; nature is everywhere adapted to ends or purposes, and thus constitutes a κόσμος, a well-ordered whole. By this means, nature is regarded by us as if its particular empirical laws were not isolated and disparate, but connected and in relation, deriving their unity in seeming diversity

from an intelligence which is at the source of nature. It is only by the assumption of such a principle that we can construe nature to ourselves; and the principle is then said to be a transcendental condition of the exercise of our judging faculty, but valid only for the reflective, not for the determinant Judgement. It gives us pleasure to view nature in this way; just as the contemplation of chaos would be painful.

But this purposiveness may be only formal and subjective, or real and objective. In some cases the purposiveness resides in the felt harmony and accordance of the form of the object with the cognitive faculties; in others the form of the object is judged to harmonise with the purpose in view in its existence. That is to say, in the one case we judge the form of the object to be purposive, as in the case of a flower, but could not explain any purpose served by it; in the other case we have a definite notion of what it is adapted for. In the former case the aesthetical Judgement is brought to bear, in the latter the teleological; and it thus appears that the Critique of Judgement has two main divisions; it treats first of the philosophy of Taste, the Beautiful and the Sublime in Nature; and secondly, of the Teleology of nature's working. It is a curious literary parallel that St. Augustine hints (*Confessions* iv. 15) that he had written a book, *De Pulchro et Ápto*, in which these apparently distinct topics were combined; "pulchrum esse, quod per se ipsum; aptum, autem, quod ad aliquid accommodatum deceret." A beautiful object has no purpose external to itself and the observer; but a useful object serves further ends. Both, however, may be brought under the higher category of things that are reckoned *purposive* by the Judgement.

We have here then, in the first place, a basis for an *a priori* Philosophy of Taste; and Kant works out its details with great elaboration. He borrowed little from the writings of his predecessors, but struck out, as was ever his plan, a line of his own. He quotes with approval from Burke's *Treatise on the Sublime and Beautiful*, which was accessible to him in a German translation; but is careful to remark that it is as psychology, not as philosophy, that Burke's work has value. He may have read in addition Hutcheson's *Inquiry* which had also been translated into German; and he was complete master of Hume's opinions. Of other writers on Beauty, he only names Batteux and Lessing. Batteux was a French writer of repute who had attempted a twofold arrangement of the Arts as they may be brought under Space and under Time respectively, a mode of classification which would naturally appeal to Kant. He does not seem, however, to have read the ancient text-book on the subject, Aristotle's *Poetics*, the principles of which Lessing declared to be as certain as Euclid.

Following the guiding thread of the categories, he declares that the aesthetical judgement about Beauty is according to *quality* disinterested; a point which had been laid down by such different writers as Hutcheson and Moses Mendelssohn. As to *quantity*, the judgement about beauty gives universal satisfaction, although it is based on no definite concept. The universality is only subjective; but still it is there. The maxim *Trahit sua quemque voluptas* does not apply to the pleasure afforded by a pure judgement about beauty. As to *relation*, the characteristic of the object called beautiful is that it betrays a purposiveness without definite purpose. The pleasure is *a priori*, independent on the one hand of the charms of sense or the emotions of mere feeling, as Winckelmann had already declared; and on the other hand is a pleasure quite distinct from that taken which we feel when viewing perfection, with which Wolff and Baumgarten had identified it. By his distinction between free and dependent beauty, which we also find in the pages of Hutcheson, Kant further develops his doctrine of the freedom of the pure judgement of taste from the thraldom of concepts.

Finally, the satisfaction afforded by the contemplation of a beautiful object is a necessary satisfaction. This necessity is not, to be sure, theoretical like the necessity attaching to the Law of Causality; nor is it a practical necessity as is the need to assume the Moral Law as the guiding principle of conduct. But it may be called *exemplary*; that is, we may set up our satisfaction in a beautiful picture as setting an example to be followed by others. It is plain, however, that this can only be assumed under certain presuppositions. We must presuppose the idea of a *sensus communis* or common sense in which all men share. As knowledge admits of being communicated to others, so also does the feeling for beauty. For the relation

between the cognitive faculties requisite for Taste is also requisite for Intelligence or sound Understanding, and as we always presuppose the latter to be the same in others as in ourselves, so may we presuppose the former.

The analysis of the Sublime which follows that of the Beautiful is interesting and profound; indeed Schopenhauer regarded it as the best part of the Critique of the Aesthetical Judgement. The general characteristics of our judgements about the Sublime are similar to those already laid down in the case of the Beautiful; but there are marked differences in the two cases. If the pleasure taken in beauty arises from a feeling of the purposiveness of the object in its relation to the subject, that in sublimity rather expresses a purposiveness of the subject in respect of the object. Nothing in nature is sublime; and the sublimity really resides in the mind and there alone. Indeed, as true Beauty is found, properly speaking, only in beauty of form, the idea of sublimity is excited rather by those objects which are formless and exhibit a violation of purpose.

A distinction not needed in the case of the Beautiful becomes necessary when we proceed to further analyse the Sublime. For in aesthetical judgements about the Beautiful the mind is in *restful* contemplation; but in the case of the Sublime a mental *movement* is excited (p and 120). This movement, as it is pleasing, must involve a purposiveness in the harmony of the mental powers; and the purposiveness may be either in reference to the faculty of cognition or to that of desire. In the former case the sublime is called the Mathematically Sublime — the sublime of mere magnitude — the absolutely great; in the latter it is the sublime of power, the Dynamically Sublime. Gioberti, an Italian writer on the philosophy of Taste, has pushed this distinction so far as to find in it an explanation of the relation between Beauty and Sublimity. “The dynamical Sublime,” he says, “creates the Beautiful; the mathematical Sublime contains it,” a remark with which probably Kant would have no quarrel.

In both cases, however, we find that the feeling of the Sublime awakens in us a feeling of the supersensible destination of man. “The very capacity of conceiving the sublime,” he tells us, “indicates a mental faculty that far surpasses every standard of sense.” And to explain the necessity belonging to our judgements about the sublime, Kant points out that as we find ourselves compelled to postulate a *sensus communis* to account for the agreement of men in their appreciation of beautiful objects, so the principle underlying their consent in judging of the sublime is “the presupposition of the moral feeling in man.” The feeling of the sublimity of our own moral destination is the necessary prerequisite for forming such judgements. The connexion between Beauty and Goodness involved to a Greek in the double sense of the word καλόν is developed by Kant with keen insight. To feel interest in the beauty of Nature he regards as a mark of a moral disposition, though he will not admit that the same inference may be drawn as to the character of the art connoisseur (*§ 42). But it is specially with reference to the connexion between the capacity for appreciating the Sublime, and the moral feeling, that the originality of Kant’s treatment becomes apparent*.

The objects of nature, he continues, which we call sublime, inspire us with a feeling of pain rather than of pleasure; as Lucretius has it —

Me quaedam divina voluptas
Percipit atque horror.

But this “horror” must not inspire actual fear. As no extraneous charm must mingle with the satisfaction felt in a beautiful object, if the judgement about beauty is to remain pure; so in the case of the sublime we must not be afraid of the object which yet in certain aspects is fearful.

This conception of the feelings of sublimity excited by the loneliness of an Alpine peak or the grandeur

of an earthquake is now a familiar one; but it was not so in Kant's day. Switzerland had not then become the recreation-ground of Europe; and though natural beauty was a familiar topic with poets and painters it was not generally recognised that taste has also to do with the sublime. De Saussure's *Travels*, Haller's poem *Die Alpen*, and this work of Kant's mark the beginning of a new epoch in our ways of looking at the sublime and terrible aspects of Nature. And it is not a little remarkable that the man who could write thus feelingly about the emotions inspired by grand and savage scenery, had never seen a mountain in his life. The power and the insight of his observations here are in marked contrast to the poverty of some of his remarks about the characteristics of beauty. For instance, he puts forward the curious doctrine that colour in a picture is only an extraneous charm, and does not really add to the beauty of the form delineated, nay rather distracts the mind from it. His criticisms on this point, if sound, would make Flaxman a truer artist than Titian or Paolo Veronese. But indeed his discussion of Painting or Music is not very appreciative; he was, to the end, a creature of pure Reason.

Upon the analysis he gives of the Arts, little need be said here. Fine Art is regarded as the Art of Genius, "that innate mental disposition through which Nature gives the rule to Art" (*§ 46). Art differs from Science in the absence of definite concepts in the mind of the artist. It thus happens that the great artist can rarely communicate his methods; indeed he cannot explain them even to himself. Poeta nascitur, non fit; and the same is true in every form of fine art. Genius is, in short, the faculty of presenting aesthetical Ideas; an aesthetical Idea being an intuition of the Imagination, to which no concept is adequate. And it is by the excitation of such ineffable Ideas that a great work of art affects us. As Bacon tells us, "that is the best part of Beauty which a picture cannot express; no, nor the first sight of the eye." This characteristic of the artistic genius has been noted by all who have thought upon art; more is present in its productions than can be perfectly expressed in language. As Pliny said of Timanthus the painter of Iphigenia, "In omnibus ejus operibus intelligitur plus super quam pingitur." But this genius requires to be kept in check by taste; quite in the spirit of the σωφροσύνη of the best Greek art, Kant remarks that if in a work of art some feature must be sacrificed, it is better to lose something of genius than to violate the canons of taste. It is in this self-mastery that "the sanity of true genius" expresses itself.*

The main question with which the Critique of Judgement is concerned is, of course, the question as to the purposiveness, the *Zweckmässigkeit*, exhibited by nature. That nature appears to be full of purpose is mere matter of fact. It displays purposiveness in respect of our faculties of cognition, in those of its phenomena which we designate beautiful. And also in its organic products we observe methods of operation which we can only explain by describing them as processes in which means are used to accomplish certain ends, as processes that are *purposive*. In our observation of natural phenomena, as Kuno Fischer puts it, we judge their *forms* aesthetically, and their *life* teleologically.

As regards the first kind of *Zweckmässigkeit*, that which is *ohne Zweck* — the purposiveness of a beautiful object which does not seem to be directed to any external end — there are two ways in which we may account for it. We may either say that it was actually designed to be beautiful by the Supreme Force behind Nature, or we may say that purposiveness is not really resident in nature, but that our perception of it is due to the subjective needs of our judging faculty. We have to contemplate beautiful objects *as if* they were purposive, but they may not be so in reality. And this latter idealistic doctrine is what Kant falls back upon. He appeals in support of it, to the phenomena of crystallisation (p sqq.), in which many very beautiful forms seem to be produced by merely mechanical processes. The beauty of a rock crystal is apparently produced without any forethought on the part of nature, and he urges that we are not justified in asserting dogmatically that any laws distinct from those of mechanism are needed to account for beauty in other cases. Mechanism can do so much; may it not do all? And he brings forward as

a consideration which ought to settle the question, the fact that in judging of beauty "we invariably seek its gauge *in ourselves a priori*"; we do not learn from nature, but from ourselves, what we are to find beautiful. Mr. Kennedy in his Donnellan Lectures has here pointed out several weak spots in Kant's armour. In the first place, the fact that we seek the gauge of beauty in our own mind "may be shown from his own definition to be a necessary result of the very nature of beauty."[2*] For Kant tells us that the aesthetical judgement about beauty always involves "a reference of the representation to the subject"; and this applies equally to judgements about the beautiful in Art and the beautiful in Nature. But no one could maintain that from this definition it follows that we are not compelled to postulate design in the mind of the artist who paints a beautiful picture. And thus as the fact that "we always seek the gauge of beauty" in ourselves does not do away with the belief in a designing mind when we are contemplating works of art, it cannot be said to exclude the belief in a Master Hand which moulded the forms of Nature. As Cicero has it, nature is "non artificiosa solum, sed plane artifex." But the cogency of this reasoning, for the details of which I must refer the reader to Mr. Kennedy's pages, becomes more apparent when we reflect on that second form of purposiveness, viz. adaptation to definite ends, with which we meet in the phenomena of organic life.

If we watch, e.g. the growth of a tree we perceive that its various parts are not isolated and unconnected, but that on the contrary they are only possible by reference to the idea of the whole. Each limb affects every other, and is reciprocally affected by it; in short "in such a product of nature every part not only exists *by means of* the other parts, but is thought as existing *for the sake of* the others and the whole" (). The operations of nature in organised bodies seem to be of an entirely different character from mere mechanical processes; we cannot construe them to ourselves except under the hypothesis that nature in them is working towards a designed end. The distinction between nature's "Technic" or purposive operation, and nature's Mechanism is fundamental for the explanation of natural law. The language of biology eloquently shows the impossibility of eliminating at least the *idea* of purpose from our investigations into the phenomena of life, growth, and reproduction. And Kant dismisses with scant respect that cheap and easy philosophy which would fain deny the distinctiveness of nature's purposive operation. A doctrine, like that of Epicurus, in which every natural phenomenon is regarded as the result of the blind drifting of atoms in accordance with purely mechanical laws, really explains nothing, and least of all explains that illusion in our teleological judgements which leads us to assume purpose where really there is none.

It has been urged by Kirchmann and others that this distinction between Technic and Mechanism, on which Kant lays so much stress, has been disproved by the progress of modern science. The doctrines, usually associated with the name of Darwin, of Natural Selection and Survival of the Fittest, quite sufficiently explain, it is said, on mechanical principles the semblance of purpose with which nature mocks us. The presence of order is not due to any purpose behind the natural operation, but to the inevitable disappearance of the disorderly. It would be absurd, of course, to claim for Kant that he anticipated the Darwinian doctrines of development; and yet passages are not wanting in his writings in which he takes a view of the continuity of species with which modern science would have little fault to find. "Nature organises itself and its organised products in every species, no doubt after one general pattern but yet with suitable deviations, which self-preservation demands according to circumstances" (). "The analogy of forms, which with all their differences seem to have been produced according to a common original type, strengthens our suspicions of an actual relationship between them in their production from a common parent, through the gradual approximation of one animal genus to another — from those in which the principle of purposes seems to be best authenticated, i.e. from man, down to the polype and again from this down to mosses and lichens, and finally to crude matter. And so the whole Technic of nature, which is so incomprehensible to us in organised beings that we believe ourselves compelled to think a different principle for it, seems to be derived from matter and its powers according

to mechanical laws (like those by which it works in the formation of crystals)” (). Such a theory he calls “a daring venture of reason,” and its coincidences with modern science are real and striking. But he is careful to add that such a theory, even if established, would not eliminate purpose from the universe; it would indeed suggest that certain special processes having the semblance of purpose may be elucidated on mechanical principles, but on the whole, purposive operation on the part of Mother Nature it would still be needful to assume (). “No finite Reason can hope to understand the production of even a blade of grass by mere mechanical causes” (). “It is absurd to hope that another Newton will arise in the future who shall make comprehensible by us the production of a blade of grass according to natural laws which no design has ordered” ().

Crude materialism thus affording no explanation of the purposiveness in nature, we go on to ask what other theories are logically possible. We may dismiss at once the doctrine of Hylozoism, according to which the purposes in nature are explained in reference to a world-soul, which is the inner principle of the material universe and constitutes its life. For such a doctrine is self-contradictory, inasmuch as lifelessness, *inertia*, is the essential characteristic of matter, and to talk of living matter is absurd (). A much more plausible system is that of Spinoza, who aimed at establishing the ideality of the principle of natural purposes. He regarded the world whole as a complex of manifold determinations inhering in a single simple substance; and thus reduced our concepts of the purposive in nature to our own consciousness of existing in an all-embracing Being. But on reflection we see that this does not so much explain as explain away the purposiveness of nature; it gives us an unity of inherence *in* one Substance, but not an unity of causal dependence *on* one Substance (). And this latter would be necessary in order to explain the unity of purpose which nature exhibits in its phenomenal working. Spinozism, therefore, does not give what it pretends to give; it puts us off with a vague and unfruitful unity of ground, when what we seek is a unity that shall itself contain the causes of the differences manifest in nature.

We have left then as the only remaining possible doctrine, Theism, which represents natural purposes as produced in accordance with the Will and Design of an Intelligent Author and Governor of Nature. This theory is, in the first place, “superior to all other grounds of explanation” (), for it gives a full solution of the problem before us and enables us to maintain the reality of the *Zweckmässigkeit* of nature. “Teleology finds the consummation of its investigations only in Theology” (). To represent the world and the natural purposes therein as produced by an intelligent Cause is “completely satisfactory from every human point of view for both the speculative and practical use of our Reason” (). Thus the contemplation of natural purposes, i.e. the common Argument from Design, enables us to reach a highest Understanding as Cause of the world “in accordance with the principles of the reflective Judgement, i.e. in accordance with the constitution of our human faculty of cognition” ().

It is in this qualifying clause that Kant’s negative attitude in respect of Theism betrays itself. He regards it as a necessary assumption for the guidance of scientific investigation, no less than for the practical needs of morals; but he does not admit that we can claim for it objective validity. In the language of the Critique of Pure Reason, the Idea of God furnishes a regulative, not a constitutive principle of Reason; or as he prefers to put it in the present work, it is valid only for the reflective, not for the determinant Judgement. We are not justified, Kant maintains, in asserting dogmatically that God exists; there is only permitted to us the limited formula “We cannot otherwise conceive the purposiveness which must lie at the basis of our cognition of the internal possibility of many natural things, than by representing it and the world in general as produced by an intelligent cause, i.e. a God” ().

We ask then, whence arises this impossibility of objective statement? It is in the true Kantian spirit to assert that no synthetical proposition can be made with reference to what lies above and behind the world of sense; but there is a difficulty in carrying out this principle into details. Kant’s refusal to infer a designing Hand behind the apparent order of nature is based, he tells us, on the fact that the concept of a “natural purpose” is one that cannot be justified to the speculative Reason. For all we know it may only

indicate our way of looking at things, and may point to no corresponding objective reality. That we are forced by the limited nature of our faculties to view nature as working towards ends, as purposive, does not prove that it is really so. We cannot justify such pretended insight into what is behind the veil.

It is to be observed, however, that precisely similar arguments might be urged against our affirmation of purpose, design, will, as the spring of the actions of other human beings.[3][*] For let us consider why it is that, mind being assumed as the basis of our own individual consciousness, we go on to attribute minds of like character to other men. We see that the external behaviour of other men is similar to our own, and that the most reasonable way of accounting for such behaviour is to suppose that they have minds like ourselves, that they are possessed of an active and spontaneously energising faculty, which is the seat of their personality. But it is instructive to observe that neither on Kantian principles nor on any other can we *demonstrate* this; to cross the chasm which separates one man's personality from another's requires a venture of faith just as emphatically as any theological formula. I can by no means *prove* to the determinant Judgement that the complex of sensations which I constantly experience, and which I call the Prime Minister, is anything more than a well-ordered machine. It is improbable that this is the case — highly improbable; but the falsity of such an hypothesis cannot be proved in the same way that we would prove the falsity of the assertion that two and two make five. But then though the hypothesis cannot be thus ruled out of court by demonstration of its absurdity, it is not the simplest hypothesis, nor is it that one which best accounts for the facts. The assumption, on the other hand, that the men whom I meet every day have minds like my own, perfectly accounts for all the facts, and is a very simple assumption. It merely extends by induction the sphere of a force which I already know to exist. Or in other words, crude materialism not giving me an intelligent account of my own individual consciousness, I recognise mind, νοῦς, as a *vera causa*, as something which really does produce effects in the field of experience, and which therefore I may legitimately put forward as the cause of those actions of other men which externally so much resemble my own. But, as has been said before, this argument, though entirely convincing to any sane person, is not demonstrative; in Kantian language and on Kantian principles the reasoning here used would seem to be valid only for the reflective and not for the determinant Judgement. If the principle of design or conscious adaptation of means to ends be not a constitutive principle of experience, but only a regulative principle introduced to account for the facts, what right have we to put it forward dogmatically as affording an explanation of the actions of other human beings?

It cannot be said that Kant's attempted answer to such a defence of the Design Argument is quite conclusive. In *§ 90 of the Methodology () he pleads that though it is perfectly legitimate to argue by analogy from our own minds to the minds of other men, — nay further, although we may conclude from those actions of the lower animals which display plan, that they are not, as Descartes alleged, mere machines — yet it is not legitimate to conclude from the apparent presence of design in the operations of nature that a conscious mind directs those operations. For, he argues, that in comparing the actions of men and the lower animals, or in comparing the actions of one man with those of another, we are not pressing our analogy beyond the limits of experience. Men and beasts alike are finite living beings, subject to the limitations of finite existence; and hence the law which governs the one series of operations may be regarded by analogy as sufficiently explaining the other series. But the power at the basis of Nature is utterly above definition or comprehension, and we are going beyond our legitimate province if we venture to ascribe to it a mode of operation with which we are only conversant in the case of beings subject to the conditions of space and time. He urges in short that when speaking about man and his mind we thoroughly understand what we are talking about; but in speaking of the Mind of Deity we are dealing with something of which we have no experience, and of which therefore we have no right to predicate anything.*

But it is apparent that, as has been pointed out, even when we infer the existence of another finite mind from certain observed operations, we are making an inference about something which is as mysterious an *x* as anything can be. Mind is not a thing that is subject to the laws and conditions of the world of sense; it is "*in* the world but not *of* the world." And so to infer the existence of the mind of any individual except myself is a quite different kind of inference from that by which, for example, we infer the presence of an electro-magnet in a given field. The action of the latter we understand to a large extent; but we do not understand the action of mind, which yet we know from daily experience of ourselves does produce effects in the phenomenal world, often permanent and important effects. Briefly, the action of mind upon matter (to use the ordinary phraseology for the sake of clearness) is — we may assume for our present purpose — an established fact. Hence the causality of mind is a *vera causa*; we bring it in to account for the actions of other human beings, and by precisely the same process of reasoning we invoke it to explain the operations of nature.

And it is altogether beside the point to urge, as Kant does incessantly, that in the latter case the intelligence inferred is *infinite*; in the former only *finite*. All that the Design Argument undertakes to prove is that mind lies at the basis of nature. It is quite beyond its province to say whether this mind is finite or infinite; and thus Kant's criticisms on are somewhat wide of the mark. There is always a difficulty in any argument which tries to establish the operation of mind anywhere, for mind cannot be seen or touched or felt; but the difficulty is not peculiar to that particular form of argument with which theological interests are involved.

The real plausibility of this objection arises from a vague idea, often present to us when we speak of *infinite* wisdom or *infinite* intelligence, namely that the epithet *infinite* in some way alters the meaning of the attributes to which it is applied. But the truth is that the word *infinite*, when applied to wisdom or knowledge or any other intellectual or moral quality, can only properly have reference to the number of acts of wisdom or knowledge that we suppose to have been performed. The only sense in which we have any right to speak of *infinite* wisdom is that it is that which performs an infinite number of wise acts. And so when we speak of infinite *intelligence*, we have not the slightest warrant, either in logic or in common sense, for supposing that such intelligence is not similar in kind to that finite intelligence which we know in man.

To understand Kant's attitude fully, we must also take into consideration the great weight that he attaches to the Moral Argument for the existence of God. The positive side of his teaching on Theism is summed up in the following sentence (): "For the theoretical reflective Judgement physical Teleology sufficiently proves from the purposes of Nature an intelligent world-cause; for the practical Judgement moral Teleology establishes it by the concept of a final purpose, which it is forced to ascribe to creation." That side of his system which is akin to Agnosticism finds expression in his determined refusal to admit anything more than this. The existence of God is for him a "thing of faith"; and is not a fact of knowledge, strictly so called. "Faith" he holds () "is the moral attitude of Reason as to belief in that which is unattainable by theoretical cognition. It is therefore the constant principle of the mind to assume as true that which it is necessary to presuppose as condition of the possibility of the highest moral final purpose." As he says elsewhere (Introduction to Logic, ix.), "That man is morally *unbelieving* who does not accept that which, though *impossible* to know, is *morally necessary* to suppose." And as far as he goes a Theist may agree with him, and he has done yeoman's service to Theism by his insistence on the absolute impossibility of any other working hypothesis as an explanation of the phenomena of nature. But I have endeavoured to indicate at what points he does not seem to me to have gone as far as even his own declared principles would justify him in going. If the existence of a Supreme Mind be a "thing of faith," this may with equal justice be said of the finite minds of the men all around us; and his attempt to show that the argument from analogy is here without foundation is not convincing.

Kant, however, in the Critique of Judgement is sadly fettered by the chains that he himself had forged,

and frequently chafes under the restraints they impose. He indicates more than once a point of view higher than that of the Critique of Pure Reason, from which the phenomena of life and mind may be contemplated. He had already hinted in that work that the supersensible substrate of the ego and the non-ego might be identical. “Both kinds of objects differ from each other, not internally, but only so far as the one *appears* external to the other; possibly what is at the basis of phenomenal matter as a thing in itself may not be so heterogeneous after all as we imagine.”[4] This hypothesis which remains a bare undeveloped possibility in the earlier work is put forward as a positive doctrine in the Critique of Judgement. “There must,” says Kant, “be a ground of the *unity* of the supersensible, which lies at the basis of nature, with that which the concept of freedom practically contains” (Introduction,). That is to say, he maintains that to explain the phenomena of organic life and the purposiveness of nature we must hold that the world of sense is not disparate from and opposed to the world of thought, but that *nature is the development of freedom*. The connexion of nature and freedom is suggested by, nay is involved in, the notion of natural adaptation; and although we can arrive at no knowledge of the supersensible substrate of both, yet such a common ground there must be. This principle is the starting-point of the systems which followed that of Kant; and the philosophy of later Idealism is little more than a development of the principle in its consequences.

He approaches the same doctrine by a different path in the Critique of the Teleological Judgement (§ *77), where he argues that the distinction between the mechanical and the teleological working of nature, upon which so much stress has been justly laid, depends for its validity upon the peculiar character of our Understanding. When we give what may be called a mechanical elucidation of any natural phenomenon, we begin with its parts, and from what we know of them we explain the whole. But in the case of certain objects, e.g. organised bodies, this cannot be done. In their case we can only account for the parts by a reference to the whole. Now, were it possible for us to perceive a whole before its parts and derive the latter from the former,[5] then an organism would be capable of being understood and would be an object of knowledge in the strictest sense. But our Understanding is not able to do this, and its inadequacy for such a task leads us to conceive the possibility of an Understanding, not discursive like ours, but intuitive, for which knowledge of the whole would precede that of the parts. “It is at least possible to consider the material world as mere phenomenon, and to think as its substrate something like a thing in itself (which is not phenomenon), and to attach to this a corresponding intellectual intuition. Thus there would be, although incognisable by us, a supersensible real ground for nature, to which we ourselves belong” (). Hence, although Mechanism and Technic must not be confused and must ever stand side by side in our scientific investigation of natural law, yet must they be regarded as coalescing in a single higher principle incognisable by us. The ground of union is “the supersensible substrate of nature of which we can determine nothing positively, except that it is the being in itself of which we merely know the phenomenon.” Thus, then, it appears that the whole force of Kant’s main argument has proceeded upon an assumption, viz. the permanent opposition between Sense and Understanding, which the progress of the argument has shown to be unsound. “Kant seems,” says Goethe,[6] “to have woven a certain element of irony into his method. For, while at one time he seemed to be bent on limiting our faculties of knowledge in the narrowest way, at another time he pointed, as it were with a side gesture, beyond the limits which he himself had drawn.” The fact of adaptation of means to ends observable in nature seems to break down the barrier between Nature and Freedom; and if we once relinquish the distinction between Mechanism and Technic in the operations of nature we are led to the Idea of an absolute Being, who manifests Himself by action which, though necessary, is yet the outcome of perfect freedom.*

Kant, however, though he approaches such a position more than once, can never be said to have risen to it. He deprecates unceasingly the attempt to combine principles of nature with the principles of freedom as a task beyond the modest capacity of human reason; and while strenuously insisting on the practical force of the Moral Argument for the Being of God, which is found in the witness of man’s conscience, will not

admit that it can in any way be regarded as strengthening the theoretical arguments adduced by Teleology. The two lines of proof, he holds, are quite distinct; and nothing but confusion and intellectual disaster can result from the effort to combine them. The moral proof stands by itself, and it needs no such crutches as the argument from Design can offer. But, as Mr. Kennedy has pointed out in his acute criticism[7*] of the Kantian doctrine of Theism, it would not be possible to combine a theoretical *disbelief* in God with a frank acceptance of the practical belief of His existence borne in upon us by the Moral Law. Kant himself admits this: "A dogmatical *unbelief*," he says (), "cannot subsist together with a moral maxim dominant in the mental attitude." That is, though the theoretical argument be incomplete, we cannot reject the conclusion to which it leads, for this is confirmed by the moral necessities of conscience.

Kant's position, then, seems to come to this, that though he never doubts the existence of God, he has very grave doubts that He can be theoretically known by man. *That* He is, is certain; *what* He is, we cannot determine. It is a position not dissimilar to current Agnostic doctrines; and as long as the antithesis between Sense and Understanding, between Matter and Mind, is insisted upon as expressing a real and abiding truth, Kant's reasoning can hardly be refuted with completeness. No doubt it may be urged that since the practical and theoretical arguments both arrive at the same conclusion, the cogency of our reasoning in the latter should confirm our trust in the former. But true conclusions may sometimes seem to follow from quite insufficient premises; and Kant is thus justified in demanding that each argument shall be submitted to independent tests. I have endeavoured to show above that he has not treated the theoretical line of reasoning quite fairly, and that he has underestimated its force; but its value *as an argument* is not increased by showing that another entirely different process of thought leads to the same result. And that the witness of conscience affords the most powerful and convincing argument for the existence of a Supreme Being, the source of law as of love, is a simple matter of experience. Induction, syllogism, analogy, do not really generate belief in God, though they may serve to justify to reason a faith that we already possess. The poet has the truth of it:

Wer Gott nicht fühlt in sich und allen Lebenskreisen,
Dem werdet Ihr Ihn nicht beweisen mit Beweisen.

* * * * *

I give at the end of this Introduction a Glossary of the chief philosophical terms used by Kant; I have tried to render them by the same English equivalents all through the work, in order to preserve, as far as may be, the exactness of expression in the original. I am conscious that this makes the translation clumsy in many places, but have thought it best to sacrifice elegance to precision. This course is the more necessary to adopt, as Kant cannot be understood unless his nice verbal distinctions be attended to. Thus *real* means quite a different thing from *wirklich*; *Hang* from *Neigung*; *Rührung* from *Affekt* or *Leidenschaft*; *Anschauung* from *Empfindung* or *Wahrnehmung*; *Endzweck* from *letzter Zweck*; *Idee* from *Vorstellung*; *Eigenschaft* from *Attribut* or *Beschaffenheit*; *Schranke* from *Grenze*; *überreden* from *überzeugen*, etc. I am not satisfied with "gratification" and "grief" as the English equivalents for *Vergnügen* and *Schmerz*; but it is necessary to distinguish these words from *Lust* and *Unlust*, and "mental pleasure," "mental pain," which would nearly hit the sense, are awkward. Again, the constant rendering of *schön* by beautiful involves the expression "beautiful art" instead of the more usual phrase "fine art." *Purposive* is an ugly word, but it has come into use lately; and its employment enables us to preserve the connexion between *Zweck* and *zweckmässig*. I have printed *Judgement* with a capital letter when it signifies the *faculty*, with a small initial when it signifies the *act*, of judging. And in like manner I distinguish *Objekt* from *Gegenstand*, by printing the word "Object," when it represents the former, with a large initial.

The text I have followed is, in the main, that printed by Hartenstein; but occasionally Rosenkranz preserves the better reading. All important variants between the First and Second Editions have been indicated at the foot of the page. A few notes have been added, which are enclosed in square brackets, to distinguish them from those which formed part of the original work. I have in general quoted Kant's *Introduction to Logic* and *Critique of Practical Reason* in Dr. Abbott's translations.

My best thanks are due to Rev. J. H. Kennedy and Mr. F. Purser for much valuable aid during the passage of this translation through the press. And I am under even greater obligations to Mr. Mahaffy, who was good enough to read through the whole of the proof; by his acute and learned criticisms many errors have been avoided. Others I have no doubt still remain, but for these I must be accounted alone responsible.

J. H. BERNARD.

TRINITY COLLEGE, DUBLIN,
May 24, 1892.

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More than twenty-one years have passed since the first edition of this Translation was published, and during that time much has been written, both in Germany and in England, on the subject of Kant's *Critique of Judgement*. In particular, the German text has been critically determined by the labours of Professor Windelband, whose fine edition forms the fifth volume of Kant's Collected Works as issued by the Royal Prussian Academy of Sciences (Berlin, 1908). It will be indispensable to future students. An excellent account of the significance, in the Kantian system, of the *Urtheilskraft*, by Mr. R. A. C. Macmillan, appeared in 1912; and Mr. J. C. Meredith has published recently an English edition of the *Critique of Aesthetical Judgement*, with notes and essays, dealing with the philosophy of art, which goes over the ground very fully.

Some critics of my first edition took exception to the clumsiness of the word "representation" as the equivalent of *Vorstellung*, but I have made no change in this respect, as it seems to me (and so far as I have observed to others who have worked on the *Critique of Judgement*), that it is necessary to preserve in English the relation between the noun *Vorstellung* and the verb *vorstellen*, if Kant's reasoning is to be exhibited clearly. I have, however, abandoned the attempt to preserve the word *Kritik* in English, and have replaced it by *Critique* or *criticism*, throughout. The other changes that have been made are mere corrections or emendations of faulty or obscure renderings, with a few additional notes. I have left my original Introduction as it was written in 1892, without attempting any fresh examination of the problems that Kant set himself.

JOHN OSSORY.

THE PALACE, KILKENNY,
January 6, 1914.

GLOSSARY OF KANT'S PHILOSOPHICAL TERMS

Absicht; *design*.

Achtung; *respect*.

Affekt; *affection*.

Angenehm; *pleasant*.

Anschauung; *intuition*.

Attribut; *attribute*.

Aufklärung; *enlightenment*.

Begehr; *desire*.

Begriff; *concept*.

Beschaffenheit; *constitution* or *characteristic*.

Bestimmen; *to determine*.

Darstellen; *to present*.

Dasein; *presence* or *being*.

Eigenschaft; *property*.

Empfindung; *sensation*.

Endzweck; *final purpose*.

Erkenntniss; *cognition* or *knowledge*.

Erklärung; *explanation*.

Erscheinung; *phenomenon*.

Existenz; *existence*.

Fürwahrhalten; *belief*.

Gebiet; *realm*.

Gefühl; *feeling*.

Gegenstand; *object*.

Geist; *spirit*.

Geniessen; *enjoyment*.

Geschicklichkeit; *skill*.

Geschmack; *Taste*.

Gesetzmässigkeit; *conformity to law*.

Gewalt; *dominion* or *authority*.

Glaube; *faith*.

Grenze; *bound*.

Grundsatz; *fundamental proposition* or *principle*.

Hang; *propension*.

Idee; *Idea*.

Leidenschaft; *passion*.

Letzter Zweck; *ultimate purpose*.

Lust; *pleasure*.

Meinen; *opinion*.

Neigung; *inclination*.

Objekt; *Object*.

Prinzip; *principle*.

Real; *real*.

Reich; *kingdom*.

Reiz; *charm*.

Rührung; *emotion*.

Schein; *illusion*.

Schmerz; *grief*.

Schön; *beautiful*.

Schranke; *limit*.

Schwärmerei; *fanaticism*.

Seele; *soul*.

Ueberreden; *to persuade*.

Ueberschwänglich; *transcendent*.

Ueberzeugen; *to convince*.

Unlust; *pain*.

Urtheil; *judgement*.

Urtheilskraft; *Judgement*.

Verbindung; *combination*.

Vergnügen; *gratification*.

Verknüpfung; *connexion*.

Vermögen; *faculty*.

Vernunft; *Reason*.

Vernünftelei; *sophistry* or *subtlety*.

Verstand; *Understanding*.

Vorstellung; *representation*.

Wahrnehmung; *perception*.

Wesen; *being*.

Willkühr; *elective will*.

Wirklich; *actual*.

Wohlgefallen; *satisfaction*.

Zufriedenheit; *contentment*.

Zweck; *purpose*.

Zweckmässig; *purposive*.

Zweckverbindung; *purposive combination*, etc.

PREFACE

We may call the faculty of cognition from principles *a priori*, *pure Reason*, and the inquiry into its possibility and bounds generally the Critique of pure Reason, although by this faculty we only understand Reason in its theoretical employment, as it appears under that name in the former work; without wishing to inquire into its faculty, as practical Reason, according to its special principles. That [Critique] goes merely into our faculty of knowing things *a priori*, and busies itself therefore only with the *cognitive faculty* to the exclusion of the feeling of pleasure and pain and the faculty of desire; and of the cognitive faculties it only concerns itself with *Understanding*, according to its principles *a priori*, to the exclusion of *Judgement* and *Reason* (as faculties alike belonging to theoretical cognition), because it is found in the sequel that no other cognitive faculty but the Understanding can furnish constitutive principles of cognition *a priori*. The Critique, then, which sifts them all, as regards the share which each of the other faculties might pretend to have in the clear possession of knowledge from its own peculiar root, leaves nothing but what the *Understanding* prescribes *a priori* as law for nature as the complex of phenomena (whose form also is given *a priori*). It relegates all other pure concepts under Ideas, which are transcendent for our theoretical faculty of cognition, but are not therefore useless or to be dispensed with. For they serve as regulative principles; partly to check the dangerous pretensions of Understanding, as if (because it can furnish *a priori* the conditions of the possibility of all things which it can know) it had thereby confined within these bounds the possibility of all things in general; and partly to lead it to the consideration of nature according to a principle of completeness, although it can never attain to this, and thus to further the final design of all knowledge.

It was then properly the *Understanding* which has its special realm in the *cognitive faculty*, so far as it contains constitutive principles of cognition *a priori*, which by the Critique, comprehensively called the Critique of pure Reason, was to be placed in certain and sole possession[8*] against all other competitors. And so also to *Reason*, which contains constitutive principles *a priori* nowhere except simply in respect of the *faculty of desire*, should be assigned its place in the Critique of practical Reason.

Whether now the *Judgement*, which in the order of our cognitive faculties forms a mediating link between Understanding and Reason, has also principles *a priori* for itself; whether these are constitutive or merely regulative (thus indicating no special realm); and whether they give a rule *a priori* to the feeling of pleasure and pain, as the mediating link between the cognitive faculty and the faculty of desire (just as the Understanding prescribes laws *a priori* to the first, Reason to the second); these are the questions with which the present Critique of Judgement is concerned.

A Critique of pure Reason, i.e. *of our faculty of judging* a priori according to principles, would be incomplete, if the Judgement, which as a cognitive faculty also makes claim to such principles, were not treated as a particular part of it; although its principles in a system of pure Philosophy need form no particular part between the theoretical and the practical, but can be annexed when needful to one or both as occasion requires. For if such a system is one day to be completed under the general name of Metaphysic (which it is possible to achieve quite completely, and which is supremely important for the use of Reason in every reference), the soil for the edifice must be explored by Criticism as deep down as the foundation of the faculty of principles independent of experience, in order that it may sink in no part, for this would inevitably bring about the downfall of the whole.

We can easily infer from the nature of the Judgement (whose right use is so necessarily and so universally requisite, that by the name of sound Understanding nothing else but this faculty is meant), that it must be attended with great difficulties to find a principle peculiar to it; (some such it must contain *a priori* in itself, for otherwise it would not be set apart by the commonest Criticism as a special cognitive

faculty). This principle must not be derived *a priori* from concepts, for these belong to the Understanding, and Judgement is only concerned with their application. It must, therefore, furnish of itself a concept, through which, properly speaking, no thing is cognised, but which only serves as a rule, though not an objective one to which it can adapt its judgement; because for this latter another faculty of Judgement would be requisite, in order to be able to distinguish whether [any given case] is or is not the case for the rule.

This perplexity about a principle (whether it is subjective or objective) presents itself mainly in those judgements that we call aesthetical, which concern the Beautiful and the Sublime of Nature or of Art. And, nevertheless, the critical investigation of a principle of Judgement in these is the most important part in a Critique of this faculty. For although they do not by themselves contribute to the knowledge of things, yet they belong to the cognitive faculty alone, and point to an immediate reference of this faculty to the feeling of pleasure or pain according to some principle *a priori*; without confusing this with what may be the determining ground of the faculty of desire, which has its principles *a priori* in concepts of Reason. — In the logical judging of nature, experience exhibits a conformity to law in things, to the understanding or to the explanation of which the general concept of the sensible does not attain; here the Judgement can only derive from itself a principle of the reference of the natural thing to the unknowable supersensible (a principle which it must only use from its own point of view for the cognition of nature). And so, though in this case such a principle *a priori* can and must be applied to the *cognition* of the beings of the world, and opens out at the same time prospects which are advantageous for the practical Reason, yet it has no immediate reference to the feeling of pleasure and pain. But this reference is precisely the puzzle in the principle of Judgement, which renders a special section for this faculty necessary in the Critique; since the logical judging according to concepts (from which an immediate inference can never be drawn to the feeling of pleasure and pain) along with their critical limitation, has at all events been capable of being appended to the theoretical part of Philosophy.

The examination of the faculty of taste, as the aesthetical Judgement, is not here planned in reference to the formation or the culture of taste (for this will take its course in the future as in the past without any such investigations), but merely in a transcendental point of view. Hence, I trust that as regards the deficiency of the former purpose it will be judged with indulgence, though in the latter point of view it must be prepared for the severest scrutiny. But I hope that the great difficulty of solving a problem so involved by nature may serve as excuse for some hardly avoidable obscurity in its solution, if only it be clearly established that the principle is correctly stated. I grant that the mode of deriving the phenomena of the Judgement from it has not all the clearness which might be rightly demanded elsewhere, viz. in the case of cognition according to concepts; but I believe that I have attained to it in the second part of this work.

Here then I end my whole critical undertaking. I shall proceed without delay to the doctrinal [part] in order to profit, as far as is possible, by the more favourable moments of my increasing years. It is obvious that in this [part] there will be no special section for the Judgement, because in respect of this faculty Criticism serves instead of Theory; but, according to the division of Philosophy (and also of pure Philosophy) into theoretical and practical, the Metaphysic of Nature and of Morals will complete the undertaking.

INTRODUCTION

I. OF THE DIVISION OF PHILOSOPHY

We proceed quite correctly if, as usual, we divide Philosophy, as containing the principles of the rational cognition of things by means of concepts (not merely, as logic does, principles of the form of thought in general without distinction of Objects), into *theoretical* and *practical*. But then the concepts, which furnish their Object to the principles of this rational cognition, must be specifically distinct; otherwise they would not justify a division, which always presupposes a contrast between the principles of the rational cognition belonging to the different parts of a science.

Now there are only two kinds of concepts, and these admit as many distinct principles of the possibility of their objects, viz. *natural concepts* and the *concept of freedom*. The former render possible *theoretical* cognition according to principles *a priori*; the latter in respect of this theoretical cognition only supplies in itself a negative principle (that of mere contrast), but on the other hand it furnishes fundamental propositions which extend the sphere of the determination of the will and are therefore called practical. Thus Philosophy is correctly divided into two parts, quite distinct in their principles; the theoretical part or *Natural Philosophy*, and the practical part or *Moral Philosophy* (for that is the name given to the practical legislation of Reason in accordance with the concept of freedom). But up to the present a gross misuse of these expressions has prevailed, both in the division of the different principles and consequently also of Philosophy itself. For what is practical according to natural concepts has been identified with the practical according to the concept of freedom; and so with the like titles, 'theoretical' and 'practical' Philosophy, a division has been made, by which in fact nothing has been divided (for both parts might in such case have principles of the same kind).

The will, regarded as the faculty of desire, is (in this view) one of the many natural causes in the world, viz. that cause which acts in accordance with concepts. All that is represented as possible (or necessary) by means of a will is called practically possible (or necessary); as distinguished from the physical possibility or necessity of an effect, whose cause is not determined to causality by concepts (but in lifeless matter by mechanism and in animals by instinct). Here, in respect of the practical, it is left undetermined whether the concept which gives the rule to the causality of the will, is a natural concept or a concept of freedom.

But the last distinction is essential. For if the concept which determines the causality is a natural concept, then the principles are *technically practical*; whereas, if it is a concept of freedom they are *morally practical*. And as the division of a rational science depends on the distinction between objects whose cognition needs distinct principles, the former will belong to theoretical Philosophy (doctrine of Nature), but the latter alone will constitute the second part, viz. practical Philosophy (doctrine of Morals).

All technically practical rules (i.e. the rules of art and skill generally, or of prudence regarded as skill in exercising an influence over men and their wills), so far as their principles rest on concepts, must be reckoned only as corollaries to theoretical Philosophy. For they concern only the possibility of things according to natural concepts, to which belong not only the means which are to be met with in nature, but also the will itself (as a faculty of desire and consequently a natural faculty), so far as it can be determined conformably to these rules by natural motives. However, practical rules of this kind are not called laws (like physical laws), but only precepts; because the will does not stand merely under the natural concept, but also under the concept of freedom, in relation to which its principles are called laws. These with their consequences alone constitute the second or practical part of Philosophy.

The solution of the problems of pure geometry does not belong to a particular part of the science; mensuration does not deserve the name of practical, in contrast to pure, geometry, as a second part of geometry in general; and just as little ought the mechanical or chemical art of experiment or observation to be reckoned as a practical part of the doctrine of Nature. Just as little, in fine, ought housekeeping, farming, statesmanship, the art of conversation, the prescribing of diet, the universal doctrine of happiness itself, or the curbing of the inclinations and checking of the affections for the sake of happiness, to be reckoned as practical Philosophy, or taken to constitute the second part of Philosophy in general. For all these contain only rules of skill (and are consequently only technically practical) for bringing about an effect that is possible according to the natural concepts of causes and effects, which, since they belong to theoretical Philosophy, are subject to those precepts as mere corollaries from it (viz. natural science), and can therefore claim no place in a special Philosophy called practical. On the other hand, the morally practical precepts, which are altogether based on the concept of freedom to the complete exclusion of the natural determining grounds of the will, constitute a quite special class. These, like the rules which nature obeys, are called simply laws, but they do not, like them, rest on sensuous conditions but on a supersensible principle; and accordingly they require for themselves a quite different part of Philosophy, called practical, corresponding to its theoretical part.

We hence see that a complex of practical precepts given by Philosophy does not constitute a distinct part of Philosophy, as opposed to the theoretical part, because these precepts are practical; for they might be that, even if their principles were derived altogether from the theoretical cognition of nature (as technically practical rules). [A distinct branch of Philosophy is constituted only] if their principle, as it is not borrowed from the natural concept, which is always sensuously conditioned, rests on the supersensible, which alone makes the concept of freedom cognisable by formal laws. These precepts are then morally practical, i.e. not merely precepts or rules in this or that aspect, but, without any preceding reference to purposes and designs, are laws.

II. OF THE REALM OF PHILOSOPHY IN GENERAL

So far as our concepts have *a priori* application, so far extends the use of our cognitive faculty according to principles, and with it Philosophy.

But the complex of all objects, to which those concepts are referred, in order to bring about a knowledge of them where it is possible, may be subdivided according to the adequacy or inadequacy of our [cognitive] faculty to this design.

Concepts, so far as they are referred to objects, independently of the possibility or impossibility of the cognition of these objects, have their field which is determined merely according to the relation that their Object has to our cognitive faculty in general. The part of this field in which knowledge is possible for us is a ground or territory (*territorium*) for these concepts and the requisite cognitive faculty. The part of this territory, where they are legislative, is the realm (*ditio*) of these concepts and of the corresponding cognitive faculties. Empirical concepts have, therefore, their territory in nature, as the complex of all objects of sense, but no realm, only a dwelling-place (*domicilium*); for though they are produced in conformity to law they are not legislative, but the rules based on them are empirical and consequently contingent.

Our whole cognitive faculty has two realms, that of natural concepts and that of the concept of freedom; for through both it is legislative *a priori*. In accordance with this, Philosophy is divided into theoretical and practical. But the territory to which its realm extends and in which its legislation is *exercised*, is always only the complex of objects of all possible experience, so long as they are taken for nothing more than mere phenomena; for otherwise no legislation of the Understanding in respect of them is conceivable.

Legislation through natural concepts is carried on by means of the Understanding and is theoretical. Legislation through the concept of freedom is carried on by the Reason and is merely practical. It is only in the practical [sphere] that the Reason can be legislative; in respect of theoretical cognition (of nature) it can merely (as acquainted with law by the Understanding) deduce from given laws consequences which always remain within [the limits of] nature. But on the other hand, Reason is not always therefore *legislative*, where there are practical rules, for they may be only technically practical.

Understanding and Reason exercise, therefore, two distinct legislations in regard to one and the same territory of experience, without prejudice to each other. The concept of freedom as little disturbs the legislation of nature, as the natural concept influences the legislation through the former. — The possibility of at least thinking without contradiction the co-existence of both legislations, and of the corresponding faculties in the same subject, has been shown in the Critique of pure Reason; for it annulled the objections on the other side by exposing the dialectical illusion which they contain.

These two different realms then do not limit each other in their legislation, though they perpetually do so in the world of sense. That they do not constitute *one* realm, arises from this, that the natural concept represents its objects in intuition, not as things in themselves, but as mere phenomena; the concept of freedom, on the other hand, represents in its Object a thing in itself, but not in intuition. Hence, neither of them can furnish a theoretical knowledge of its Object (or even of the thinking subject) as a thing in itself; this would be the supersensible, the Idea of which we must indeed make the basis of the possibility of all these objects of experience, but which we can never extend or elevate into a cognition.

There is, then, an unbounded but also inaccessible field for our whole cognitive faculty — the field of the supersensible — wherein we find no territory, and, therefore, can have in it, for theoretical cognition, no realm either for concepts of Understanding or Reason. This field we must indeed occupy with Ideas on behalf of the theoretical as well as the practical use of Reason, but we can supply to them in reference to the laws [arising] from the concept of freedom no other than practical reality, by which our theoretical cognition is not extended in the slightest degree towards the supersensible.

Now even if an immeasurable gulf is fixed between the sensible realm of the concept of nature and the supersensible realm of the concept of freedom, so that no transition is possible from the first to the second (by means of the theoretical use of Reason), just as if they were two different worlds of which the first could have no influence upon the second, yet the second is *meant* to have an influence upon the first. The concept of freedom is meant to actualise in the world of sense the purpose proposed by its laws, and consequently nature must be so thought that the conformity to law of its form, at least harmonises with the possibility of the purposes to be effected in it according to laws of freedom. — There must, therefore, be a ground of the *unity* of the supersensible, which lies at the basis of nature, with that which the concept of freedom practically contains; and the concept of this ground, although it does not attain either theoretically or practically to a knowledge of the same, and hence has no peculiar realm, nevertheless makes possible the transition from the mode of thought according to the principles of the one to that according to the principles of the other.

III. OF THE CRITIQUE OF JUDGEMENT AS A MEANS OF COMBINING THE TWO PARTS OF PHILOSOPHY INTO A WHOLE.

The Critique of the cognitive faculties, as regards what they can furnish *a priori*, has properly speaking no realm in respect of Objects, because it is not a doctrine, but only has to investigate whether and how, in accordance with the state of these faculties, a doctrine is possible by their means. Its field extends to all their pretensions, in order to confine them within their legitimate bounds. But what cannot enter into the division of Philosophy may yet enter, as a chief part, into the Critique of the pure faculty of cognition in

general, viz. if it contains principles which are available neither for theoretical nor for practical use.

The natural concepts, which contain the ground of all theoretical knowledge *a priori*, rest on the legislation of the Understanding. — The concept of freedom, which contains the ground of all sensuously-unconditioned practical precepts *a priori*, rests on the legislation of the Reason. Both faculties, therefore, besides being capable of application as regards their logical form to principles of whatever origin, have also as regards their content, their special legislations above which there is no other (*a priori*); and hence the division of Philosophy into theoretical and practical is justified.

But in the family of the higher cognitive faculties there is a middle term between the Understanding and the Reason. This is the *Judgement*, of which we have cause for supposing according to analogy that it may contain in itself, if not a special legislation, yet a special principle of its own to be sought according to laws, though merely subjective *a priori*. This principle, even if it have no field of objects as its realm, yet may have somewhere a territory with a certain character, for which no other principle can be valid.

But besides (to judge by analogy) there is a new ground for bringing the Judgement into connexion with another arrangement of our representative faculties, which seems to be of even greater importance than that of its relationship with the family of the cognitive faculties. For all faculties or capacities of the soul can be reduced to three, which cannot be any further derived from one common ground: the *faculty of knowledge*, the *feeling of pleasure and pain*, and the *faculty of desire*.[9*] For the faculty of knowledge the Understanding is alone legislative, if (as must happen when it is considered by itself without confusion with the faculty of desire) this faculty is referred to nature as the faculty of *theoretical knowledge*; for in respect of nature (as phenomenon) it is alone possible for us to give laws by means of natural concepts *a priori*, i.e. by pure concepts of Understanding. — For the faculty of desire, as a higher faculty according to the concept of freedom, the Reason (in which alone this concept has a place) is alone *a priori* legislative. — Now between the faculties of knowledge and desire there is the feeling of pleasure, just as the Judgement is intermediate between the Understanding and the Reason. We may therefore suppose provisionally that the Judgement likewise contains in itself an *a priori* principle. And as pleasure or pain is necessarily combined with the faculty of desire (either preceding this principle as in the lower desires, or following it as in the higher, when the desire is determined by the moral law), we may also suppose that the Judgement will bring about a transition from the pure faculty of knowledge, the realm of natural concepts, to the realm of the concept of freedom, just as in its logical use it makes possible the transition from Understanding to Reason.

Although, then, Philosophy can be divided only into two main parts, the theoretical and the practical, and although all that we may be able to say of the special principles of Judgement must be counted as belonging in it to the theoretical part, i.e. to rational cognition in accordance with natural concepts; yet the Critique of pure Reason, which must decide all this, as regards the possibility of the system before undertaking it, consists of three parts; the Critique of pure Understanding, of pure Judgement, and of pure Reason, which faculties are called pure because they are legislative *a priori*.

IV. OF JUDGEMENT AS A FACULTY LEGISLATING *A PRIORI*

Judgement in general is the faculty of thinking the particular as contained under the Universal. If the universal (the rule, the principle, the law) be given, the Judgement which subsumes the particular under it (even if, as transcendental Judgement, it furnishes *a priori*, the conditions in conformity with which subsumption under that universal is alone possible) is *determinant*. But if only the particular be given for which the universal has to be found, the Judgement is merely *reflective*.

The determinant Judgement only subsumes under universal transcendental laws given by the Understanding; the law is marked out for it, *a priori*, and it has therefore no need to seek a law for itself

in order to be able to subordinate the particular in nature to the universal. — But the forms of nature are so manifold, and there are so many modifications of the universal transcendental natural concepts left undetermined by the laws given, *a priori*, by the pure Understanding, — because these only concern the possibility of a nature in general (as an object of sense), — that there must be laws for these [forms] also. These, as empirical, may be contingent from the point of view of *our* Understanding, and yet, if they are to be called laws (as the concept of a nature requires), they must be regarded as necessary in virtue of a principle of the unity of the manifold, though it be unknown to us. — The reflective Judgement, which is obliged to ascend from the particular in nature to the universal, requires on that account a principle that it cannot borrow from experience, because its function is to establish the unity of all empirical principles under higher ones, and hence to establish the possibility of their systematic subordination. Such a transcendental principle, then, the reflective Judgement can only give as a law from and to itself. It cannot derive it from outside (because then it would be the determinant Judgement); nor can it prescribe it to nature, because reflection upon the laws of nature adjusts itself by nature, and not nature by the conditions according to which we attempt to arrive at a concept of it which is quite contingent in respect of these.

This principle can be no other than the following: As universal laws of nature have their ground in our Understanding, which prescribes them to nature (although only according to the universal concept of it as nature); so particular empirical laws, in respect of what is in them left undetermined by these universal laws, must be considered in accordance with such a unity as they would have if an Understanding (although not our Understanding) had furnished them to our cognitive faculties, so as to make possible a system of experience according to particular laws of nature. Not as if, in this way, such an Understanding must be assumed as actual (for it is only our reflective Judgement to which this Idea serves as a principle — for reflecting, not for determining); but this faculty thus gives a law only to itself and not to nature.

Now the concept of an Object, so far as it contains the ground of the actuality of this Object, is the *purpose*; and the agreement of a thing with that constitution of things, which is only possible according to purposes, is called the *purposiveness* of its form. Thus the principle of Judgement, in respect of the form of things of nature under empirical laws generally, is the *purposiveness of nature* in its manifoldness. That is, nature is represented by means of this concept, as if an Understanding contained the ground of the unity of the manifold of its empirical laws.

The purposiveness of nature is therefore a particular concept, *a priori*, which has its origin solely in the reflective Judgement. For we cannot ascribe to natural products anything like a reference of nature in them to purposes; we can only use this concept to reflect upon such products in respect of the connexion of phenomena which is given in nature according to empirical laws. This concept is also quite different from practical purposiveness (in human art or in morals), though it is certainly thought according to the analogy of these last.

V. THE PRINCIPLE OF THE FORMAL PURPOSIVENESS OF NATURE IS A TRANSCENDENTAL PRINCIPLE OF JUDGEMENT.

A transcendental principle is one by means of which is represented, *a priori*, the universal condition under which alone things can be in general Objects of our cognition. On the other hand, a principle is called metaphysical if it represents the *a priori* condition under which alone Objects, whose concept must be empirically given, can be further determined *a priori*. Thus the principle of the cognition of bodies as substances, and as changeable substances, is transcendental, if thereby it is asserted that their changes must have a cause; it is metaphysical if it asserts that their changes must have an *external* cause. For in the former case bodies need only be thought by means of ontological predicates (pure concepts of Understanding), e.g. *substance, in order to cognise the proposition* a priori; but in the latter case the

empirical concept of a body (as a movable thing in space) must lie at the basis of the proposition, although once this basis has been laid down, it may be seen completely *a priori* that this latter predicate (motion only by external causes) belongs to body. — Thus, as I shall presently show, the principle of the purposiveness of nature (in the manifoldness of its empirical laws) is a transcendental principle. For the concept of Objects, so far as they are thought as standing under this principle, is only the pure concept of objects of possible empirical cognition in general and contains nothing empirical. On the other hand, the principle of practical purposiveness, which must be thought in the Idea of the *determination* of a free *will*, is a metaphysical principle; because the concept of a faculty of desire as a will must be given empirically (i.e. does not belong to transcendental predicates). Both principles are, however, not empirical, but *a priori*; because for the combination of the predicate with the empirical concept of the subject of their judgements no further experience is needed, but it can be apprehended completely *a priori*.

That the concept of a purposiveness of nature belongs to transcendental principles can be sufficiently seen from the maxims of the Judgement, which lie at the basis of the investigation of nature *a priori*, and yet do not go further than the possibility of experience, and consequently of the cognition of nature — not indeed nature in general, but nature as determined through a variety of particular laws. These maxims present themselves in the course of this science often enough, though in a scattered way, as sentences of metaphysical wisdom, whose necessity we cannot demonstrate from concepts. "Nature takes the shortest way (*lex parsimoniae*); at the same time it makes no leaps, either in the course of its changes or in the juxtaposition of specifically different forms (*lex continui in natura*); its great variety in empirical laws is yet unity under a few principles (*principia praeter necessitatem non sunt multiplicanda*)," etc.

If we propose to set forth the origin of these fundamental propositions and try to do so by the psychological method, we violate their sense. For they do not tell us what happens, i.e. by what rule our cognitive powers actually operate, and how we judge, but how we ought to judge; and this logical objective necessity does not emerge if the principles are merely empirical. Hence that purposiveness of nature for our cognitive faculties and their use, which is plainly apparent from them, is a transcendental principle of judgements, and needs therefore also a Transcendental Deduction, by means of which the ground for so judging must be sought in the sources of cognition *a priori*.

We find in the grounds of the possibility of an experience in the very first place something necessary, viz. the universal laws without which nature in general (as an object of sense) cannot be thought; and these rest upon the Categories, applied to the formal conditions of all intuition possible for us, so far as it is also given *a priori*. Now under these laws the Judgement is determinant, for it has nothing to do but to subsume under given laws. For example, the Understanding says that every change has its cause (universal law of nature); the transcendental Judgement has nothing further to do than to supply *a priori* the condition of subsumption under the concept of the Understanding placed before it, i.e. the succession [in time] of the determinations of one and the same thing. For nature in general (as an object of possible experience) that law is cognised as absolutely necessary. — But now the objects of empirical cognition are determined in many other ways than by that formal time-condition, or, at least as far as we can judge *a priori*, are determinable. Hence specifically different natures can be causes in an infinite variety of ways, as well as in virtue of what they have in common as belonging to nature in general; and each of these modes must (in accordance with the concept of a cause in general) have its rule, which is a law and therefore brings necessity with it, although we do not at all comprehend this necessity, in virtue of the constitution and the limitations of our cognitive faculties. We must therefore think in nature, in respect of its merely empirical laws, a possibility of infinitely various empirical laws, which are, as far as our insight goes, contingent (cannot be cognised *a priori*), and in respect of which we judge nature, according to empirical laws and the possibility of the unity of experience (as a system according to empirical laws), to be contingent. But such a unity must be necessarily presupposed and assumed, for otherwise there would be no

thoroughgoing connexion of empirical cognitions in a whole of experience. The universal laws of nature no doubt furnish such a connexion of things according to their kind as things of nature in general, but not specifically, as such particular beings of nature. Hence the Judgement must assume for its special use this principle *a priori*, that what in the particular (empirical) laws of nature is from the human point of view contingent, yet contains a unity of law in the combination of its manifold into an experience possible in itself — a unity not indeed to be fathomed by us, but yet thinkable. Consequently as the unity of law in a combination, which we cognise as contingent in itself, although in conformity with a necessary design (a need) of Understanding, is represented as the purposiveness of Objects (here of nature); so must the Judgement, which in respect of things under possible (not yet discovered) empirical laws is merely reflection, think of nature in respect of the latter according to *a principle of purposiveness* for our cognitive faculty, which then is expressed in the above maxims of the Judgement. This transcendental concept of a purposiveness of nature is neither a natural concept nor a concept of freedom, because it ascribes nothing to the Object (of nature), but only represents the peculiar way in which we must proceed in reflection upon the objects of nature in reference to a thoroughly connected experience, and is consequently a subjective principle (maxim) of the Judgement. Hence, as if it were a lucky chance favouring our design, we are rejoiced (properly speaking, relieved of a want), if we meet with such systematic unity under merely empirical laws; although we must necessarily assume that there is such a unity without our comprehending it or being able to prove it.

In order to convince ourselves of the correctness of this Deduction of the concept before us, and the necessity of assuming it as a transcendental principle of cognition, just consider the magnitude of the problem. The problem, which lies *a priori* in our Understanding, is to make a connected experience out of given perceptions of a nature containing at all events an infinite variety of empirical laws. The Understanding is, no doubt, in possession *a priori* of universal laws of nature, without which nature could not be an object of experience; but it needs in addition a certain order of nature in its particular rules, which can only be empirically known and which are, as regards the Understanding, contingent. These rules, without which we could not proceed from the universal analogy of a possible experience in general to the particular, must be thought by it as laws (i.e. as necessary), for otherwise they would not constitute an order of nature; although their necessity can never be cognised or comprehended by it. Although, therefore, the Understanding can determine nothing *a priori* in respect of Objects, it must, in order to trace out these empirical so-called laws, place at the basis of all reflection upon Objects an *a priori* principle, viz. that a cognisable order of nature is possible in accordance with these laws. The following propositions express some such principle. There is in nature a subordination of genera and species comprehensible by us. Each one approximates to some other according to a common principle, so that a transition from one to another and so on to a higher genus may be possible. Though it seems at the outset unavoidable for our Understanding to assume different kinds of causality for the specific differences of natural operations, yet these different kinds may stand under a small number of principles, with the investigation of which we have to busy ourselves. This harmony of nature with our cognitive faculty is presupposed *a priori* by the Judgement, on behalf of its reflection upon nature in accordance with its empirical laws; whilst the Understanding at the same time cognises it objectively as contingent, and it is only the Judgement that ascribes it to nature as a trancendental purposiveness (in relation to the cognitive faculty of the subject). For without this presupposition we should have no order of nature in accordance with empirical laws, and consequently no guiding thread for an experience ordered by these in all their variety, or for an investigation of them.

For it might easily be thought that, in spite of all the uniformity of natural things according to the universal laws, without which we should not have the form of an empirical cognition in general, the specific variety of the empirical laws of nature including their effects might yet be so great, that it would be impossible for our Understanding, to detect in nature a comprehensible order; to divide its products

into genera and species, so as to use the principles which explain and make intelligible one for the explanation and comprehension of another; or out of such confused material (strictly we should say, so infinitely various and not to be measured by our faculty of comprehension) to make a connected experience.

The Judgement has therefore also in itself a principle *a priori* of the possibility of nature, but only in a subjective aspect; by which it prescribes, not to nature (autonomy), but to itself (heautonomy) a law for its reflection upon nature. This we might call the *law of the specification of nature* in respect of its empirical laws. The Judgement does not cognise this *a priori* in nature, but assumes it on behalf of a natural order cognisable by our Understanding in the division which it makes of the universal laws of nature when it wishes to subordinate to these the variety of particular laws. If then we say that nature specifies its universal laws according to the principles of purposiveness for our cognitive faculty, i.e. in accordance with the necessary business of the human Understanding of finding the universal for the particular which perception offers it, and again of finding connexion for the diverse (which however is a universal for each species) in the unity of a principle, — we thus neither prescribe to nature a law, nor do we learn one from it by observation (although such a principle may be confirmed by this means). For it is not a principle of the determinant but merely of the reflective Judgement. We only require that, be nature disposed as it may as regards its universal laws, investigation into its empirical laws may be carried on in accordance with that principle and the maxims founded thereon, because it is only so far as that holds that we can make any progress with the use of our Understanding in experience, or gain knowledge.

VI. OF THE COMBINATION OF THE FEELING OF PLEASURE WITH THE CONCEPT OF THE PURPOSIVENESS OF NATURE.

The thought harmony of nature in the variety of its particular laws with our need of finding universality of principles for it, must be judged as contingent in respect of our insight, but yet at the same time as indispensable for the needs of our Understanding, and consequently as a purposiveness by which nature is harmonised with our design, which, however, has only knowledge for its aim. The universal laws of the Understanding, which are at the same time laws of nature, are just as necessary (although arising from spontaneity) as the material laws of motion. Their production presupposes no design on the part of our cognitive faculty, because it is only by means of them that we, in the first place, attain a concept of what the cognition of things (of nature) is, and attribute them necessarily to nature as Object of our cognition in general. But, so far as we can see, it is contingent that the order of nature according to its particular laws, in all its variety and heterogeneity possibly at least transcending our comprehension, should be actually conformable to these [laws]. The discovery of this [order] is the business of the Understanding which is designedly borne towards a necessary purpose, viz. the bringing of unity of principles into nature, which purpose then the Judgement must ascribe to nature, because the Understanding cannot here prescribe any law to it.

The attainment of that design is bound up with the feeling of pleasure, and since the condition of this attainment is a representation *a priori*, — as here a principle for the reflective Judgement in general, — therefore the feeling of pleasure is determined by a ground *a priori* and valid for every man, and that merely by the reference of the Object to the cognitive faculty, the concept of purposiveness here not having the least reference to the faculty of desire. It is thus quite distinguished from all practical purposiveness of nature.

In fact, although from the agreement of perceptions with laws in accordance with universal natural concepts (the categories), we do not and cannot find in ourselves the slightest effect upon the feeling of pleasure, because the Understanding necessarily proceeds according to its nature without any design; yet,

on the other hand, the discovery that two or more empirical heterogeneous laws of nature may be combined under one principle comprehending them both, is the ground of a very marked pleasure, often even of an admiration, which does not cease, though we may be already quite familiar with the objects of it. We no longer find, it is true, any marked pleasure in the comprehensibility of nature and in the unity of its divisions into genera and species, whereby are possible all empirical concepts, through which we cognise it according to its particular laws. But this pleasure has certainly been present at one time, and it is only because the commonest experience would be impossible without it that it is gradually confounded with mere cognition and no longer arrests particular attention. There is then something in our judgements upon nature which makes us attentive to its purposiveness for our Understanding — an endeavour to bring, where possible, its dissimilar laws under higher ones, though still always empirical — and thus, if successful, makes us feel pleasure in that harmony of these with our cognitive faculty, which harmony we regard as merely contingent. On the other hand, a representation of nature would altogether displease, by which it should be foretold to us that in the smallest investigation beyond the commonest experience we should meet with a heterogeneity of its laws, which would make the union of its particular laws under universal empirical laws impossible for our Understanding. For this would contradict the principle of the subjectively-purposive specification of nature in its genera, and also of our reflective Judgement in respect of such principle.

This presupposition of the Judgement is, however, at the same time so indeterminate as to how far that ideal purposiveness of nature for our cognitive faculty should be extended, that if we were told that a deeper or wider knowledge of nature derived from observation must lead at last to a variety of laws, which no human Understanding could reduce to a principle, we should at once acquiesce. But still we more gladly listen to one who offers hope that the more we know nature internally, and can compare it with external members now unknown to us, the more simple shall we find it in its principles, and that the further our experience reaches the more uniform shall we find it amid the apparent heterogeneity of its empirical laws. For it is a mandate of our Judgement to proceed according to the principle of the harmony of nature with our cognitive faculty so far as that reaches, without deciding (because it is not the determinant Judgement which gives us this rule) whether or not it is bounded anywhere. For although in respect of the rational use of our cognitive faculty we can determine such bounds, this is not possible in the empirical field.

VII. OF THE AESTHETICAL REPRESENTATION OF THE PURPOSIVENESS OF NATURE.

That which in the representation of an Object is merely subjective, i.e. which decides its reference to the subject, not to the object, is its aesthetical character; but that which serves or can be used for the determination of the object (for cognition), is its logical validity. In the cognition of an object of sense both references present themselves. In the sense-representation of external things the quality of space wherein we intuite them is the merely subjective [element] of my representation (by which it remains undecided what they may be in themselves as Objects), on account of which reference the object is thought thereby merely as phenomenon. But space, notwithstanding its merely subjective quality, is at the same time an ingredient in the cognition of things as phenomena. *Sensation*, again (i.e. external sensation), expresses the merely subjective [element] of our representations of external things, but it is also the proper material (reale) of them (by which something existing is given), just as space is the mere form *a priori* of the possibility of their intuition. Nevertheless, however, sensation is also employed in the cognition of external Objects.

But the subjective [element] in a representation *which cannot be an ingredient of cognition*, is the *pleasure* or *pain* which is bound up with it; for through it I cognise nothing in the object of the

representation, although it may be the effect of some cognition. Now the purposiveness of a thing, so far as it is represented in perception, is no characteristic of the Object itself (for such cannot be perceived), although it may be inferred from a cognition of things. The purposiveness, therefore, which precedes the cognition of an Object, and which, even without our wishing to use the representation of it for cognition, is, at the same time, immediately bound up with it, is that subjective [element] which cannot be an ingredient in cognition. Hence the object is only called purposive, when its representation is immediately combined with the feeling of pleasure; and this very representation is an aesthetical representation of purposiveness. — The only question is whether there is, in general, such a representation of purposiveness.

If pleasure is bound up with the mere apprehension (*apprehensio*) of the form of an object of intuition, without reference to a concept for a definite cognition, then the representation is thereby not referred to the Object, but simply to the subject; and the pleasure can express nothing else than its harmony with the cognitive faculties which come into play in the reflective Judgement, and so far as they are in play; and hence can only express a subjective formal purposiveness of the Object. For that apprehension of forms in the Imagination can never take place without the reflective Judgement, though undesignedly, at least comparing them with its faculty of referring intuitions to concepts. If now in this comparison the Imagination (as the faculty of *a priori* intuitions) is placed by means of a given representation undesignedly in agreement with the Understanding, as the faculty of concepts, and thus a feeling of pleasure is aroused, the object must then be regarded as purposive for the reflective Judgement. Such a judgement is an aesthetical judgement upon the purposiveness of the Object, which does not base itself upon any present concept of the object, nor does it furnish any such. In the case of an object whose form (not the matter of its representation, as sensation), in the mere reflection upon it (without reference to any concept to be obtained of it), is judged as the ground of a pleasure in the representation of such an Object, this pleasure is judged as bound up with the representation necessarily; and, consequently, not only for the subject which apprehends this form, but for every judging being in general. The object is then called beautiful; and the faculty of judging by means of such a pleasure (and, consequently, with universal validity) is called Taste. For since the ground of the pleasure is placed merely in the form of the object for reflection in general — and, consequently, in no sensation of the object, and also without reference to any concept which anywhere involves design — it is only the conformity to law in the empirical use of the Judgement in general (unity of the Imagination with the Understanding) in the subject, with which the representation of the Object in reflection, whose conditions are universally valid *a priori*, harmonises. And since this harmony of the object with the faculties of the subject is contingent, it brings about the representation of its purposiveness in respect of the cognitive faculties of the subject.

Here now is a pleasure, which, like all pleasure or pain that is not produced through the concept of freedom (i.e. through the preceding determination of the higher faculties of desire by pure Reason), can never be comprehended from concepts, as necessarily bound up with the representation of an object. It must always be cognised as combined with this only by means of reflective perception; and, consequently, like all empirical judgements, it can declare no objective necessity and lay claim to no *a priori* validity. But the judgement of taste also claims, as every other empirical judgement does, to be valid for every one; and in spite of its inner contingency this is always possible. The strange and irregular thing is that it is not an empirical concept, but a feeling of pleasure (consequently not a concept at all), which by the judgement of taste is attributed to every one, — just as if it were a predicate bound up with the cognition of the Object — and which is connected with the representation thereof.

A singular judgement of experience, e.g., when we perceive a moveable drop of water in an ice-crystal, may justly claim that every one else should find it the same; because we have formed this judgement, according to the universal conditions of the determinant faculty of Judgement, under the laws of a possible experience in general. Just in the same way he who feels pleasure in the mere reflection

upon the form of an object without respect to any concept, although this judgement be empirical and singular, justly claims the agreement of every one; because the ground of this pleasure is found in the universal, although subjective, condition of reflective judgements, viz., the purposive harmony of an object (whether a product of nature or of art) with the mutual relations of the cognitive faculties (the Imagination and the Understanding), a harmony which is requisite for every empirical cognition. The pleasure, therefore, in the judgement of taste is dependent on an empirical representation, and cannot be bound up *a priori* with any concept (we cannot determine *a priori* what object is or is not according to taste; that we must find out by experiment). But the pleasure is the determining ground of this judgement only because we are conscious that it rests merely on reflection and on the universal though only subjective conditions of the harmony of that reflection with the cognition of Objects in general, for which the form of the Object is purposive.

Thus the reason why judgements of taste according to their possibility are subjected to a Critique is that they presuppose a principle *a priori*, although this principle is neither one of cognition for the Understanding nor of practice for the Will, and therefore is not in any way determinant *a priori*.

Susceptibility to pleasure from reflection upon the forms of things (of Nature as well as of Art), indicates not only a purposiveness of the Objects in relation to the reflective Judgement, conformably to the concept of nature in the subject; but also conversely a purposiveness of the subject in respect of the objects according to their form or even their formlessness, in virtue of the concept of freedom. Hence the aesthetical judgement is not only related as a judgement of taste to the beautiful, but also as springing from a spiritual feeling is related to the *sublime*; and thus the Critique of the aesthetical Judgement must be divided into two corresponding sections.

VIII. OF THE LOGICAL REPRESENTATION OF THE PURPOSIVENESS OF NATURE

Purposiveness may be represented in an object given in experience on a merely subjective ground, as the harmony of its form, — in the *apprehension* (*apprehensio*) of it prior to any concept, — with the cognitive faculties, in order to unite the intuition with concepts for a cognition generally. Or it may be represented objectively as the harmony of the form of the object with the possibility of the thing itself, according to a concept of it which precedes and contains the ground of this form. We have seen that the representation of purposiveness of the first kind rests on the immediate pleasure in the form of the object in the mere reflection upon it. But the representation of purposiveness of the second kind, since it refers the form of the Object, not to the cognitive faculties of the subject in the apprehension of it, but to a definite cognition of the object under a given concept, has nothing to do with a feeling of pleasure in things, but only with the Understanding in its judgement upon them. If the concept of an object is given, the business of the Judgement in the use of the concept for cognition consists in *presentation* (*exhibitio*), i.e. in setting a corresponding intuition beside the concept. This may take place either through our own Imagination, as in Art when we realise a preconceived concept of an object which is a purpose of ours; or through Nature in its Technic (as in organised bodies) when we supply to it our concept of its purpose in order to judge of its products. In the latter case it is not merely the *purposiveness* of nature in the form of the thing that is represented, but this its product is represented as a *natural purpose*. — Although our concept of a subjective purposiveness of nature in its forms according to empirical laws is not a concept of the Object, but only a principle of the Judgement for furnishing itself with concepts amid the immense variety of nature (and thus being able to ascertain its own position), yet we thus ascribe to nature as it were a regard to our cognitive faculty according to the analogy of purpose. Thus we can regard *natural beauty* as the *presentation* of the concept of the formal (merely subjective) purposiveness, and *natural purposes* as the presentation of the concept of a real (objective) purposiveness. The former of these we

judge of by Taste (aesthetically, by the medium of the feeling of pleasure), the latter by Understanding and Reason (logically, according to concepts).

On this is based the division of the Critique of Judgement into the Critique of *aesthetical* and of *teleological* Judgement. By the first we understand the faculty of judging of the formal purposiveness (otherwise called subjective) of Nature by means of the feeling of pleasure or pain; by the second the faculty of judging its real (objective) purposiveness by means of Understanding and Reason.

In a Critique of Judgement the part containing the aesthetical Judgement is essential, because this alone contains a principle which the Judgement places quite *a priori* at the basis of its reflection upon nature; viz., the principle of a formal purposiveness of nature, according to its particular (empirical) laws, for our cognitive faculty, without which the Understanding could not find itself in nature. On the other hand no reason *a priori* could be specified, — and even the possibility of a reason would not be apparent from the concept of nature as an object of experience whether general or particular, — why there should be objective purposes of nature, i.e. things which are only possible as natural purposes; but the Judgement, without containing such a principle *a priori* in itself, in given cases (of certain products), in order to make use of the concept of purposes on behalf of Reason, would only contain the rule according to which that transcendental principle has already prepared the Understanding to apply to nature the concept of a purpose (at least as regards its form).

But the transcendental principle which represents a purposiveness of nature (in subjective reference to our cognitive faculty) in the form of a thing as a principle by which we judge of nature, leaves it quite undetermined where and in what cases I have to judge of a product according to a principle of purposiveness, and not rather according to universal natural laws. It leaves it to the *aesthetical* Judgement to decide by taste the harmony of this product (of its form) with our cognitive faculty (so far as this decision rests not on any agreement with concepts but on feeling). On the other hand, the Judgement teleologically employed furnishes conditions determinately under which something (e.g. an organised body) is to be judged according to the Idea of a purpose of nature; but it can adduce no fundamental proposition from the concept of nature as an object of experience authorising it to ascribe to nature *a priori* a reference to purposes, or even indeterminately to assume this of such products in actual experience. The reason of this is that we must have many particular experiences, and consider them under the unity of their principle, in order to be able to cognise, even empirically, objective purposiveness in a certain object. — The aesthetical Judgement is therefore a special faculty for judging of things according to a rule, but not according to concepts. The teleological Judgement is not a special faculty, but only the reflective Judgement in general, so far as it proceeds, as it always does in theoretical cognition, according to concepts; but in respect of certain objects of nature according to special principles, viz., of a merely reflective Judgement, and not of a Judgement that determines Objects. Thus as regards its application it belongs to the theoretical part of Philosophy; and on account of its special principles which are not determinant, as they must be in Doctrine, it must constitute a special part of the Critique. On the other hand, the aesthetical Judgement contributes nothing towards the knowledge of its objects, and thus must be reckoned as belonging to the criticism of the judging subject and its cognitive faculties, *only* so far as they are susceptible of *a priori* principles, of whatever other use (theoretical or practical) they may be. This is the propaedeutic of all Philosophy.

IX. OF THE CONNEXION OF THE LEGISLATION OF UNDERSTANDING WITH THAT OF REASON BY MEANS OF THE JUDGEMENT

The Understanding legislates *a priori* for nature as an Object of sense — for a theoretical knowledge of it in a possible experience. Reason legislates *a priori* for freedom and its peculiar casuality; as the supersensible in the subject, for an unconditioned practical knowledge. The realm of the natural concept under the one legislation and that of the concept of freedom under the other are entirely removed from all mutual influence which they might have on one another (each according to its fundamental laws) by the

great gulf that separates the supersensible from phenomena. The concept of freedom determines nothing in respect of the theoretical cognition of nature; and the natural concept determines nothing in respect of the practical laws of freedom. So far then it is not possible to throw a bridge from the one realm to the other. But although the determining grounds of causality according to the concept of freedom (and the practical rules which it contains) are not resident in nature, and the sensible cannot determine the supersensible in the subject, yet this is possible conversely (not, to be sure, in respect of the cognition of nature, but as regards the effects of the supersensible upon the sensible). This in fact is involved in the concept of a causality through freedom, the *effect* of which is to take place in the world according to its formal laws. The word *cause*, of course, when used of the supersensible only signifies the *ground* which determines the causality of natural things to an effect in accordance with their proper natural laws, although harmoniously with the formal principle of the laws of Reason. Although the possibility of this cannot be comprehended, yet the objection of a contradiction alleged to be found in it can be sufficiently answered.[10]* — The effect in accordance with the concept of freedom is the final purpose which (or its phenomenon in the world of sense) ought to exist; and the condition of the possibility of this is presupposed in nature (in the nature of the subject as a sensible being, that is, as man). The Judgement presupposes this *a priori* and without reference to the practical; and thus furnishes the mediating concept between the concepts of nature and that of freedom. It makes possible the transition from the conformity to law in accordance with the former to the final purpose in accordance with the latter, and this by the concept of a *purposiveness* of nature. For thus is cognised the possibility of the final purpose which alone can be actualised in nature in harmony with its laws.

The Understanding by the possibility of its *a priori* laws for nature, gives a proof that nature is only cognised by us as phenomenon; and implies at the same time that it has a supersensible substrate, though it leaves this quite *undetermined*. The Judgement by its *a priori* principle for the judging of nature according to its possible particular laws, makes the supersensible substrate (both in us and without us) *determinable by means of the intellectual faculty*. But the Reason by its practical *a priori* law *determines* it; and thus the Judgement makes possible the transition from the realm of the concept of nature to that of the concept of freedom.

As regards the faculties of the soul in general, in their higher aspect, as containing an autonomy; the Understanding is that which contains the *constitutive* principles *a priori* for the *cognitive faculty* (the theoretical cognition of nature). For the *feeling of pleasure and pain* there is the Judgement, independently of concepts and sensations which relate to the determination of the faculty of desire and can thus be immediately practical. For the *faculty of desire* there is the Reason which is practical without the mediation of any pleasure whatever. It determines for the faculty of desire, as a superior faculty, the final purpose which carries with it the pure intellectual satisfaction in the Object. — The concept formed by Judgement of a purposiveness of nature belongs to natural concepts, but only as a regulative principle of the cognitive faculty; although the aesthetical judgement upon certain objects (of Nature or Art) which occasions it is, in respect of the feeling of pleasure or pain, a constitutive principle. The spontaneity in the play of the cognitive faculties, the harmony of which contains the ground of this pleasure, makes the above concept [of the purposiveness of nature] fit to be the mediating link between the realm of the natural concept and that of the concept of freedom in its effects; whilst at the same time it promotes the sensibility of the mind for moral feeling. — The following table may facilitate the review of all the higher faculties according to their systematic unity.[11]*

All the faculties of the mind

All the faculties of the mind

Cognitive faculties.

Faculties of desire.

Feeling of pleasure and pain.

Cognitive faculties

Understanding.
Judgement.
Reason.

A priori principles

Conformity to law.
Purposiveness.
Final purpose.

Application to

Nature.
Art.
Freedom.

PART I. CRITIQUE OF THE AESTHETICAL JUDGEMENT

FIRST DIVISION. ANALYTIC OF THE AESTHETICAL JUDGEMENT

FIRST BOOK. ANALYTIC OF THE BEAUTIFUL

FIRST MOMENT.

OF THE JUDGEMENT OF TASTE[12][*] ACCORDING TO QUALITY

§ 1. The judgement of taste is aesthetical

In order to decide whether anything is beautiful or not, we refer the representation, not by the Understanding to the Object for cognition but, by the Imagination (perhaps in conjunction with the Understanding) to the subject, and its feeling of pleasure or pain. The judgement of taste is therefore not a judgement of cognition, and is consequently not logical but aesthetical, by which we understand that whose determining ground can be *no other than subjective*. Every reference of representations, even that of sensations, may be objective (and then it signifies the real in an empirical representation); save only the reference to the feeling of pleasure and pain, by which nothing in the Object is signified, but through which there is a feeling in the subject, as it is affected by the representation.

To apprehend a regular, purposive building by means of one's cognitive faculty (whether in a clear or a confused way of representation) is something quite different from being conscious of this representation as connected with the sensation of satisfaction. Here the representation is altogether referred to the subject and to its feeling of life, under the name of the feeling of pleasure or pain. This establishes a quite separate faculty of distinction and of judgement, adding nothing to cognition, but only comparing the given representation in the subject with the whole faculty of representations, of which the mind is conscious in the feeling of its state. Given representations in a judgement can be empirical (consequently, aesthetical); but the judgement which is formed by means of them is logical, provided they are referred in the judgement to the Object. Conversely, if the given representations are rational, but are referred in a judgement simply to the subject (to its feeling), the judgement is so far always aesthetical.

§ 2. The satisfaction which determines the judgement of taste is disinterested

The satisfaction which we combine with the representation of the existence of an object is called interest. Such satisfaction always has reference to the faculty of desire, either as its determining ground or as necessarily connected with its determining ground. Now when the question is if a thing is beautiful, we do not want to know whether anything depends or can depend on the existence of the thing either for myself or for any one else, but how we judge it by mere observation (intuition or reflection). If any one asks me if I find that palace beautiful which I see before me, I may answer: I do not like things of that kind which are made merely to be stared at. Or I can answer like that Iroquois *sachem* who was pleased in Paris by nothing more than by the cook-shops. Or again after the manner of *Rousseau* I may rebuke the vanity of the great who waste the sweat of the people on such superfluous things. In fine I could easily convince myself that if I found myself on an uninhabited island without the hope of ever again coming among men, and could conjure up just such a splendid building by my mere wish, I should not even give myself the trouble if I had a sufficiently comfortable hut. This may all be admitted and approved; but we are not now talking of this. We wish only to know if this mere representation of the object is accompanied in me with satisfaction, however indifferent I may be as regards the existence of the object of this representation. We easily see that in saying it is *beautiful* and in showing that I have taste, I am concerned, not with that in which I depend on the existence of the object, but with that which I make out of this representation in myself. Every one must admit that a judgement about beauty, in which the least interest mingles, is very partial and is not a pure judgement of taste. We must not be in the least prejudiced in favour of the existence of the things, but be quite indifferent in this respect, in order to play the judge in things of taste.

We cannot, however, better elucidate this proposition, which is of capital importance, than by contrasting the pure disinterested[13*] satisfaction in judgements of taste, with that which is bound up with an interest, especially if we can at the same time be certain that there are no other kinds of interest than those which are now to be specified.

§ 3. The satisfaction in the PLEASANT is bound up with interest

That which pleases the senses in sensation is PLEASANT. Here the opportunity presents itself of censuring a very common confusion of the double sense which the word sensation can have, and of calling attention to it. All satisfaction (it is said or thought) is itself sensation (of a pleasure). Consequently everything that pleases is pleasant because it pleases (and according to its different degrees or its relations to other pleasant sensations it is *agreeable*, *lovely*, *delightful*, *enjoyable*, etc.). But if this be admitted, then impressions of Sense which determine the inclination, fundamental propositions of Reason which determine the Will, mere reflective forms of intuition which determine the Judgement, are quite the same, as regards the effect upon the feeling of pleasure. For this would be pleasantness in the sensation of one's state, and since in the end all the operations of our faculties must issue in the practical and unite in it as their goal, we could suppose no other way of estimating things and their worth than that which consists in the gratification that they promise. It is of no consequence at all how this is attained, and since then the choice of means alone could make a difference, men could indeed blame one another for stupidity and indiscretion, but never for baseness and wickedness. For all, each according to his own way of seeing things, seek one goal, that is, gratification.

If a determination of the feeling of pleasure or pain is called sensation, this expression signifies something quite different from what I mean when I call the representation of a thing (by sense, as a receptivity belonging to the cognitive faculty) sensation. For in the latter case the representation is referred to the Object, in the former simply to the subject, and is available for no cognition whatever, not even for that by which the subject *cognises* itself.

In the above elucidation we understand by the word sensation, an objective representation of sense; and in order to avoid misinterpretation, we shall call that, which must always remain merely subjective and can constitute absolutely no representation of an object, by the ordinary term "feeling." The green colour of the meadows belongs to *objective* sensation, as a perception of an object of sense; the pleasantness of this belongs to *subjective* sensation by which no object is represented, i.e. to feeling, by which the object is considered as an Object of satisfaction (which does not furnish a cognition of it).

Now that a judgement about an object, by which I describe it as pleasant, expresses an interest in it, is plain from the fact that by sensation it excites a desire for objects of that kind; consequently the satisfaction presupposes not the mere judgement about it, but the relation of its existence to my state, so far as this is affected by such an Object. Hence we do not merely say of the pleasant, *it pleases*; but, *it gratifies*. I give to it no mere approval, but inclination is aroused by it; and in the case of what is pleasant in the most lively fashion, there is no judgement at all upon the character of the Object, for those who always lay themselves out only for enjoyment (for that is the word describing intense gratification) would fain dispense with all judgement.

§ 4. The satisfaction in the GOOD is bound up with interest

Whatever by means of Reason pleases through the mere concept is GOOD. That which pleases only as a means we call *good for something* (the useful); but that which pleases for itself is *good in itself*. In both there is always involved the concept of a purpose, and consequently the relation of Reason to the (at least possible) volition, and thus a satisfaction in the *presence* of an Object or an action, i.e. some kind of

interest.

In order to find anything good, I must always know what sort of a thing the object ought to be, i.e. I must have a concept of it. But there is no need of this, to find a thing beautiful. Flowers, free delineations, outlines intertwined with one another without design and called foliage, have no meaning, depend on no definite concept, and yet they please. The satisfaction in the beautiful must depend on the reflection upon an object, leading to any concept (however indefinite); and it is thus distinguished from the pleasant which rests entirely upon sensation.

It is true, the Pleasant seems in many cases to be the same as the Good. Thus people are accustomed to say that all gratification (especially if it lasts) is good in itself; which is very much the same as to say that lasting pleasure and the good are the same. But we can soon see that this is merely a confusion of words; for the concepts which properly belong to these expressions can in no way be interchanged. The pleasant, which, as such, represents the object simply in relation to Sense, must first be brought by the concept of a purpose under principles of Reason, in order to call it good, as an object of the Will. But that there is [involved] a quite different relation to satisfaction in calling that which gratifies at the same time *good*, may be seen from the fact that in the case of the good the question always is, whether it is mediately or immediately good (useful or good in itself); but on the contrary in the case of the pleasant there can be no question about this at all, for the word always signifies something which pleases immediately. (The same is applicable to what I call beautiful.)

Even in common speech men distinguish the Pleasant from the Good. Of a dish which stimulates the taste by spices and other condiments we say unhesitatingly that it is pleasant, though it is at the same time admitted not to be good; for though it immediately *delights* the senses, yet mediately, i.e. considered by Reason which looks to the after results, it displeases. Even in the judging of health we may notice this distinction. It is immediately pleasant to every one possessing it (at least negatively, i.e. as the absence of all bodily pains). But in order to say that it is good, it must be considered by Reason with reference to purposes; viz. that it is a state which makes us fit for all our business. Finally in respect of happiness every one believes himself entitled to describe the greatest sum of the pleasantnesses of life (as regards both their number and their duration) as a true, even as the highest, good. However Reason is opposed to this. Pleasantness is enjoyment. And if we were concerned with this alone, it would be foolish to be scrupulous as regards the means which procure it for us, or [to care] whether it is obtained passively by the bounty of nature or by our own activity and work. But Reason can never be persuaded that the existence of a man who merely lives for *enjoyment* (however busy he may be in this point of view), has a worth in itself; even if he at the same time is conducive as a means to the best enjoyment of others, and shares in all their gratifications by sympathy. Only what he does, without reference to enjoyment, in full freedom and independently of what nature can procure for him passively, gives an [absolute[14*]] worth to his being, as the existence of a person; and happiness, with the whole abundance of its pleasures, is far from being an unconditioned good.[15*]

However, notwithstanding all this difference between the pleasant and the good, they both agree in this that they are always bound up with an interest in their object. [This is true] not only of the pleasant(*§ 3), and the mediate good (the useful) which is pleasing as a means towards pleasantness somewhere, but also of that which is good absolutely and in every aspect, viz. moral good, which brings with it the highest interest. For the good is the Object of will (i.e. of a faculty of desire determined by Reason). But to will something, and to have a satisfaction in its existence, i.e. to take an interest in it, are identical.*

§ 5. Comparison of the three specifically different kinds of satisfaction

The pleasant and the good have both a reference to the faculty of desire; and they bring with them — the former a satisfaction pathologically conditioned (by impulses, *stimuli*) — the latter a pure practical satisfaction, which is determined not merely by the representation of the object, but also by the represented connexion of the subject with the existence of the object. [It is not merely the object that pleases, but also its existence.[16*]] On the other hand, the judgement of taste is merely *contemplative*; i.e. it is a judgement which, indifferent as regards the being of an object, compares its character with the feeling of pleasure and pain. But this contemplation itself is not directed to concepts; for the judgement of taste is not a cognitive judgement (either theoretical or practical), and thus is not *based* on concepts, nor has it concepts as its *purpose*.

The Pleasant, the Beautiful, and the Good, designate then, three different relations of representations to the feeling of pleasure and pain, in reference to which we distinguish from each other objects or methods of representing them. And the expressions corresponding to each, by which we mark our complacency in them, are not the same. That which GRATIFIES a man is called *pleasant*; that which merely PLEASES him is *beautiful*; that which is ESTEEMED [or *approved*[17*]] by him, i.e. *that to which he accords an objective worth, is* good. Pleasantness concerns irrational animals also; but Beauty only concerns men, i.e. animal, but still rational, beings — not merely *quâ* rational (e.g. spirits), but *quâ* animal also; and the Good concerns every rational being in general. This is a proposition which can only be completely established and explained in the sequel. We may say that of all these three kinds of satisfaction, that of taste in the Beautiful is alone a disinterested and *free* satisfaction; for no interest, either of Sense or of Reason, here forces our assent. Hence we may say of satisfaction that it is related in the three aforesaid cases to *inclination*, to *favour*, or to *respect*. Now *favour* is the only free satisfaction. An object of inclination, and one that is proposed to our desire by a law of Reason, leave us no freedom in forming for ourselves anywhere an object of pleasure. All interest presupposes or generates a want; and, as the determining ground of assent, it leaves the judgement about the object no longer free.

As regards the interest of inclination in the case of the Pleasant, every one says that hunger is the best sauce, and everything that is eatable is relished by people with a healthy appetite; and thus a satisfaction of this sort does not indicate choice directed by taste. It is only when the want is appeased that we can distinguish which of many men has or has not taste. In the same way there may be manners (conduct) without virtue, politeness without goodwill, decorum without modesty, etc. For where the moral law speaks there is no longer, objectively, a free choice as regards what is to be done; and to display taste in its fulfilment (or in judging of another’s fulfilment of it) is something quite different from manifesting the moral attitude of thought. For this involves a command and generates a want, whilst moral taste only plays with the objects of satisfaction, without attaching itself to one of them.

EXPLANATION OF THE BEAUTIFUL RESULTING FROM THE FIRST MOMENT

Taste is the faculty of judging of an object or a method of representing it by an *entirely disinterested* satisfaction or dissatisfaction. The object of such satisfaction is called *beautiful*.[18*]

SECOND MOMENT

OF THE JUDGEMENT OF TASTE, VIZ. ACCORDING TO QUANTITY

§ 6. The beautiful is that which apart from concepts is represented as the object of a universal satisfaction

This explanation of the beautiful can be derived from the preceding explanation of it as the object of an entirely disinterested satisfaction. For the fact of which every one is conscious, that the satisfaction is for him quite disinterested, implies in his judgement a ground of satisfaction for every one. For since it does not rest on any inclination of the subject (nor upon any other premeditated interest), but since he who judges feels himself quite *free* as regards the satisfaction which he attaches to the object, he cannot find the ground of this satisfaction in any private conditions connected with his own subject; and hence it must be regarded as grounded on what he can presuppose in every other man. Consequently he must believe that he has reason for attributing a similar satisfaction to every one. He will therefore speak of the beautiful, as if beauty were a characteristic of the object and the judgement logical (constituting a cognition of the Object by means of concepts of it); although it is only aesthetical and involves merely a reference of the representation of the object to the subject. For it has this similarity to a logical judgement that we can presuppose its validity for every one. But this universality cannot arise from concepts; for from concepts there is no transition to the feeling of pleasure or pain (except in pure practical laws, which bring an interest with them such as is not bound up with the pure judgement of taste). Consequently the judgement of taste, accompanied with the consciousness of separation from all interest, must claim validity for every one, without this universality depending on Objects. That is, there must be bound up with it a title to subjective universality.

§ 7. Comparison of the Beautiful with the Pleasant and the Good by means of the above characteristic

As regards the Pleasant every one is content that his judgement, which he bases upon private feeling, and by which he says of an object that it pleases him, should be limited merely to his own person. Thus he is quite contented that if he says “Canary wine is pleasant,” another man may correct his expression and remind him that he ought to say “It is pleasant *to me*.” And this is the case not only as regards the taste of the tongue, the palate, and the throat, but for whatever is pleasant to any one’s eyes and ears. To one violet colour is soft and lovely, to another it is faded and dead. One man likes the tone of wind instruments, another that of strings. To strive here with the design of reproving as incorrect another man’s judgement which is different from our own, as if the judgements were logically opposed, would be folly. As regards the pleasant therefore the fundamental proposition is valid, *every one has his own taste* (the taste of Sense).

The case is quite different with the Beautiful. It would (on the contrary) be laughable if a man who imagined anything to his own taste, thought to justify himself by saying: “This object (the house we see, the coat that person wears, the concert we hear, the poem submitted to our judgement) is beautiful *for me*.” For he must not call it *beautiful* if it merely pleases himself. Many things may have for him charm and pleasantness; no one troubles himself at that; but if he gives out anything as beautiful, he supposes in others the same satisfaction — he judges not merely for himself, but for every one, and speaks of beauty as if it were a property of things. Hence he says “the *thing* is beautiful”; and he does not count on the

agreement of others with this his judgement of satisfaction, because he has found this agreement several times before, but he *demands* it of them. He blames them if they judge otherwise and he denies them taste, which he nevertheless requires from them. Here then we cannot say that each man has his own particular taste. For this would be as much as to say that there is no taste whatever; i.e. no aesthetical judgement, which can make a rightful claim upon every one's assent.

At the same time we find as regards the Pleasant that there is an agreement among men in their judgements upon it, in regard to which we deny Taste to some and attribute it to others; by this not meaning one of our organic senses, but a faculty of judging in respect of the pleasant generally. Thus we say of a man who knows how to entertain his guests with pleasures (of enjoyment for all the senses), so that they are all pleased, "he has taste." But here the universality is only taken comparatively; and there emerge rules which are only *general* (like all empirical ones), and not *universal*; which latter the judgement of Taste upon the beautiful undertakes or lays claim to. It is a judgement in reference to sociability, so far as this rests on empirical rules. In respect of the Good it is true that judgements make rightful claim to validity for every one; but the Good is represented only *by means of a concept* as the Object of a universal satisfaction, which is the case neither with the Pleasant nor with the Beautiful.

§ 8. The universality of the satisfaction is represented in a judgement of Taste only as subjective

This particular determination of the universality of an aesthetical judgement, which is to be met with in a judgement of taste, is noteworthy, not indeed for the logician, but for the transcendental philosopher. It requires no small trouble to discover its origin, but we thus detect a property of our cognitive faculty which without this analysis would remain unknown.

First, we must be fully convinced of the fact that in a judgement of taste (about the Beautiful) the satisfaction in the object is imputed to *every one*, without being based on a concept (for then it would be the Good). Further, this claim to universal validity so essentially belongs to a judgement by which we describe anything as *beautiful*, that if this were not thought in it, it would never come into our thoughts to use the expression at all, but everything which pleases without a concept would be counted as pleasant. In respect of the latter every one has his own opinion; and no one assumes, in another, agreement with his judgement of taste, which is always the case in a judgement of taste about beauty. I may call the first the taste of Sense, the second the taste of Reflection; so far as the first lays down mere private judgements, and the second judgements supposed to be generally valid (public), but in both cases aesthetical (not practical) judgements about an object merely in respect of the relation of its representation to the feeling of pleasure and pain. Now here is something strange. As regards the taste of Sense not only does experience show that its judgement (of pleasure or pain connected with anything) is not valid universally, but every one is content not to impute agreement with it to others (although actually there is often found a very extended concurrence in these judgements). On the other hand, the taste of Reflection has its claim to the universal validity of its judgements (about the beautiful) rejected often enough, as experience teaches; although it may find it possible (as it actually does) to represent judgements which can demand this universal agreement. In fact for each of its judgements of taste it imputes this to every one, without the persons that judge disputing as to the possibility of such a claim; although in particular cases they cannot agree as to the correct application of this faculty.

Here we must, in the first place, remark that a universality which does not rest on concepts of Objects (not even on empirical ones) is not logical but aesthetical, i.e. it involves no objective quantity of the judgement but only that which is subjective. For this I use the expression *general validity* which signifies the validity of the reference of a representation, not to the cognitive faculty but, to the feeling of pleasure and pain for every subject. (We can avail ourselves also of the same expression for the logical quantity of the judgement, if only we prefix *objective* to "universal validity," to distinguish it from that which is

merely subjective and aesthetical.)

A judgement with *objective universal validity* is also always valid subjectively; i.e. if the judgement holds for everything contained under a given concept, it holds also for every one who represents an object by means of this concept. But from a *subjective universal validity*, i.e. aesthetical and resting on no concept, we cannot infer that which is logical; because that kind of judgement does not extend to the Object. Hence the aesthetical universality which is ascribed to a judgement must be of a particular kind, because it does not unite the predicate of beauty with the concept of the *Object*, considered in its whole logical sphere, and yet extends it to the whole sphere of judging persons.

In respect of logical quantity all judgements of taste are *singular* judgements. For because I must refer the object immediately to my feeling of pleasure and pain, and that not by means of concepts, they cannot have the quantity of objective generally valid judgements. Nevertheless if the singular representation of the Object of the judgement of taste in accordance with the conditions determining the latter, were transformed by comparison into a concept, a logically universal judgement could result therefrom. E.g. I describe by a judgement of taste the rose, that I see, as beautiful. But the judgement which results from the comparison of several singular judgements, "Roses in general are beautiful" is no longer described simply as aesthetical, but as a logical judgement based on an aesthetical one. Again the judgement "The rose is pleasant" (to smell) is, although aesthetical and singular, not a judgement of Taste but of Sense. It is distinguished from the former by the fact that the judgement of Taste carries with it an *aesthetical quantity* of universality, i.e. of validity for every one; which cannot be found in a judgement about the Pleasant. It is only judgements about the Good which — although they also determine satisfaction in an object, — have logical and not merely aesthetical universality; for they are valid of the Object, as cognitive of it, and thus are valid for every one.

If we judge Objects merely according to concepts, then all representation of beauty is lost. Thus there can be no rule according to which any one is to be forced to recognise anything as beautiful. We cannot press [upon others] by the aid of any reasons or fundamental propositions our judgement that a coat, a house, or a flower is beautiful. We wish to submit the Object to our own eyes, as if the satisfaction in it depended on sensation; and yet if we then call the object beautiful, we believe that we speak with a universal voice, and we claim the assent of every one, although on the contrary all private sensation can only decide for the observer himself and his satisfaction.

We may see now that in the judgement of taste nothing is postulated but such a *universal voice*, in respect of the satisfaction without the intervention of concepts; and thus the *possibility* of an aesthetical judgement that can, at the same time, be regarded as valid for every one. The judgement of taste itself does not *postulate* the agreement of every one (for that can only be done by a logically universal judgement because it can adduce reasons); it only *imputes* this agreement to every one, as a case of the rule in respect of which it expects, not confirmation by concepts, but assent from others. The universal voice is, therefore, only an Idea (we do not yet inquire upon what it rests). It may be uncertain whether or not the man, who believes that he is laying down a judgement of taste, is, as a matter of fact, judging in conformity with that Idea; but that he refers his judgement thereto, and, consequently, that it is intended to be a judgement of taste, he announces by the expression "beauty." He can be quite certain of this for himself by the mere consciousness of the separation of everything belonging to the Pleasant and the Good from the satisfaction which is left; and this is all for which he promises himself the agreement of every one — a claim which would be justifiable under these conditions, provided only he did not often make mistakes, and thus lay down an erroneous judgement of taste.

§ 9. Investigation of the question whether in the judgement of taste the feeling of pleasure precedes or follows the judging of the object

The solution of this question is the key to the Critique of Taste, and so is worthy of all attention.

If the pleasure in the given object precedes, and it is only its universal communicability that is to be acknowledged in the judgement of taste about the representation of the object, there would be a contradiction. For such pleasure would be nothing different from the mere pleasantness in the sensation, and so in accordance with its nature could have only private validity, because it is immediately dependent on the representation through which the object *is given*.

Hence, it is the universal capability of communication of the mental state in the given representation which, as the subjective condition of the judgement of taste, must be fundamental, and must have the pleasure in the object as its consequent. But nothing can be universally communicated except cognition and representation, so far as it belongs to cognition. For it is only thus that this latter can be objective; and only through this has it a universal point of reference, with which the representative power of every one is compelled to harmonise. If the determining ground of our judgement as to this universal communicability of the representation is to be merely subjective, i.e. is conceived independently of any concept of the object, it can be nothing else than the state of mind, which is to be met with in the relation of our representative powers to each other, so far as they refer a given representation to *cognition in general*.

The cognitive powers, which are involved by this representation, are here in free play, because no definite concept limits them to a particular[19*] rule of cognition. Hence, the state of mind in this representation must be a feeling of the free play of the representative powers in a given representation with reference to a cognition in general. Now a representation by which an object is given, that is to become a cognition in general, requires *Imagination*, for the gathering together the manifold of intuition, and *Understanding*, for the unity of the concept uniting the representations. This state of *free play* of the cognitive faculties in a representation by which an object is given, must be universally communicable; because cognition, as the determination of the Object with which given representations (in whatever subject) are to agree, is the only kind of representation which is valid for every one.

The subjective universal communicability of the mode of representation in a judgement of taste, since it is to be possible without presupposing a definite concept, can refer to nothing else than the state of mind in the free play of the Imagination and the Understanding (so far as they agree with each other, as is requisite for *cognition in general*). We are conscious that this subjective relation, suitable for cognition in general, must be valid for every one, and thus must be universally communicable, just as if it were a definite cognition, resting always on that relation as its subjective condition.

This merely subjective (aesthetical) judging of the object, or of the representation by which it is given, precedes the pleasure in it, and is the ground of this pleasure in the harmony of the cognitive faculties; but on the universality of the subjective conditions for judging of objects is alone based the universal subjective validity of the satisfaction bound up by us with the representation of the object that we call beautiful.

The power of communicating one's state of mind, even though only in respect of the cognitive faculties, carries a pleasure with it, as we can easily show from the natural propension of man towards sociability (empirical and psychological). But this is not enough for our design. The pleasure that we feel is, in a judgement of taste, necessarily imputed by us to every one else; as if, when we call a thing beautiful, it is to be regarded as a characteristic of the object which is determined in it according to concepts; though beauty, without a reference to the feeling of the subject, is nothing by itself. But we must reserve the examination of this question until we have answered another, viz. "If and how aesthetical judgements are possible *a priori*?"

We now occupy ourselves with the easier question, in what way we are conscious of a mutual subjective harmony of the cognitive powers with one another in the judgement of taste; is it aesthetically by mere internal sense and sensation? or is it intellectually by the consciousness of our designed activity, by which we bring them into play?

If the given representation, which occasions the judgement of taste, were a concept uniting Understanding and Imagination in the judging of the object, into a cognition of the Object, the consciousness of this relation would be intellectual (as in the objective schematism of the Judgement of which the Critique[20*] treats). But then the judgement would not be laid down in reference to pleasure and pain, and consequently would not be a judgement of taste. But the judgement of taste, independently of concepts, determines the Object in respect of satisfaction and of the predicate of beauty. Therefore that subjective unity of relation can only make itself known by means of sensation. The excitement of both faculties (Imagination and Understanding) to indeterminate, but yet, through the stimulus of the given sensation, harmonious activity, viz. that which belongs to cognition in general, is the sensation whose universal communicability is postulated by the judgement of taste. An objective relation can only be thought, but yet, so far as it is subjective according to its conditions, can be felt in its effect on the mind; and, of a relation based on no concept (like the relation of the representative powers to a cognitive faculty in general), no other consciousness is possible than that through the sensation of the effect, which consists in the more lively play of both mental powers (the Imagination and the Understanding) when animated by mutual agreement. A representation which, as singular and apart from comparison with others, yet has an agreement with the conditions of universality which it is the business of the Understanding to supply, brings the cognitive faculties into that proportionate accord which we require for all cognition, and so regard as holding for every one who is determined to judge by means of Understanding and Sense in combination (i.e. for every man).

EXPLANATION OF THE BEAUTIFUL RESULTING FROM THE SECOND MOMENT

The *beautiful* is that which pleases universally, without a concept.

THIRD MOMENT

OF JUDGEMENTS OF TASTE, ACCORDING TO THE RELATION OF THE PURPOSES WHICH ARE BROUGHT INTO CONSIDERATION THEREIN.

§ 10. Of purposiveness in general

If we wish to explain what a purpose is according to its transcendental determinations (without presupposing anything empirical like the feeling of pleasure) [we say that] the purpose is the object of a concept, in so far as the concept is regarded as the cause of the object (the real ground of its possibility); and the causality of a *concept* in respect of its *Object* is its purposiveness (*forma finalis*). Where then not merely the cognition of an object, but the object itself (its form and existence) is thought as an effect only possible by means of the concept of this latter, there we think a purpose. The representation of the effect is here the determining ground of its cause and precedes it. The consciousness of the causality of a representation, for *maintaining* the subject in the same state, may here generally denote what we call pleasure; while on the other hand pain is that representation which contains the ground of the determination of the state of representations into their opposite [of restraining or removing them[21]*].

The faculty of desire, so far as it is determinable only through concepts, i.e. to act in conformity with the representation of a purpose, would be the Will. But an Object, or a state of mind, or even an action, is called purposive, although its possibility does not necessarily presuppose the representation of a purpose, merely because its possibility can be explained and conceived by us only so far as we assume for its ground a causality according to purposes, i.e. a will which would have so disposed it according to the representation of a certain rule. There can be, then, purposiveness without[22]* purpose, so far as we do not place the causes of this form in a will, but yet can only make the explanation of its possibility intelligible to ourselves by deriving it from a will. Again, we are not always forced to regard what we observe (in respect of its possibility) from the point of view of Reason. Thus we can at least observe a purposiveness according to form, without basing it on a purpose (as the material of the *nexus finalis*), and we can notice it in objects, although only by reflection.

§ 11. The judgement of taste has nothing at its basis but the form of the purposiveness of an object (or of its mode of representation)

Every purpose, if it be regarded as a ground of satisfaction, always carries with it an interest — as the determining ground of the judgement — about the object of pleasure. Therefore no subjective purpose can lie at the basis of the judgement of taste. But neither can the judgement of taste be determined by any representation of an objective purpose, i.e. of the possibility of the object itself in accordance with principles of purposive combination, and consequently it can be determined by no concept of the good; because it is an aesthetical and not a cognitive judgement. It therefore has to do with no *concept* of the character and internal or external possibility of the object by means of this or that cause, but merely with the relation of the representative powers to one another, so far as they are determined by a representation.

Now this relation in the determination of an object as beautiful is bound up with the feeling of pleasure, which is declared by the judgement of taste to be valid for every one; hence a pleasantness, accompanying the representation, can as little contain the determining ground [of the judgement] as the representation of the perfection of the object and the concept of the good can. Therefore it can be nothing else than the subjective purposiveness in the representation of an object without any purpose (either objective or subjective); and thus it is the mere form of purposiveness in the representation by which an object is

given to us, so far as we are conscious of it, which constitutes the satisfaction that we without a concept judge to be universally communicable; and, consequently, this is the determining ground of the judgement of taste.

§ 12. The judgement of taste rests on a priori grounds

To establish *a priori* the connexion of the feeling of a pleasure or pain as an effect, with any representation whatever (sensation or concept) as its cause, is absolutely impossible; for that would be a [particular][23*] causal relation which (with objects of experience) can always only be cognised *a posteriori*, and through the medium of experience itself. We actually have, indeed, in the Critique of practical Reason, derived from universal moral concepts *a priori* the feeling of respect (as a special and peculiar modification of feeling which will not strictly correspond either to the pleasure or the pain that we get from empirical objects). But there we could go beyond the bounds of experience and call in a causality which rested on a supersensible attribute of the subject, viz. freedom. And even there, properly speaking, it was not this *feeling* which we derived from the Idea of the moral as cause, but merely the determination of the will. But the state of mind which accompanies any determination of the will is in itself a feeling of pleasure and identical with it, and therefore does not follow from it as its effect. This last must only be assumed if the concept of the moral as a good precede the determination of the will by the law; for in that case the pleasure that is bound up with the concept could not be derived from it as from a mere cognition.

Now the case is similar with the pleasure in aesthetical judgements, only that here it is merely contemplative and does not bring about an interest in the Object, which on the other hand in the moral judgement it is practical.[24*] The consciousness of the mere formal purposiveness in the play of the subject's cognitive powers, in a representation through which an object is given, is the pleasure itself; because it contains a determining ground of the activity of the subject in respect of the excitement of its cognitive powers, and therefore an inner causality (which is purposive) in respect of cognition in general without however being limited to any definite cognition; and consequently contains a mere form of the subjective purposiveness of a representation in an aesthetical judgement. This pleasure is in no way practical, neither like that arising from the pathological ground of pleasantness, nor that from the intellectual ground of the represented good. But yet it involves causality, viz. of *maintaining* the state of the representation itself, and the exercise of the cognitive powers without further design. We *linger* over the contemplation of the beautiful, because this contemplation strengthens and reproduces itself, which is analogous to (though not of the same kind as) that lingering which takes place when a [physical] charm in the representation of the object repeatedly arouses the attention, the mind being passive.

§ 13. The pure judgement of taste is independent of charm and emotion

Every interest spoils the judgement of taste and takes from its impartiality, especially if the purposiveness is not, as with the interest of Reason, placed before the feeling of pleasure but grounded on it. This last always happens in an aesthetical judgement upon anything so far as it gratifies or grieves us. Hence judgements so affected can lay no claim at all to a universally valid satisfaction, or at least so much the less claim, in proportion as there are sensations of this sort among the determining grounds of taste. That taste is still barbaric which needs a mixture of *charms* and *emotions* in order that there may be satisfaction, and still more so if it make these the measure of its assent.

Nevertheless charms are often not only taken account of in the case of beauty (which properly speaking ought merely to be concerned with form) as contributory to the aesthetical universal satisfaction; but they are passed off as in themselves beauties, and thus the matter of satisfaction is substituted for the form.

This misconception, however, like so many others which have something true at their basis, may be removed by a careful definition of these concepts.

A judgement of taste on which charm and emotion have no influence (although they may be bound up with the satisfaction in the beautiful), — which therefore has as its determining ground merely the purposiveness of the form, — is a *pure judgement of taste*.

§ 14. Elucidation by means of examples

Aesthetical judgements can be divided just like theoretical (logical) judgements into empirical and pure. The first assert pleasantness or unpleasantness; the second assert the beauty of an object or of the manner of representing it. The former are judgements of Sense (material aesthetical judgements); the latter [as formal[25*]] are alone strictly judgements of Taste.

A judgement of taste is therefore pure, only so far as no merely empirical satisfaction is mingled with its determining ground. But this always happens if charm or emotion have any share in the judgement by which anything is to be described as beautiful.

Now here many objections present themselves, which fallaciously put forward charm not merely as a necessary ingredient of beauty, but as alone sufficient [to justify] a thing's being called beautiful. A mere colour, e.g. the green of a grass plot, a mere tone (as distinguished from sound and noise) like that of a violin, are by most people described as beautiful in themselves; although both seem to have at their basis merely the matter of representations, viz. simply sensation, and therefore only deserve to be called pleasant. But we must at the same time remark that the sensations of colours and of tone have a right to be regarded as beautiful only in so far as they are *pure*. This is a determination which concerns their form, and is the only [element] of these representations which admits with certainty of universal communicability; for we cannot assume that the quality of sensations is the same in all subjects, and we can hardly say that the pleasantness of one colour or the tone of one musical instrument is judged preferable to that of another in the same[26*] way by every one.

If we assume with *Euler* that colours are isochronous vibrations (*pulsus*) of the aether, as sounds are of the air in a state of disturbance, and, — what is most important, — that the mind not only perceives by sense the effect of these in exciting the organ, but also perceives by reflection the regular play of impressions (and thus the form of the combination of different representations) which I still do not doubt[27*] — then colours and tone cannot be reckoned as mere sensations, but as the formal determination of the unity of a manifold of sensations, and thus as beauties in themselves.

But "pure" in a simple mode of sensation means that its uniformity is troubled and interrupted by no foreign sensation, and it belongs merely to the form; because here we can abstract from the quality of that mode of sensation (abstract from the colours and tone, if any, which it represents). Hence all simple colours, so far as they are pure, are regarded as beautiful; composite colours have not this advantage, because, as they are not simple, we have no standard for judging whether they should be called pure or not.

But as regards the beauty attributed to the object on account of its form, to suppose it to be capable of augmentation through the charm of the object is a common error, and one very prejudicial to genuine, uncorrupted, well-founded taste. We can doubtless add these charms to beauty, in order to interest the mind by the representation of the object, apart from the bare satisfaction [received]; and thus they may serve as a recommendation of taste and its cultivation, especially when it is yet crude and unexercised. But they actually do injury to the judgement of taste if they draw attention to themselves as the grounds for judging of beauty. So far are they from adding to beauty that they must only be admitted by indulgence as aliens; and provided always that they do not disturb the beautiful form, in cases when taste is yet weak and untrained.

In painting, sculpture, and in all the formative arts — in architecture, and horticulture, so far as they are beautiful arts — the *delineation* is the essential thing; and here it is not what gratifies in sensation but what pleases by means of its form that is fundamental for taste. The colours which light up the sketch belong to the charm; they may indeed enliven[28*] the object for sensation, but they cannot make it worthy of contemplation and beautiful. In most cases they are rather limited by the requirements of the beautiful form; and even where charm is permissible it is ennobled solely by this.

Every form of the objects of sense (both of external sense and also mediately of internal) is either *figure* or *play*. In the latter case it is either play of figures (in space, viz. pantomime and dancing), or the mere play of sensations (in time). The *charm* of colours or of the pleasant tones of an instrument may be added; but the *delineation* in the first case and the composition in the second constitute the proper object of the pure judgement of taste. To say that the purity of colours and of tones, or their variety and contrast, seems to add to beauty, does not mean that they supply a homogeneous addition to our satisfaction in the form because they are pleasant in themselves; but they do so, because they make the form more exactly, definitely, and completely, intuitible, and besides by their charm [excite the representation, whilst they[29*]] awaken and fix our attention on the object itself.

Even what we call *ornaments* [parerga[29*]], i.e. those things which do not belong to the complete representation of the object internally as elements but only externally as complements, and which augment the satisfaction of taste, do so only by their form; as for example [the frames of pictures,[29*] or] the draperies of statues or the colonnades of palaces. But if the ornament does not itself consist in beautiful form, and if it is used as a golden frame is used, merely to recommend the painting by its *charm*, it is then called *finery* and injures genuine beauty.

Emotion, i.e. a sensation in which pleasantness is produced by means of a momentary checking and a consequent more powerful outflow of the vital force, does not belong at all to beauty. But sublimity [with which the feeling of emotion is bound up[29*]] requires a different standard of judgement from that which is at the foundation of taste; and thus a pure judgement of taste has for its determining ground neither charm nor emotion, in a word, no sensation as the material of the aesthetical judgement.

§ 15. The judgement of taste is quite independent of the concept of perfection

Objective purposiveness can only be cognised by means of the reference of the manifold to a definite purpose, and therefore only through a concept. From this alone it is plain that the Beautiful, the judging of which has at its basis a merely formal purposiveness, i.e. a purposiveness without purpose, is quite independent of the concept of the Good; because the latter presupposes an objective purposiveness, i.e. the reference of the object to a definite purpose.

Objective purposiveness is either external, i.e. *the* utility, *or internal,* i.e. *the* perfection of the object. That the satisfaction in an object, on account of which we call it beautiful, cannot rest on the representation of its utility, is sufficiently obvious from the two preceding sections; because in that case it would not be an immediate satisfaction in the object, which is the essential condition of a judgement about beauty. But objective internal purposiveness, i.e. perfection, comes nearer to the predicate of beauty; and it has been regarded by celebrated philosophers[30*] as the same as beauty, with the proviso, *if it is thought in a confused way*. It is of the greatest importance in a Critique of Taste to decide whether beauty can thus actually be resolved into the concept of perfection.

To judge of objective purposiveness we always need not only the concept of a purpose, but (if that purposiveness is not to be external utility but internal) the concept of an internal purpose which shall contain the ground of the internal possibility of the object. Now as a purpose in general is that whose *concept* can be regarded as the ground of the possibility of the object itself; so, in order to represent objective purposiveness in a thing, the concept of *what sort of thing it is to be* must come first. The

agreement of the manifold in it with this concept (which furnishes the rule for combining the manifold) is the *qualitative perfection* of the thing. Quite different from this is *quantitative* perfection, the completeness of a thing after its kind, which is a mere concept of magnitude (of totality).[31*] In this *what the thing ought to be* is conceived as already determined, and it is only asked if it has *all* its requisites. The formal [element] in the representation of a thing, i.e. the agreement of the manifold with a unity (it being undetermined what this ought to be), gives to cognition no objective purposiveness whatever. For since abstraction is made of this unity as *purpose* (what the thing ought to be), nothing remains but the subjective purposiveness of the representations in the mind of the intuiting subject. And this, although it furnishes a certain purposiveness of the representative state of the subject, and so a facility of apprehending a given form by the Imagination, yet furnishes no perfection of an Object, since the Object is not here conceived by means of the concept of a purpose. For example, if in a forest I come across a plot of sward, round which trees stand in a circle, and do not then represent to myself a purpose, viz. that it is intended to serve for country dances, not the least concept of perfection is furnished by the mere form. But to represent to oneself a formal *objective* purposiveness without purpose, i.e. *the mere form of a* perfection (without any matter and without the *concept* of that with which it is accordant, even if it were merely the Idea of conformity to law in general[32*]) is a veritable contradiction.

Now the judgement of taste is an aesthetical judgement, i.e. such as rests on subjective grounds, the determining ground of which cannot be a concept, and consequently cannot be the concept of a definite purpose. Therefore in beauty, regarded as a formal subjective purposiveness, there is in no way thought a perfection of the object, as a would-be formal purposiveness, which yet is objective. And thus to distinguish between the concepts of the Beautiful and the Good, as if they were only different in logical form, the first being a confused, the second a clear concept of perfection, but identical in content and origin, is quite fallacious. For then there would be no *specific* difference between them, but a judgement of taste would be as much a cognitive judgement as the judgement by which a thing is described as good; just as when the ordinary man says that fraud is unjust he bases his judgement on confused grounds, whilst the philosopher bases it on clear grounds, but both on identical principles of Reason. I have already, however, said that an aesthetical judgement is unique of its kind, and gives absolutely no cognition (not even a confused cognition) of the Object; this is only supplied by a logical judgement. On the contrary, it simply refers the representation, by which an Object is given, to the subject; and brings to our notice no characteristic of the object, but only the purposive form in the determination of the representative powers which are occupying themselves therewith. The judgement is called aesthetical just because its determining ground is not a concept, but the feeling (of internal sense) of that harmony in the play of the mental powers, so far as it can be felt in sensation. On the other hand, if we wish to call confused concepts and the objective judgement based on them, aesthetical, we shall have an Understanding judging sensibly or a Sense representing its Objects by means of concepts [both of which are contradictory.[33*]] The faculty of concepts, be they confused or clear, is the Understanding; and although Understanding has to do with the judgement of taste, as an aesthetical judgement (as it has with all judgements), yet it has to do with it not as a faculty by which an object is cognised, but as the faculty which determines the judgement and its representation (without any concept) in accordance with its relation to the subject and the subject's internal feeling, in so far as this judgement may be possible in accordance with a universal rule.

§ 16. The judgement of taste, by which an object is declared to be beautiful under the condition of a definite concept, is not pure

There are two kinds of beauty; free beauty (*pulchritudo vaga*) or merely dependent beauty (*pulchritudo adhaerens*). The first presupposes no concept of what the object ought to be; the second does presuppose

such a concept and the perfection of the object in accordance therewith. The first is called the (self-subsistent) beauty of this or that thing; the second, as dependent upon a concept (conditioned beauty), is ascribed to Objects which come under the concept of a particular purpose.

Flowers are free natural beauties. Hardly any one but a botanist knows what sort of a thing a flower ought to be; and even he, though recognising in the flower the reproductive organ of the plant, pays no regard to this natural purpose if he is passing judgement on the flower by Taste. There is then at the basis of this judgement no perfection of any kind, no internal purposiveness, to which the collection of the manifold is referred. Many birds (such as the parrot, the humming bird, the bird of paradise), and many sea shells are beauties in themselves, which do not belong to any object determined in respect of its purpose by concepts, but please freely and in themselves. So also delineations *à la grecque*, foliage for borders or wall-papers, mean nothing in themselves; they represent nothing — no Object under a definite concept, — and are free beauties. We can refer to the same class what are called in music phantasies (i.e. pieces without any theme), and in fact all music without words.

In the judging of a free beauty (according to the mere form) the judgement of taste is pure. There is presupposed no concept of any purpose, for which the manifold should serve the given Object, and which therefore is to be represented therein. By such a concept the freedom of the Imagination which disports itself in the contemplation of the figure would be only limited.

But human beauty (i.e. of a man, a woman, or a child), the beauty of a horse, or a building (be it church, palace, arsenal, or summer-house) presupposes a concept of the purpose which determines what the thing is to be, and consequently a concept of its perfection; it is therefore adherent beauty. Now as the combination of the Pleasant (in sensation) with Beauty, which properly is only concerned with form, is a hindrance to the purity of the judgement of taste; so also is its purity injured by the combination with Beauty of the Good (viz. that manifold which is good for the thing itself in accordance with its purpose).

We could add much to a building which would immediately please the eye, if only it were not to be a church. We could adorn a figure with all kinds of spirals and light but regular lines, as the New Zealanders do with their tattooing, if only it were not the figure of a human being. And again this could have much finer features and a more pleasing and gentle cast of countenance provided it were not intended to represent a man, much less a warrior.

Now the satisfaction in the manifold of a thing in reference to the internal purpose which determines its possibility is a satisfaction grounded on a concept; but the satisfaction in beauty is such as presupposes no concept, but is immediately bound up with the representation through which the object is given (not through which it is thought). If now the judgement of Taste in respect of the beauty of a thing is made dependent on the purpose in its manifold, like a judgement of Reason, and thus limited, it is no longer a free and pure judgement of Taste.

It is true that taste gains by this combination of aesthetical with intellectual satisfaction, inasmuch as it becomes fixed; and though it is not universal, yet in respect to certain purposively determined Objects it becomes possible to prescribe rules for it. These, however, are not rules of taste, but merely rules for the unification of Taste with Reason, i.e. of the Beautiful with the Good, by which the former becomes available as an instrument of design in respect of the latter. Thus the tone of mind which is self-maintaining and of subjective universal validity is subordinated to the way of thinking which can be maintained only by painful resolve, but is of objective universal validity. Properly speaking, however, perfection gains nothing by beauty or beauty by perfection; but, when we compare the representation by which an object is given to us with the Object (as regards what it ought to be) by means of a concept, we cannot avoid considering along with it the sensation in the subject. And thus when both states of mind are in harmony our *whole faculty* of representative power gains.

A judgement of taste, then, in respect of an object with a definite internal purpose, can only be pure, if either the person judging has no concept of this purpose, or else abstracts from it in his judgement. Such a

person, although forming an accurate judgement of taste in judging of the object as free beauty, would yet by another who considers the beauty in it only as a dependent attribute (who looks to the purpose of the object) be blamed, and accused of false taste; although both are right in their own way, the one in reference to what he has before his eyes, the other in reference to what he has in his thought. By means of this distinction we can settle many disputes about beauty between judges of taste; by showing that the one is speaking of free, the other of dependent, beauty, — that the first is making a pure, the second an applied, judgement of taste.

§ 17. Of the Ideal of beauty

There can be no objective rule of taste which shall determine by means of concepts what is beautiful. For every judgement from this source is aesthetical; i.e. the feeling of the subject, and not a concept of the Object, is its determining ground. To seek for a principle of taste which shall furnish, by means of definite concepts, a universal criterion of the beautiful, is fruitless trouble; because what is sought is impossible and self-contradictory. The universal communicability of sensation (satisfaction or dissatisfaction) without the aid of a concept — the agreement, as far as is possible, of all times and peoples as regards this feeling in the representation of certain objects — this is the empirical criterion, although weak and hardly sufficing for probability, of the derivation of a taste, thus confirmed by examples, from the deep-lying grounds of agreement common to all men, in judging of the forms under which objects are given to them.

Hence, we consider some products of taste as *exemplary*. Not that taste can be acquired by imitating others; for it must be an original faculty. He who imitates a model shows, no doubt, in so far as he attains to it, skill; but only shows taste in so far as he can judge of this model itself.[34*] It follows from hence that the highest model, the archetype of taste, is a mere Idea, which every one must produce in himself; and according to which he must judge every Object of taste, every example of judgement by taste, and even the taste of every one. *Idea* properly means a rational concept, and *Ideal* the representation of an individual being, regarded as adequate to an Idea.[35*] Hence that archetype of taste, which certainly rests on the indeterminate Idea that Reason has of a maximum, but which cannot be represented by concepts, but only in an individual presentation, is better called the Ideal of the beautiful. Although we are not in possession of this, we yet strive to produce it in ourselves. But it can only be an Ideal of the Imagination, because it rests on a presentation and not on concepts, and the Imagination is the faculty of presentation. — How do we arrive at such an Ideal of beauty? *A priori*, or empirically? Moreover, what species of the beautiful is susceptible of an Ideal?

First, it is well to remark that the beauty for which an Ideal is to be sought cannot be *vague* beauty, but is *fixed* by a concept of objective purposiveness; and thus it cannot appertain to the Object of a quite pure judgement of taste, but to that of a judgement of taste which is in part intellectual. That is, in whatever grounds of judgement an Ideal is to be found, an Idea of Reason in accordance with definite concepts must lie at its basis; which determines *a priori* the purpose on which the internal possibility of the object rests. An Ideal of beautiful flowers, of a beautiful piece of furniture, of a beautiful view, is inconceivable. But neither can an Ideal be represented of a beauty dependent on definite purposes, e.g. of a beautiful dwelling-house, a beautiful tree, a beautiful garden, etc.; presumably because their purpose is not sufficiently determined and fixed by the concept, and thus the purposiveness is nearly as free as in the case of *vague* beauty. The only being which has the purpose of its existence in itself is *man*, who can determine his purposes by Reason; or, where he must receive them from external perception, yet can compare them with essential and universal purposes, and can judge this their accordance aesthetically. This *man* is, then, alone of all objects in the world, susceptible of an Ideal of *beauty*; as it is only *humanity* in his person, as an intelligence, that is susceptible of the Ideal of *perfection*.

But there are here two elements. *First*, there is the aesthetical *normal Idea*, which is an individual intuition (of the Imagination), representing the standard of our judgement [upon man] as a thing belonging to a particular animal species. *Secondly*, there is the *rational Idea* which makes the purposes of humanity, so far as they cannot be sensibly represented, the principle for judging of a figure through which, as their phenomenal effect, those purposes are revealed. The normal Idea of the figure of an animal of a particular race must take its elements from experience. But the greatest purposiveness in the construction of the figure, that would be available for the universal standard of aesthetical judgement upon each individual of this species — the image which is as it were designedly at the basis of nature's Technic, to which only the whole race and not any isolated individual is adequate — this lies merely in the Idea of the judging [subject]. And this, with its proportions, as an aesthetical Idea, can be completely presented *in concreto* in a model. In order to make intelligible in some measure (for who can extract her whole secret from nature?) how this comes to pass, we shall attempt a psychological explanation.

We must remark that, in a way quite incomprehensible by us, the Imagination can not only recall, on occasion, the signs for concepts long past, but can also reproduce the image of the figure of the object out of an unspeakable number of objects of different kinds or even of the same kind. Further, if the mind is concerned with comparisons, the Imagination can, in all probability, actually though unconsciously let one image glide into another, and thus by the concurrence of several of the same kind come by an average, which serves as the common measure of all. Every one has seen a thousand full-grown men. Now if you wish to judge of their normal size, estimating it by means of comparison, the Imagination (as I think) allows a great number of images (perhaps the whole thousand) to fall on one another. If I am allowed to apply here the analogy of optical presentation, it is in the space where most of them are combined and inside the contour, where the place is illuminated with the most vivid colours, that the *average size* is cognisable; which, both in height and breadth, is equally far removed from the extreme bounds of the greatest and smallest stature. And this is the stature of a beautiful man. (We could arrive at the same thing mechanically, by adding together all thousand magnitudes, heights, breadths, and thicknesses, and dividing the sum by a thousand. But the Imagination does this by means of a dynamical effect, which arises from the various impressions of such figures on the organ of internal sense.) If now in a similar way for this average man we seek the average head, for this head the average nose, etc., such figure is at the basis of the normal Idea in the country where the comparison is instituted. Thus necessarily under these empirical conditions a negro must have a different normal Idea of the beauty of the [human figure] from a white man, a Chinaman a different normal Idea from a European, etc. And the same is the case with the model of a beautiful horse or dog (of a certain breed). — This *normal Idea* is not derived from proportions got from experience [and regarded] *as definite rules*; but in accordance with it rules for judging become in the first instance possible. It is the image for the whole race, which floats among all the variously different intuitions of individuals, which nature takes as archetype in her productions of the same species, but which seems not to be fully reached in any individual case. It is by no means the whole *archetype of beauty* in the race, but only the form constituting the indispensable condition of all beauty, and thus merely *correctness* in the [mental] presentation of the race. It is, like the celebrated *Doryphorus* of *Polycletus*,[36*] the *rule* (Myron's[37*] Cow might also be used thus for its kind). It can therefore contain nothing specifically characteristic, for otherwise it would not be the *normal Idea* for the race. Its presentation pleases, not by its beauty, but merely because it contradicts no condition, under which alone a thing of this kind can be beautiful. The presentation is merely correct.[38*]

We must yet distinguish the *normal Idea* of the beautiful from the *Ideal*, which latter, on grounds already alleged, we can only expect in the *human* figure. In this the Ideal consists in the expression of the *moral*, without which the object would not please universally and thus positively (not merely negatively in a correct presentation). The visible expression of moral Ideas that rule men inwardly, can indeed only be got from experience; but to make its connexion with all which our Reason unites with the morally good

in the Idea of the highest purposiveness, — goodness of heart, purity, strength, peace, etc., — visible as it were in bodily manifestation (as the effect of that which is internal), requires a union of pure Ideas of Reason with great imaginative power, even in him who wishes to judge of it, still more in him who wishes to present it. The correctness of such an Ideal of beauty is shown by its permitting no sensible charm to mingle with the satisfaction in the Object and yet allowing us to take a great interest therein. This shows that a judgement in accordance with such a standard can never be purely aesthetical, and that a judgement in accordance with an Ideal of beauty is not a mere judgement of taste.

EXPLANATION OF THE BEAUTIFUL DERIVED FROM THIS THIRD MOMENT

Beauty is the form of the *purposiveness* of an object, so far as this is perceived in it *without any representation of a purpose*.[39] *

FOURTH MOMENT

OF THE JUDGEMENT OF TASTE, ACCORDING TO THE MODALITY OF THE SATISFACTION IN THE OBJECT

§ 18. What the modality in a judgement of taste is

I can say of every representation that it is at least *possible* that (as a cognition) it should be bound up with a pleasure. Of a representation that I call *pleasant* I say that it *actually* excites pleasure in me. But the *beautiful* we think as having a *necessary* reference to satisfaction. Now this necessity is of a peculiar kind. It is not a theoretical objective necessity; in which case it would be cognised *a priori* that every one *will feel* this satisfaction in the object called beautiful by me. It is not a practical necessity; in which case, by concepts of a pure rational will serving as a rule for freely acting beings, the satisfaction is the necessary result of an objective law and only indicates that we absolutely (without any further design) ought to act in a certain way. But the necessity which is thought in an aesthetical judgement can only be called *exemplary*; i.e. *a necessity of the assent of* all to a judgement which is regarded as the example of a universal rule that we cannot state. Since an aesthetical judgement is not an objective cognitive judgement, this necessity cannot be derived from definite concepts, and is therefore not apodictic. Still less can it be inferred from the universality of experience (of a complete agreement of judgements as to the beauty of a certain object). For not only would experience hardly furnish sufficiently numerous vouchers for this; but also, on empirical judgements we can base no concept of the necessity of these judgements.

§ 19. The subjective necessity, which we ascribe to the judgement of taste, is conditioned

The judgement of taste requires the agreement of every one; and he who describes anything as beautiful claims that every one *ought* to give his approval to the object in question and also describe it as beautiful. The *ought* in the aesthetical judgement is therefore pronounced in accordance with all the data which are required for judging and yet is only conditioned. We ask for the agreement of every one else, because we have for it a ground that is common to all; and we could count on this agreement, provided we were always sure that the case was correctly subsumed under that ground as rule of assent.

§ 20. The condition of necessity which a judgement of taste asserts is the Idea of a common sense

If judgements of taste (like cognitive judgements) had a definite objective principle, then the person who lays them down in accordance with this latter would claim an unconditioned necessity for his judgement. If they were devoid of all principle, like those of the mere taste of sense, we would not allow them in thought any necessity whatever. Hence they must have a subjective principle which determines what pleases or displeases only by feeling and not by concepts, but yet with universal validity. But such a principle could only be regarded as a *common sense*, which is essentially different from common Understanding which people sometimes call common Sense (*sensus communis*); for the latter does not judge by feeling but always by concepts, although ordinarily only as by obscurely represented principles.

Hence it is only under the presupposition that there is a common sense (by which we do not understand an external sense, but the effect resulting from the free play of our cognitive powers) — it is only under this presupposition, I say, that the judgement of taste can be laid down.

§ 21. Have we ground for presupposing a common sense?

Cognitions and judgements must, along with the conviction that accompanies them, admit of universal communicability; for otherwise there would be no harmony between them and the Object, and they would be collectively a mere subjective play of the representative powers, exactly as scepticism would have it. But if cognitions are to admit of communicability, so must also the state of mind, — i.e. the accordance of the cognitive powers with a cognition generally, and that proportion of them which is suitable for a representation (by which an object is given to us) in order that a cognition may be made out of it — admit of universal communicability. For without this as the subjective condition of cognition, knowledge as an effect could not arise. This actually always takes place when a given object by means of Sense excites the Imagination to collect the manifold, and the Imagination in its turn excites the Understanding to bring about a unity of this collective process in concepts. But this accordance of the cognitive powers has a different proportion according to the variety of the Objects which are given. However, it must be such that this internal relation, by which one mental faculty is excited by another, shall be generally the most beneficial for both faculties in respect of cognition (of given objects); and this accordance can only be determined by feeling (not according to concepts). Since now this accordance itself must admit of universal communicability, and consequently also our feeling of it (in a given representation), and since the universal communicability of a feeling presupposes a common sense, we have grounds for assuming this latter. And this common sense is assumed without relying on psychological observations, but simply as the necessary condition of the universal communicability of our knowledge, which is presupposed in every Logic and in every principle of knowledge that is not sceptical.

§ 22. The necessity of the universal agreement that is thought in a judgement of taste is a subjective necessity, which is represented as objective under the presupposition of a common sense

In all judgements by which we describe anything as beautiful, we allow no one to be of another opinion; without however grounding our judgement on concepts but only on our feeling, which we therefore place at its basis not as a private, but as a communal feeling.[40*] Now this common sense cannot be grounded on experience; for it aims at justifying judgements which contain an *ought*. It does not say that every one *will* agree with my judgement, but that he *ought*. And so common sense, as an example of whose judgement I here put forward my judgement of taste and on account of which I attribute to the latter an *exemplary* validity, is a mere ideal norm, under the supposition of which I have a right to make into a rule for every one a judgement that accords therewith, as well as the satisfaction in an Object expressed in such judgement. For the principle, which concerns the agreement of different judging persons, although only subjective, is yet assumed as subjectively universal (an Idea necessary for every one); and thus can claim universal assent (as if it were objective) provided we are sure that we have correctly subsumed [the particulars] under it.

This indeterminate norm of a common sense is actually presupposed by us; as is shown by our claim to lay down judgements of taste. Whether there is in fact such a common sense, as a constitutive principle of the possibility of experience, or whether a yet higher principle of Reason makes it only into a regulative principle for producing in us a common sense for higher purposes: whether therefore Taste is an original and natural faculty, or only the Idea of an artificial one yet to be acquired, so that a judgement of taste with its assumption of a universal assent in fact, is only a requirement of Reason for producing such harmony of sentiment; whether the “ought,” i.e. the objective necessity of the confluence of the feeling of any one man with that of every other, only signifies the possibility of arriving at this accord, and the judgement of taste only affords an example of the application of this principle: these questions we have neither the wish nor the power to investigate as yet; we have now only to resolve the faculty of taste into its elements in

order to unite them at last in the Idea of a common sense.

EXPLANATION OF THE BEAUTIFUL RESULTING FROM THE FOURTH MOMENT

The *beautiful* is that which without any concept is cognised as the object of a *necessary* satisfaction.

GENERAL REMARK ON THE FIRST SECTION OF THE ANALYTIC

If we seek the result of the preceding analysis we find that everything runs up into this concept of Taste, that it is a faculty for judging an object in reference to the Imagination's *free conformity to law*. Now if in the judgement of taste the Imagination must be considered in its freedom, it is in the first place not regarded as reproductive, as it is subject to the laws of association, but as productive and spontaneous (as the author of arbitrary forms of possible intuition). And although in the apprehension of a given object of sense it is tied to a definite form of this Object, and so far has no free play (such as that of poetry) yet it may readily be conceived that the object can furnish it with such a form containing a collection of the manifold, as the Imagination itself, if it were left free, would project in accordance with the *conformity to law of the Understanding* in general. But that the *imaginative power* should be *free* and yet *of itself conformed to law*, i.e. bringing autonomy with it, is a contradiction. The Understanding alone gives the law. If, however, the Imagination is compelled to proceed according to a definite law, its product in respect of form is determined by concepts as to what it ought to be. But then, as is above shown, the satisfaction is not that in the Beautiful, but in the Good (in perfection, at any rate in mere formal perfection); and the judgement is not a judgement of taste. Hence it is a conformity to law without a law; and a subjective agreement of the Imagination and Understanding, — without such an objective agreement as there is when the representation is referred to a definite concept of an object, — can subsist along with the free conformity to law of the Understanding (which is also called purposiveness without purpose) and with the peculiar feature of a judgement of taste.

Now geometrically regular figures, such as a circle, a square, a cube, etc., are commonly adduced by critics of taste as the simplest and most indisputable examples of beauty; and yet they are called regular, because we can only represent them by regarding them as mere presentations of a definite concept which prescribes the rule for the figure (according to which alone it is possible). One of these two must be wrong, either that judgement of the critic which ascribes beauty to the said figures, or ours, which regards purposiveness apart from a concept as requisite for beauty.

Hardly any one will say that a man must have taste in order that he should find more satisfaction in a circle than in a scrawled outline, in an equilateral and equiangular quadrilateral than in one which is oblique, irregular, and as it were deformed, for this belongs to the ordinary Understanding and is not Taste at all. Where, e.g. our design is to judge of the size of an area, or to make intelligible the relation of the parts of it, when divided, to one another and to the whole, then regular figures and those of the simplest kind are needed, and the satisfaction does not rest immediately on the aspect of the figure, but on its availability for all kinds of possible designs. A room whose walls form oblique angles, or a parterre of this kind, even every violation of symmetry in the figure of animals (e.g. being one-eyed), of buildings, or of flower beds, displeases, because it contradicts the purpose of the thing, not only practically in respect of a definite use of it, but also when we pass judgement on it as regards any possible design. This is not the case in the judgement of taste, which when pure combines satisfaction or dissatisfaction, — without any reference to its use or to a purpose, — with the mere *consideration* of the object.

The regularity which leads to the concept of an object is indeed the indispensable condition (*conditio sine qua non*) for grasping the object in a single representation and determining the manifold in its form. This determination is a purpose in respect of cognition, and in reference to this it is always bound up with satisfaction (which accompanies the execution of every, even problematical, design). There is here, however, merely the approval of the solution satisfying a problem, and not a free and indefinite purposive entertainment of the mental powers with what we call beautiful, where the Understanding is at the service

of Imagination and not *vice versa*.

In a thing that is only possible by means of design, — a building, or even an animal, — the regularity consisting in symmetry must express the unity of the intuition that accompanies the concept of purpose, and this regularity belongs to cognition. But where only a free play of the representative powers (under the condition, however, that the Understanding is to suffer no shock thereby) is to be kept up, in pleasure gardens, room decorations, all kinds of tasteful furniture, etc., regularity that shows constraint is avoided as much as possible. Thus in the English taste in gardens, or in bizarre taste in furniture, the freedom of the Imagination is pushed almost near to the grotesque, and in this separation from every constraint of rule we have the case, where taste can display its greatest perfection in the enterprises of the Imagination.

All stiff regularity (such as approximates to mathematical regularity) has something in it repugnant to taste; for our entertainment in the contemplation of it lasts for no length of time, but it rather, in so far as it has not expressly in view cognition or a definite practical purpose, produces weariness. On the other hand that with which Imagination can play in an unstudied and purposive manner is always new to us, and one does not get tired of looking at it. *Marsden* in his description of Sumatra makes the remark that the free beauties of nature surround the spectator everywhere and thus lose their attraction for him.[41*] On the other hand a pepper-garden, where the stakes on which this plant twines itself form parallel rows, had much attractiveness for him, if he met with it in the middle of a forest. And hence he infers that wild beauty, apparently irregular, only pleases as a variation from the regular beauty of which one has seen enough. But he need only have made the experiment of spending one day in a pepper-garden, to have been convinced that, once the Understanding, by the aid of this regularity, has put itself in accord with the order that it always needs, the object will not entertain for long, — nay rather it will impose a burdensome constraint upon the Imagination. On the other hand, nature, which there is prodigal in its variety even to luxuriance, that is subjected to no constraint of artificial rules, can supply constant food for taste. — Even the song of birds, which we can bring under no musical rule, seems to have more freedom, and therefore more for taste, than a song of a human being which is produced in accordance with all the rules of music; for we very much sooner weary of the latter, if it is repeated often and at length. Here, however, we probably confuse our participation in the mirth of a little creature that we love, with the beauty of its song; for if this were exactly imitated by man (as sometimes the notes of the nightingale are)[42*] it would seem to our ear quite devoid of taste.

Again, beautiful objects are to be distinguished from beautiful views of objects (which often on account of their distance cannot be clearly recognised). In the latter case taste appears not so much in what the Imagination *apprehends* in this field, as in the impulse it thus gets to *fiction*, i.e. in the peculiar fancies with which the mind entertains itself, whilst it is continually being aroused by the variety which strikes the eye. An illustration is afforded, e.g. by the sight of the changing shapes of a fire on the hearth or of a rippling brook; neither of these has beauty, but they bring with them a charm for the Imagination, because they entertain it in free play.

SECOND BOOK. ANALYTIC OF THE SUBLIME

§ 23. Transition from the faculty which judges of the Beautiful to that which judges of the Sublime

The Beautiful and the Sublime agree in this, that both please in themselves. Further, neither presupposes a judgement of sense nor a judgement logically determined, but a judgement of reflection. Consequently the satisfaction [belonging to them] does not depend on a sensation, as in the case of the Pleasant, nor on a definite concept, as in the case of the Good; but it is nevertheless referred to concepts although indeterminate ones. And so the satisfaction is connected with the mere presentation [of the object] or with the faculty of presentation; so that in the case of a given intuition this faculty or the Imagination is considered as in agreement with the *faculty of concepts* of Understanding or Reason (in its furtherance of these latter). Hence both kinds of judgements are *singular*, and yet announce themselves as universally valid for every subject; although they lay claim merely to the feeling of pleasure and not to any knowledge of the object.

But there are also remarkable differences between the two. The Beautiful in nature is connected with the form of the object, which consists in having boundaries. The Sublime, on the other hand, is to be found in a formless object, so far as in it or by occasion of it *boundlessness* is represented, and yet its totality is also present to thought. Thus the Beautiful seems to be regarded as the presentation of an indefinite concept of Understanding; the Sublime as that of a like concept of Reason. Therefore the satisfaction in the one case is bound up with the representation of *quality*, in the other with that of *quantity*. And the latter satisfaction is quite different in kind from the former, for this [the Beautiful[43*]] directly brings with it a feeling of the furtherance of life, and thus is compatible with charms and with the play of the Imagination. But the other [the feeling of the Sublime[43*]] is a pleasure that arises only indirectly; viz. it is produced by the feeling of a momentary checking of the vital powers and a consequent stronger outflow of them, so that it seems to be regarded as emotion, — not play, but earnest in the exercise of the Imagination. — Hence it is incompatible with charms; and as the mind is not merely attracted by the object but is ever being alternately repelled, the satisfaction in the sublime does not so much involve a positive pleasure as admiration or respect, which rather deserves to be called negative pleasure.

But the inner and most important distinction between the Sublime and Beautiful is, certainly, as follows. (Here, as we are entitled to do, we only bring under consideration in the first instance the sublime in natural Objects; for the sublime of Art is always limited by the conditions of agreement with Nature.) Natural beauty (which is self-subsisting) brings with it a purposiveness in its form by which the object seems to be, as it were, pre-adapted to our Judgement, and thus constitutes in itself an object of satisfaction. On the other hand, that which excites in us, without any reasoning about it, but in the mere apprehension of it, the feeling of the sublime, may appear as regards its form to violate purpose in respect of the Judgement, to be unsuited to our presentative faculty, and, as it were, to do violence to the Imagination; and yet it is judged to be only the more sublime.

Now from this we may see that in general we express ourselves incorrectly if we call any *object of nature* sublime, although we can quite correctly call many objects of nature beautiful. For how can that be marked by an expression of approval, which is apprehended in itself as being a violation of purpose? All that we can say is that the object is fit for the presentation of a sublimity which can be found in the mind; for no sensible form can contain the sublime properly so-called. This concerns only Ideas of the Reason, which, although no adequate presentation is possible for them, by this inadequacy that admits of sensible presentation, are aroused and summoned into the mind. Thus the wide ocean, agitated by the storm, cannot be called sublime. Its aspect is horrible; and the mind must be already filled with manifold Ideas if it is to

be determined by such an intuition to a feeling itself sublime, as it is incited to abandon sensibility and to busy itself with Ideas that involve higher purposiveness.

Self-subsisting natural beauty discovers to us a Technic of nature, which represents it as a system in accordance with laws, the principle of which we do not find in the whole of our faculty of Understanding. That principle is the principle of purposiveness, in respect of the use of our Judgement in regard to phenomena; [which requires] that these must not be judged as merely belonging to nature in its purposeless mechanism, but also as belonging to something analogous to art. It, therefore, actually extends, not indeed our cognition of natural Objects, but our concept of nature; [which is now not regarded] as mere mechanism but as art. This leads to profound investigations as to the possibility of such a form. But in what we are accustomed to call sublime there is nothing at all that leads to particular objective principles and forms of nature corresponding to them; so far from it that for the most part nature excites the Ideas of the sublime in its chaos or in its wildest and most irregular disorder and desolation, provided size and might are perceived. Hence, we see that the concept of the Sublime is not nearly so important or rich in consequences as the concept of the Beautiful; and that in general it displays nothing purposive in nature itself, but only in that possible use of our intuitions of it by which there is produced in us a feeling of a purposiveness quite independent of nature. We must seek a ground external to ourselves for the Beautiful of nature; but seek it for the Sublime merely in ourselves and in our attitude of thought which introduces sublimity into the representation of nature. This is a very needful preliminary remark, which quite separates the Ideas of the sublime from that of a purposiveness of *nature*, and makes the theory of the sublime a mere appendix to the aesthetical judging of that purposiveness; because by means of it no particular form is represented in nature, but there is only developed a purposive use which the Imagination makes of its representation.

§ 24. Of the divisions of an investigation into the feeling of the sublime

As regards the division of the moments of the aesthetical judging of objects in reference to the feeling of the sublime, the Analytic can proceed according to the same principle as was adapted in the analysis of judgements of taste. For as an act of the aesthetical reflective Judgement, the satisfaction in the Sublime must be represented just as in the case of the Beautiful, — according to *quantity* as universally valid, according to *quality* as devoid of *interest*, according to *relation* as subjective purposiveness, and according to *modality* as necessary. And so the method here will not diverge from that of the preceding section; unless, indeed, we count it a difference that in the case where the aesthetical Judgement is concerned with the form of the Object we began with the investigation of its quality, but here, in view of the formlessness which may belong to what we call sublime, we shall begin with quantity, as the first moment of the aesthetical judgement as to the sublime. The reason for this may be seen from the preceding paragraph.

But the analysis of the Sublime involves a division not needed in the case of the Beautiful, viz. a division into the *mathematically* and the *dynamically sublime*.

For the feeling of the Sublime brings with it as its characteristic feature a *movement* of the mind bound up with the judging of the object, while in the case of the Beautiful taste presupposes and maintains the mind in *restful* contemplation. Now this movement ought to be judged as subjectively purposive (because the sublime pleases us), and thus it is referred through the Imagination either to the *faculty of cognition* or of *desire*. In either reference the purposiveness of the given representation ought to be judged only in respect of this *faculty* (without purpose or interest); but in the first case it is ascribed to the Object as a *mathematical* determination of the Imagination, in the second as *dynamical*. And hence we have this twofold way of representing the sublime.

A. — OF THE MATHEMATICALLY SUBLIME

§ 25. Explanation of the term "sublime"

We call that *sublime* which is *absolutely great*. But to be great, and to be a great something are quite different concepts (*magnitudo* and *quantitas*). In like manner to *say simply* (*simpliciter*) that anything is *great* is quite different from saying that it is *absolutely great* (*absolute, non comparative magnum*). The latter is *what is great beyond all comparison*. — What now is meant by the expression that anything is great or small or of medium size? It is not a pure concept of Understanding that is thus signified; still less is it an intuition of Sense, and just as little is it a concept of Reason, because it brings with it no principle of cognition. It must therefore be a concept of Judgement or derived from one; and a subjective purposiveness of the representation in reference to the Judgement must lie at its basis. That anything is a magnitude (*quantum*) may be cognised from the thing itself, without any comparison of it with other things; viz. if there is a multiplicity of the homogeneous constituting one thing. But to cognise *how great* it is always requires some other magnitude as a measure. But because the judging of magnitude depends not merely on multiplicity (number), but also on the magnitude of the unit (the measure), and since, to judge of the magnitude of this latter again requires another as measure with which it may be compared, we see that the determination of the magnitude of phenomena can supply no absolute concept whatever of magnitude, but only a comparative one.

If now I say simply that anything is great, it appears that I have no comparison in view, at least none with an objective measure; because it is thus not determined at all how great the object is. But although the standard of comparison is merely subjective, yet the judgement none the less claims universal assent; "this man is beautiful," and "he is tall," are judgements not limited merely to the judging subject, but, like theoretical judgements, demanding the assent of every one.

In a judgement by which anything is designated simply as great, it is not merely meant that the object has a magnitude, but that this magnitude is superior to that of many other objects of the same kind, without, however, any exact determination of this superiority. Thus there is always at the basis of our judgement a standard which we assume as the same for every one; this, however, is not available for any logical (mathematically definite) judging of magnitude, but only for aesthetical judging of the same, because it is a merely subjective standard lying at the basis of the reflective judgement upon magnitude. It may be empirical, as, e.g. the average size of the men known to us, of animals of a certain kind, trees, houses, mountains, etc. Or it may be a standard given *a priori,* which through the defects of the judging subject is limited by the subjective conditions of presentation *in concreto*; as, e.g. in the practical sphere, the greatness of a certain virtue, or of the public liberty and justice in a country; or, in the theoretical sphere, the greatness of the accuracy or the inaccuracy of an observation or measurement that has been made, etc.

Here it is remarkable that, although we have no interest whatever in an Object, — i.e. its existence is indifferent to us, — yet its mere size, even if it is considered as formless, may bring a satisfaction with it that is universally communicable, and that consequently involves the consciousness of a subjective purposiveness in the use of our cognitive faculty. This is not indeed a satisfaction in the Object (because it may be formless), as in the case of the Beautiful, in which the reflective Judgement finds itself purposively determined in reference to cognition in general; but [a satisfaction] in the extension of the Imagination by itself.

If (under the above limitation) we say simply of an object "it is great," this is no mathematically definite judgement but a mere judgement of reflection upon the representation of it, which is subjectively purposive for a certain use of our cognitive powers in the estimation of magnitude; and we always then bind up with the representation a kind of respect, as also a kind of contempt for what we simply call

“small.” Further, the judging of things as great or small extends to everything, even to all their characteristics; thus we describe beauty as great or small. The reason of this is to be sought in the fact that whatever we present in intuition according to the precept of the Judgement (and thus represent aesthetically) is always a phenomenon and thus a quantum.

But if we call anything not only great, but absolutely great in every point of view (great beyond all comparison), i.e. sublime, we soon see that it is not permissible to seek for an adequate standard of this outside itself, but merely in itself. It is a magnitude which is like itself alone. It follows hence that the sublime is not to be sought in the things of nature, but only in our Ideas; but in which of them it lies must be reserved for the Deduction.

The foregoing explanation can be thus expressed: *the sublime is that in comparison with which everything else is small*. Here we easily see that nothing can be given in nature, however great it is judged by us to be, which could not if considered in another relation be reduced to the infinitely small; and conversely there is nothing so small, which does not admit of extension by our Imagination to the greatness of a world, if compared with still smaller standards. Telescopes have furnished us with abundant material for making the first remark, microscopes for the second. Nothing, therefore, which can be an object of the senses, is, considered on this basis, to be called sublime. But because there is in our Imagination a striving towards infinite progress, and in our Reason a claim for absolute totality, regarded as a real Idea, therefore this very inadequateness for that Idea in our faculty for estimating the magnitude of things of sense, excites in us the feeling of a supersensible faculty. And it is not the object of sense, but the use which the Judgement naturally makes of certain objects on behalf of this latter feeling, that is absolutely great; and in comparison every other use is small. Consequently it is the state of mind produced by a certain representation with which the reflective Judgement is occupied, and not the Object, that is to be called sublime.

We may therefore append to the preceding formulas explaining the sublime this other: *the sublime is that, the mere ability to think which, shows a faculty of the mind surpassing every standard of Sense*.

§ 26. Of that estimation of the magnitude of natural things which is requisite for the Idea of the Sublime

The estimation of magnitude by means of concepts of number (or their signs in Algebra) is mathematical; but that in mere intuition (by the measurement of the eye) is aesthetical. Now we can come by definite concepts of *how great* a thing is, [only][44*] by numbers, of which the unit is the measure (at all events by series of numbers progressing to infinity); and so far all logical estimation of magnitude is mathematical. But since the magnitude of the measure must then be assumed known, and this again is only to be estimated mathematically by means of numbers, — the unit of which must be another [smaller] measure, — we can never have a first or fundamental measure, and therefore can never have a definite concept of a given magnitude. So the estimation of the magnitude of the fundamental measure must consist in this, that we can immediately apprehend it in intuition and use it by the Imagination for the presentation of concepts of number. That is, all estimation of the magnitude of the objects of nature is in the end aesthetical (i.e. subjectively and not objectively determined).

Now for the mathematical estimation of magnitude there is, indeed, no maximum (for the power of numbers extends to infinity); but for its aesthetical estimation there is always a maximum, and of this I say that if it is judged as the absolute measure than which no greater is possible subjectively (for the judging subject), it brings with it the Idea of the sublime and produces that emotion which no mathematical estimation of its magnitude by means of numbers can bring about (except so far as the aesthetical fundamental measure remains vividly in the Imagination). For the former only presents relative magnitude by means of comparison with others of the same kind; but the latter presents magnitude absolutely, so far

as the mind can grasp it in an intuition.

In receiving a quantum into the Imagination by intuition, in order to be able to use it for a measure or as a unit for the estimation of magnitude by means of numbers, there are two operations of the Imagination involved: *apprehension* (*apprehensio*) and *comprehension* (*comprehensio aesthetica*). As to apprehension there is no difficulty, for it can go on *ad infinitum*; but comprehension becomes harder the further apprehension advances, and soon attains to its maximum, viz. the aesthetically greatest fundamental measure for the estimation of magnitude. For when apprehension has gone so far that the partial representations of sensuous intuition at first apprehended begin to vanish in the Imagination, whilst this ever proceeds to the apprehension of others, then it loses as much on the one side as it gains on the other; and in comprehension there is a maximum beyond which it cannot go.

Hence can be explained what *Savary*[45*] remarks in his account of Egypt, viz. that we must keep from going very near the Pyramids just as much as we keep from going too far from them, in order to get the full emotional effect from their size. For if we are too far away, the parts to be apprehended (the stones lying one over the other) are only obscurely represented, and the representation of them produces no effect upon the aesthetical judgement of the subject. But if we are very near, the eye requires some time to complete the apprehension of the tiers from the bottom up to the apex; and then the first tiers are always partly forgotten before the Imagination has taken in the last, and so the comprehension of them is never complete. — The same thing may sufficiently explain the bewilderment or, as it were, perplexity which, it is said, seizes the spectator on his first entrance into St. Peter’s at Rome. For there is here a feeling of the inadequacy of his Imagination for presenting the Ideas of a whole, wherein the Imagination reaches its maximum, and, in striving to surpass it, sinks back into itself, by which, however, a kind of emotional satisfaction is produced.

I do not wish to speak as yet of the ground of this satisfaction, which is bound up with a representation from which we should least of all expect it, viz. a representation which lets us remark its inadequacy and consequently its subjective want of purposiveness for the Judgement in the estimation of magnitude. I only remark that if the aesthetical judgement is pure (i.e. *mingled with no teleological judgement* or judgement of Reason) and is to be given as a completely suitable example of the Critique of the *aesthetical* Judgement, we must not exhibit the sublime in products of art (e.g. buildings, pillars, etc.) where human purpose determines the form as well as the size; nor yet in things of nature *the concepts of which bring with them a definite purpose* (e.g. animals with a known natural destination); but in rude nature (and in this only in so far as it does not bring with it any charm or emotion produced by actual danger) merely as containing magnitude. For in this kind of representation nature contains nothing monstrous (either magnificent or horrible); the magnitude that is apprehended may be increased as much as you wish provided it can be comprehended in a whole by the Imagination. An object is *monstrous* if by its size it destroys the purpose which constitutes the concept of it. But the mere presentation of a concept is called *colossal*, which is almost too great for any presentation (bordering on the relatively monstrous); because the purpose of the presentation of a concept is made harder [to realise] by the intuition of the object being almost too great for our faculty of apprehension. — A pure judgement upon the sublime must, however, have no purpose of the Object as its determining ground, if it is to be aesthetical and not mixed up with any judgement of Understanding or Reason.

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Because everything which is to give disinterested pleasure to the merely reflective Judgement must bring with the representation of it, subjective and, as subjective, universally valid purposiveness — although no purposiveness of the *form* of the object lies (as in the case of the Beautiful) at the ground of the judgement — the question arises “what is this subjective purposiveness?” And how does it come to be prescribed as

the norm by which a ground for universally valid satisfaction is supplied in the mere estimation of magnitude, even in that which is forced up to the point where our faculty of Imagination is inadequate for the presentation of the concept of magnitude?

In the process of combination requisite for the estimation of magnitude, the Imagination proceeds of itself to infinity without anything hindering it; but the Understanding guides it by means of concepts of number, for which the Imagination must furnish the schema. And in this procedure, as belonging to the logical estimation of magnitude, there is indeed something objectively purposive, — in accordance with the concept of a purpose (as all measurement is), — but nothing purposive and pleasing for the aesthetical Judgement. There is also in this designed purposiveness nothing which would force us to push the magnitude of the measure, and consequently the *comprehension* of the manifold in an intuition, to the bounds of the faculty of Imagination, or as far as ever this can reach in its presentations. For in the estimation of magnitude by the Understanding (Arithmetic) we only go to a certain point whether we push the comprehension of the units up to the number 10 (as in the decimal scale) or only up to 4 (as in the quaternary scale); the further production of magnitude proceeds by combination or, if the quantum is given in intuition, by apprehension, but merely by way of progression (not of comprehension) in accordance with an assumed principle of progression. In this mathematical estimation of magnitude the Understanding is equally served and contented whether the Imagination chooses for unit a magnitude that we can take in in a glance, e.g. a foot or rod, or a German mile or even the earth's diameter, — of which the apprehension is indeed possible, but not the comprehension in an intuition of the Imagination (not possible by *comprehensio aesthetica*, although quite possible by *comprehensio logica* in a concept of number). In both cases the logical estimation of magnitude goes on without hindrance to infinity.

But now the mind listens to the voice of Reason which, for every given magnitude, — even for those that can never be entirely apprehended, although (in sensible representation) they are judged as entirely given, — requires totality. Reason consequently desires comprehension in *one* intuition, and so the *presentation* of all these members of a progressively increasing series. It does not even exempt the infinite (space and past time) from this requirement; it rather renders it unavoidable to think the infinite (in the judgement of common Reason) as *entirely given* (according to its totality).

But the infinite is absolutely (not merely comparatively) great. Compared with it everything else (of the same kind of magnitudes) is small. And what is most important is that to be able only to think it as *a whole* indicates a faculty of mind which surpasses every standard of Sense. For [to represent it sensibly] would require a comprehension having for unit a standard bearing a definite relation, expressible in numbers, to the infinite; which is impossible. Nevertheless, *the bare capability of thinking* this infinite without contradiction requires in the human mind a faculty itself supersensible. For it is only by means of this faculty and its Idea of a noumenon, — which admits of no intuition, but which yet serves as the substrate for the intuition of the world, as a mere phenomenon, — that the infinite of the world of sense, in the pure intellectual estimation of magnitude, can be *completely* comprehended *under* a concept, although in the mathematical estimation of magnitude by means of *concepts of number* it can never be completely thought. The faculty of being able to think the infinite of supersensible intuition as given (in its intelligible substrate), surpasses every standard of sensibility, and is great beyond all comparison even with the faculty of mathematical estimation; not of course in a theoretical point of view and on behalf of the cognitive faculty, but as an extension of the mind which feels itself able in another (practical) point of view to go beyond the limit of sensibility.

Nature is therefore sublime in those of its phenomena, whose intuition brings with it the Idea of their infinity. This last can only come by the inadequacy of the greatest effort of our Imagination to estimate the magnitude of an object. But now in mathematical estimation of magnitude the Imagination is equal to providing a sufficient measure for every object; because the numerical concepts of the Understanding, by means of progression, can make any measure adequate to any given magnitude. Therefore it must be the

aesthetical estimation of magnitude in which it is felt that the effort towards comprehension surpasses the power of the Imagination to grasp in a whole of intuition the progressive apprehension; and at the same time is perceived the inadequacy of this faculty, unbounded in its progress, for grasping and using, for the estimation of magnitude, a fundamental measure which could be made available by the Understanding with little trouble. Now the proper unchangeable fundamental measure of nature is its absolute whole; which, regarding nature as a phenomenon, would be infinity comprehended. But since this fundamental measure is a self-contradictory concept (on account of the impossibility of the absolute totality of an endless progress), that magnitude of a natural Object, on which the Imagination fruitlessly spends its whole faculty of comprehension, must carry our concept of nature to a supersensible substrate (which lies at its basis and also at the basis of our faculty of thought). As this, however, is great beyond all standards of sense, it makes us judge as *sublime*, not so much the object, as our own state of mind in the estimation of it.

Therefore, just as the aesthetical Judgement in judging the Beautiful refers the Imagination in its free play to the *Understanding*, in order to harmonise it with the *concepts* of the latter in general (without any determination of them); so does the same faculty when judging a thing as Sublime refer itself to the *Reason* in order that it may subjectively be in accordance with its *Ideas* (no matter what they are): — i.e. that it may produce a state of mind conformable to them and compatible with that brought about by the influence of definite (practical) Ideas upon feeling.

We hence see also that true sublimity must be sought only in the mind of the [subject] judging, not in the natural Object, the judgement upon which occasions this state. Who would call sublime, e.g. shapeless mountain masses piled in wild disorder upon each other with their pyramids of ice, or the gloomy raging sea? But the mind feels itself elevated in its own judgement if, while contemplating them without any reference to their form, and abandoning itself to the Imagination and to the Reason — which although placed in combination with the Imagination without any definite purpose, merely extends it — it yet finds the whole power of the Imagination inadequate to its Ideas.

Examples of the mathematically Sublime of nature in mere intuition are all the cases in which we are given, not so much a larger numerical concept as a large unit for the measure of the Imagination (for shortening the numerical series). A tree, [the height of] which we estimate with reference to the height of a man, at all events gives a standard for a mountain; and if this were a mile high, it would serve as unit for the number expressive of the earth's diameter, so that the latter might be made intuitible. The earth's diameter [would supply a unit] for the known planetary system; this again for the Milky Way; and the immeasurable number of milky way systems called nebulae, — which presumably constitute a system of the same kind among themselves — lets us expect no bounds here. Now the Sublime in the aesthetical judging of an immeasurable whole like this lies not so much in the greatness of the number [of units], as in the fact that in our progress we ever arrive at yet greater units. To this the systematic division of the universe contributes, which represents every magnitude in nature as small in its turn; and represents our Imagination with its entire freedom from bounds, and with it Nature, as a mere nothing in comparison with the Ideas of Reason, if it is sought to furnish a presentation which shall be adequate to them.

§ 27. Of the quality of the satisfaction in our judgements upon the Sublime

The feeling of our incapacity to attain to an Idea, *which is a law for us*, is RESPECT. Now the Idea of the comprehension of every phenomenon that can be given us in the intuition of a whole, is an Idea prescribed to us by a law of Reason, which recognises no other measure, definite, valid for every one, and invariable, than the absolute whole. But our Imagination, even in its greatest efforts, in respect of that comprehension, which we expect from it, of a given object in a whole of intuition (and thus with reference to the presentation of the Idea of Reason), exhibits its own limits and inadequacy; although at the same

time it shows that its destination is to make itself adequate to this Idea regarded as a law. Therefore the feeling of the Sublime in nature is respect for our own destination, which by a certain subreption we attribute to an Object of nature (conversion of respect for the Idea of humanity in our own subject into respect for the Object). This makes intuitively evident the superiority of the rational determination of our cognitive faculties to the greatest faculty of our Sensibility.

The feeling of the Sublime is therefore a feeling of pain, arising from the want of accordance between the aesthetical estimation of magnitude formed by the Imagination and the estimation of the same formed by Reason. There is at the same time a pleasure thus excited, arising from the correspondence with rational Ideas of this very judgement of the inadequacy of our greatest faculty of Sense; in so far as it is a law for us to strive after these Ideas. In fact it is for us a law (of Reason), and belongs to our destination, to estimate as small, in comparison with Ideas of Reason, everything which nature, regarded as an object of Sense, contains that is great for us; and that which arouses in us the feeling of this supersensible destination agrees with that law. Now the greatest effort of the Imagination in the presentation of the unit for the estimation of magnitude indicates a reference to something *absolutely great*; and consequently a reference to the law of Reason, which bids us take this alone as the supreme measure of magnitude. Therefore the inner perception of the inadequacy of all sensible standards for rational estimation of magnitude indicates a correspondence with rational laws; it involves a pain, which arouses in us the feeling of our supersensible destination, according to which it is purposive and therefore pleasurable to find every standard of Sensibility inadequate to the Ideas of Understanding.

The mind feels itself *moved* in the representation of the Sublime in nature; whilst in aesthetical judgements about the Beautiful it is in *restful* contemplation. This movement may (especially in its beginnings) be compared to a vibration, i.e. to a quickly alternating attraction towards, and repulsion from, the same Object. The transcendent (towards which the Imagination is impelled in its apprehension of intuition) is for the Imagination like an abyss in which it fears to lose itself; but for the rational Idea of the supersensible it is not transcendent but in conformity with law to bring about such an effort of the Imagination, and consequently here there is the same amount of attraction as there was of repulsion for the mere Sensibility. But the judgement itself always remains in this case only aesthetical, because — without having any determinate concept of the Object at its basis — it merely represents the subjective play of the mental powers (Imagination and Reason) as harmonious through their very contrast. For just as Imagination and *Understanding*, in judging of the Beautiful, generate a subjective purposiveness of the mental powers by means of their harmony, so [here[46*]] Imagination and *Reason* do so by means of their conflict. That is, they bring about a feeling that we possess pure self-subsistent Reason, or a faculty for the estimation of magnitude, whose pre-eminence can be made intuitively evident only by the inadequacy of that faculty [Imagination] which is itself unbounded in the presentation of magnitudes (of sensible objects).

The measurement of a space (regarded as apprehension) is at the same time a description of it, and thus an objective movement in the act of Imagination and a progress. On the other hand, the comprehension of the manifold in the unity, — not of thought but of intuition, — and consequently the comprehension of the successively apprehended [elements] in one glance, is a regress, which annihilates the condition of time in this progress of the Imagination and makes *coexistence* intuitible.[47*] It is therefore (since the time-series is a condition of the internal sense and of an intuition) a subjective movement of the Imagination, by which it does violence to the internal sense; this must be the more noticeable, the greater the quantum is which the Imagination comprehends in one intuition. The effort, therefore, to receive in one single intuition a measure for magnitudes that requires an appreciable time to apprehend, is a kind of representation, which, subjectively considered, is contrary to purpose: but objectively, as requisite for the estimation of magnitude, it is purposive. Thus that very violence which is done to the subject through the Imagination is judged as purposive *in reference to the whole determination* of the mind.

The *quality* of the feeling of the Sublime is that it is a feeling of pain in reference to the faculty by which we judge aesthetically of an object, which pain, however, is represented at the same time as purposive. This is possible through the fact that the very incapacity in question discovers the consciousness of an unlimited faculty of the same subject, and that the mind can only judge of the latter aesthetically by means of the former.

In the logical estimation of magnitude the impossibility of ever arriving at absolute totality, by means of the progress of the measurement of things of the sensible world in time and space, was cognised as objective, i.e. *as an impossibility of* thinking the infinite as entirely given; and not as merely subjective or that there was only an incapacity to *grasp* it. For there we have not to do with the degree of comprehension in an intuition, regarded as a measure, but everything depends on a concept of number. But in aesthetical estimation of magnitude the concept of number must disappear or be changed, and the comprehension of the Imagination in reference to the unit of measure (thus avoiding the concepts of a law of the successive production of concepts of magnitude) is alone purposive for it. — If now a magnitude almost reaches the limit of our faculty of comprehension in an intuition, and yet the Imagination is invited by means of numerical magnitudes (in respect of which we are conscious that our faculty is unbounded) to aesthetical comprehension in a greater unit, then we mentally feel ourselves confined aesthetically within bounds. But nevertheless the pain in regard to the necessary extension of the Imagination for accordance with that which is unbounded in our faculty of Reason, viz. the Idea of the absolute whole, and consequently the very unpurposiveness of the faculty of Imagination for rational Ideas and the arousing of them, are represented as purposive. Thus it is that the aesthetical judgement itself is subjectively purposive for the Reason as the source of Ideas, i.e. as the source of an intellectual comprehension for which all aesthetical comprehension is small; and there accompanies the reception of an object as sublime a pleasure, which is only possible through the medium of a pain.

B. — OF THE DYNAMICALLY SUBLIME IN NATURE

§ 28. Of Nature regarded as Might

Might is that which is superior to great hindrances. It is called *dominion* if it is superior to the resistance of that which itself possesses might. Nature considered in an aesthetical judgement as might that has no dominion over us, is *dynamically sublime*.

If nature is to be judged by us as dynamically sublime, it must be represented as exciting fear (although it is not true conversely that every object which excites fear is regarded in our aesthetical judgement as sublime). For in aesthetical judgements (without the aid of concepts) superiority to hindrances can only be judged according to the greatness of the resistance. Now that which we are driven to resist is an evil, and, if we do not find our faculties a match for it, is an object of fear. Hence nature can be regarded by the aesthetical Judgement as might, and consequently as dynamically sublime, only so far as it is considered an object of fear.

But we can regard an object as *fearful*, without being afraid *of* it; viz. if we judge of it in such a way that we merely *think* a case in which we would wish to resist it, and yet in which all resistance would be altogether vain. Thus the virtuous man fears God without being afraid of Him; because to wish to resist Him and His commandments, he thinks is a case as to which *he* need not be anxious. But in every such case that he thinks as not impossible, he cognises Him as fearful.

He who fears can form no judgement about the Sublime in nature; just as he who is seduced by inclination and appetite can form no judgement about the Beautiful. The former flies from the sight of an

object which inspires him with awe; and it is impossible to find satisfaction in a terror that is seriously felt. Hence the pleasurableness arising from the cessation of an uneasiness is *a state of joy*. But this, on account of the deliverance from danger [which is involved], is a state of joy conjoined with the resolve not to expose ourselves to the danger again; we cannot willingly look back upon our sensations [of danger], much less seek the occasion for them again.

Bold, overhanging, and as it were threatening, rocks; clouds piled up in the sky, moving with lightning flashes and thunder peals; volcanoes in all their violence of destruction; hurricanes with their track of devastation; the boundless ocean in a state of tumult; the lofty waterfall of a mighty river, and such like; these exhibit our faculty of resistance as insignificantly small in comparison with their might. But the sight of them is the more attractive, the more fearful it is, provided only that we are in security; and we readily call these objects sublime, because they raise the energies of the soul above their accustomed height, and discover in us a faculty of resistance of a quite different kind, which gives us courage to measure ourselves against the apparent almightiness of nature.

Now, in the immensity of nature, and in the inadequacy of our faculties for adopting a standard proportionate to the aesthetical estimation of the magnitude of its *realm*, we find our own limitation; although at the same time in our rational faculty we find a different, non-sensuous standard, which has that infinity itself under it as a unit, and in comparison with which everything in nature is small. Thus in our mind we find a superiority to nature even in its immensity. And so also the irresistibility of its might, while making us recognise our own [physical[48*]] impotence, considered as beings of nature, discloses to us a faculty of judging independently of, and a superiority over, nature; on which is based a kind of self-preservation, entirely different from that which can be attacked and brought into danger by external nature. Thus, humanity in our person remains unhumiliated, though the individual might have to submit to this dominion. In this way nature is not judged to be sublime in our aesthetical judgements, in so far as it excites fear; but because it calls up that power in us (which is not nature) of regarding as small the things about which we are solicitous (goods, health, and life), and of regarding its might (to which we are no doubt subjected in respect of these things), as nevertheless without any dominion over us and our personality to which we must bow where our highest fundamental propositions, and their assertion or abandonment, are concerned. Therefore nature is here called sublime merely because it elevates the Imagination to a presentation of those cases in which the mind can make felt the proper sublimity of its destination, in comparison with nature itself.

This estimation of ourselves loses nothing through the fact that we must regard ourselves as safe in order to feel this inspiriting satisfaction; and that hence, as there is no seriousness in the danger, there might be also (as might seem to be the case) just as little seriousness in the sublimity of our spiritual faculty. For the satisfaction here concerns only the *destination* of our faculty which discloses itself in such a case, so far as the tendency to this destination lies in our nature, whilst its development and exercise remain incumbent and obligatory. And in this there is truth, however conscious the man may be of his present actual powerlessness, when he stretches his reflection so far.

No doubt this principle seems to be too far-fetched and too subtly reasoned, and consequently seems to go beyond the scope of an aesthetical judgement; but observation of men proves the opposite, and shows that it may lie at the root of the most ordinary judgements, although we are not always conscious of it. For what is that which is, even to the savage, an object of the greatest admiration? It is a man who shrinks from nothing, who fears nothing, and therefore does not yield to danger, but rather goes to face it vigorously with the fullest deliberation. Even in the most highly civilised state this peculiar veneration for the soldier remains, though only under the condition that he exhibit all the virtues of peace, gentleness, compassion, and even a becoming care for his own person; because even by these it is recognised that his mind is unsubdued by danger. Hence whatever disputes there may be about the superiority of the respect which is to be accorded them, in the comparison of a statesman and a general, the aesthetical judgement

decides for the latter. War itself, if it is carried on with order and with a sacred respect for the rights of citizens, has something sublime in it, and makes the disposition of the people who carry it on thus, only the more sublime, the more numerous are the dangers to which they are exposed, and in respect of which they behave with courage. On the other hand, a long peace generally brings about a predominant commercial spirit, and along with it, low selfishness, cowardice, and effeminacy, and debases the disposition of the people.[49*]

It appears to conflict with this solution of the concept of the sublime, so far as sublimity is ascribed to might, that we are accustomed to represent God as presenting Himself in His wrath and yet in His sublimity, in the tempest, the storm, the earthquake, etc.; and that it would be foolish and criminal to imagine a superiority of our minds over these works of His, and, as it seems, even over the designs of such might. Hence it would appear that no feeling of the sublimity of our own nature, but rather subjection, abasement, and a feeling of complete powerlessness, is a fitting state of mind before the manifestation of such an object, and this is generally bound up with the Idea of it during natural phenomena of this kind. Generally in religion, prostration, adoration with bent head, with contrite, anxious demeanour and voice, seems to be the only fitting behaviour in presence of the Godhead; and hence most peoples have adopted and still observe it. But this state of mind is far from being necessarily bound up with the Idea of the *sublimity* of a religion and its object. The man who is actually afraid, because he finds reasons for fear in himself, whilst conscious by his culpable disposition of offending against a Might whose will is irresistible and at the same time just, is not in the frame of mind for admiring the divine greatness. For this a mood of calm contemplation and a quite free judgement are needed. Only if he is conscious of an upright disposition pleasing to God do those operations of might serve to awaken in him the Idea of the sublimity of this Being, for then he recognises in himself a sublimity of disposition conformable to His will; and thus he is raised above the fear of such operations of nature, which he no longer regards as outbursts of His wrath. Even humility, in the shape of a stern judgement upon his own faults, — which otherwise, with a consciousness of good intentions, could be easily palliated from the frailty of human nature, — is a sublime state of mind, consisting in a voluntary subjection of himself to the pain of remorse, in order that its causes may be gradually removed. In this way religion is essentially distinguished from superstition. The latter establishes in the mind, not reverence for the Sublime, but fear and apprehension of the all-powerful Being to whose will the terrified man sees himself subject, without according Him any high esteem. From this nothing can arise but a seeking of favour, and flattery, instead of a religion which consists in a good life.[50*]

Sublimity, therefore, does not reside in anything of nature, but only in our mind, in so far as we can become conscious that we are superior to nature within, and therefore also to nature without us (so far as it influences us). Everything that excites this feeling in us, e.g. *the* might of nature which calls forth our forces, is called then (although improperly) sublime. Only by supposing this Idea in ourselves, and in reference to it, are we capable of attaining to the Idea of the sublimity of that Being, which produces respect in us, not merely by the might that it displays in nature, but rather by means of the faculty which resides in us of judging it fearlessly and of regarding our destination as sublime in respect of it.

§ 29. Of the modality of the judgement upon the sublime in nature

There are numberless beautiful things in nature about which we can assume and even expect, without being far mistaken, the harmony of every one’s judgement with our own. But in respect of our judgement upon the sublime in nature, we cannot promise ourselves so easily the accordance of others. For a far greater culture, as well of the aesthetical Judgement as of the cognitive faculties which lie at its basis, seems requisite in order to be able to pass judgement on this pre-eminent quality of natural objects.

That the mind be attuned to feel the sublime postulates a susceptibility of the mind for Ideas. For in the

very inadequacy of nature to these latter, and thus only by presupposing them and by straining the Imagination to use nature as a schema for them, is to be found that which is terrible to sensibility and yet is attractive. [It is attractive] because Reason exerts a dominion over sensibility in order to extend it in conformity with its own realm (the practical) and to make it look out into the Infinite, which is for it an abyss. In fact, without development of moral Ideas, that which we, prepared by culture, call sublime, presents itself to the uneducated man merely as terrible. In the indications of the dominion of nature in destruction, and in the great scale of its might, in comparison with which his own is a vanishing quantity, he will only see the misery, danger, and distress which surround the man who is exposed to it. So the good, and indeed intelligent, Savoyard peasant (as Herr von *Saussure*[51*] relates) unhesitatingly called all lovers of snow-mountains fools. And who knows, whether he would have been so completely wrong, if Saussure had undertaken the danger to which he exposed himself merely, as most travellers do, from amateur curiosity, or that he might be able to give a pathetic account of them? But his design was the instruction of men; and this excellent man gave the readers of his Travels, soul-stirring sensations such as he himself had, into the bargain.

But although the judgement upon the Sublime in nature needs culture (more than the judgement upon the Beautiful), it is not therefore primarily produced by culture and introduced in a merely conventional way into society. Rather has it root in human nature, even in that which, alike with common Understanding, we can impute to and expect of every one, viz. in the tendency to the feeling for (practical) Ideas, i.e. to the moral feeling.

Hereon is based the necessity of that agreement of the judgement of others about the sublime with our own which we include in the latter. For just as we charge with want of *taste* the man who is indifferent when passing judgement upon an object of nature that we regard as beautiful; so we say of him who remains unmoved in the presence of that which we judge to be sublime, he has no *feeling*. But we claim both from every man, and we presuppose them in him if he has any culture at all; only with the difference, that we expect the former directly of every one, because in it the Judgement refers the Imagination merely to the Understanding, the faculty of concepts; but the latter, because in it the Imagination is related to the Reason, the faculty of Ideas, only under a subjective presupposition (which, however, we believe we are authorised in imputing to every one), viz. the presupposition of the moral feeling [in man.[52*]] Thus it is that we ascribe necessity to this aesthetical judgement also.

In this modality of aesthetical judgements, viz. in the necessity claimed for them, lies an important moment of the Critique of Judgement. For it enables us to recognise in them an *a priori* principle, and raises them out of empirical psychology, in which otherwise they would remain buried amongst the feelings of gratification and grief (only with the unmeaning addition of being called *finer* feelings). Thus it enables us too to place the Judgement among those faculties that have *a priori* principles at their basis, and so to bring it into Transcendental Philosophy.

GENERAL REMARK UPON THE EXPOSITION OF THE AESTHETICAL REFLECTIVE JUDGEMENT

In reference to the feeling of pleasure an object is to be classified as either *pleasant*, or *beautiful*, or *sublime*, or *good* (absolutely), (*jucundum*, *pulchrum*, *sublime*, *honestum*).

The *pleasant*, as motive of desire, is always of one and the same kind, no matter whence it comes and however specifically different the representation (of sense, and sensation objectively considered) may be. Hence in judging its influence on the mind, account is taken only of the number of its charms (simultaneous and successive), and so only of the mass, as it were, of the pleasant sensation; and this can be made

intelligible only by *quantity*. It has no reference to culture, but belongs to mere enjoyment. — On the other hand, the *beautiful* requires the representation of a certain *quality* of the Object, that can be made intelligible and reduced to concepts (although it is not so reduced in an aesthetical judgement); and it cultivates us, in that it teaches us to attend to the purposiveness in the feeling of pleasure. — The *sublime* consists merely in the *relation* by which the sensible in the representation of nature is judged available for a possible supersensible use. — The *absolutely good*, subjectively judged according to the feeling that it inspires (the Object of the moral feeling), as capable of determining the powers of the subject through the representation of an *absolutely compelling* law, is specially distinguished by the *modality* of a necessity that rests *a priori* upon concepts. This necessity involves not merely a *claim*, but a *command* for the assent of every one, and belongs in itself to the pure intellectual, rather than to the aesthetical Judgement; and is by a determinant and not a mere reflective judgement ascribed not to Nature but to Freedom. But the *determinability of the subject* by means of this Idea, and especially of a subject that can feel *hindrances* in sensibility, and at the same time its superiority to them by their subjugation involving a *modification of its state* — i.e. the moral feeling, — is yet so far cognate to the aesthetical Judgement and its formal conditions that it can serve to represent the conformity to law of action from duty as aesthetical, i.e. as sublime or even as beautiful, without losing its purity. This would not be so, if we were to put it in natural combination with the feeling of the pleasant.

If we take the result of the foregoing exposition of the two kinds of aesthetical judgements, there arise therefrom the following short explanations:

The *Beautiful* is what pleases in the mere judgement (and therefore not by the medium of sensation in accordance with a concept of the Understanding). It follows at once from this that it must please apart from all interest.

The *Sublime* is what pleases immediately through its opposition to the interest of sense.

Both, as explanations of aesthetical universally valid judging, are referred to subjective grounds; in the one case to grounds of sensibility, in favour of the contemplative Understanding; in the other case *in opposition to* sensibility, but on behalf of the purposes of practical Reason. Both, however, united in the same subject, are purposive in reference to the moral feeling. The Beautiful prepares us to love disinterestedly something, even nature itself; the Sublime prepares us to esteem something highly even in opposition to our own (sensible) interest.

We may describe the Sublime thus: it is an object (of nature) *the representation of which determines the mind to think the unattainability of nature regarded as a presentation of Ideas*.

Literally taken and logically considered, Ideas cannot be presented. But if we extend our empirical representative faculty (mathematically or dynamically) to the intuition of nature, Reason inevitably intervenes, as the faculty expressing the independence of absolute totality,[53*] and generates the effort of the mind, vain though it be, to make the representation of the senses adequate to this. This effort, — and the feeling of the unattainability of the Idea by means of the Imagination, — is itself a presentation of the subjective purposiveness of our mind in the employment of the Imagination for its supersensible destination; and forces us, subjectively, to *think* nature itself in its totality as a presentation of something supersensible, without being able *objectively* to arrive at this presentation.

For we soon see that nature in space and time entirely lacks the unconditioned, and, consequently, that absolute magnitude, which yet is desired by the most ordinary Reason. It is by this that we are reminded that we only have to do with nature as phenomenon, and that it must be regarded as the mere presentation of a nature in itself (of which Reason has the Idea). But this Idea of the supersensible, which we can no further determine, — so that we cannot *know* but only *think* nature as its presentation, — is awakened in us by means of an object, whose aesthetical appreciation strains the Imagination to its utmost bounds, whether of extension (mathematical) or of its might over the mind (dynamical). And this judgement is based upon a feeling of the mind's destination, which entirely surpasses the realm of the former (i.e. upon

the moral feeling), in respect of which the representation of the object is judged as subjectively purposive.

In fact, a feeling for the Sublime in nature cannot well be thought without combining therewith a mental disposition which is akin to the Moral. And although the immediate pleasure in the Beautiful of nature likewise presupposes and cultivates a certain *liberality* in our mental attitude, i.e. *a satisfaction independent of mere sensible enjoyment*, *yet freedom is thus represented as in* play rather than in that law-directed *occupation* which is the genuine characteristic of human morality, in which Reason must exercise dominion over Sensibility. But in aesthetical judgements upon the Sublime this dominion is represented as exercised by the Imagination, regarded as an instrument of Reason.

The satisfaction in the Sublime of nature is then only *negative* (whilst that in the Beautiful is *positive*); viz. a feeling that the Imagination is depriving itself of its freedom, while it is purposively determined according to a different law from that of its empirical employment. It thus acquires an extension and a might greater than it sacrifices, — the ground of which, however, is concealed from itself; whilst yet it *feels* the sacrifice or the deprivation and, at the same time, the cause to which it is subjected. *Astonishment*, that borders upon terror, the dread and the holy awe which seizes the observer at the sight of mountain peaks rearing themselves to heaven, deep chasms and streams raging therein, deep-shadowed solitudes that dispose one to melancholy meditations — this, in the safety in which we know ourselves to be, is not actual fear, but only an attempt to feel fear by the aid of the Imagination; that we may feel the might of this faculty in combining with the mind’s repose the mental movement thereby excited, and being thus superior to internal nature, — and therefore to external, — so far as this can have any influence on our feeling of well-being. For the Imagination by the laws of Association makes our state of contentment dependent on physical [causes]; but it also, by the principles of the Schematism of the Judgement (being so far, therefore, ranked under freedom), is the instrument of Reason and its Ideas, and, as such, has might to maintain our independence of natural influences, to regard as small what in reference to them is great, and so to place the absolutely great only in the proper destination of the subject. The raising of this reflection of the aesthetical Judgement so as to be adequate to Reason (though without a definite concept of Reason) represents the object as subjectively purposive, even by the objective want of accordance between the Imagination in its greatest extension and the Reason (as the faculty of Ideas).

We must here, generally, attend to what has been already noted, that in the Transcendental Aesthetic of Judgement we must speak solely of pure aesthetical judgements; consequently our examples are not to be taken from such beautiful or sublime objects of Nature as presuppose the concept of a purpose. For, if so, the purposiveness would be either teleological, or would be based on mere sensations of an object (gratification or grief); and thus would be in the former case not aesthetical, in the latter not merely formal. If then we call the sight of the starry heaven *sublime*, we must not place at the basis of our judgement concepts of worlds inhabited by rational beings, and regard the bright points, with which we see the space above us filled, as their suns moving in circles purposively fixed with reference to them; but we must regard it, just as we see it, as a distant, all-embracing vault. Only under such a representation can we range that sublimity which a pure aesthetical judgement ascribes to this object. And in the same way, if we are to call the sight of the ocean sublime, we must not *think* of it as we [ordinarily] do, endowed as we are with all kinds of knowledge (not contained, however, in the immediate intuition). For example, we sometimes think of the ocean as a vast kingdom of aquatic creatures; or as the great source of those vapours that fill the air with clouds for the benefit of the land; or again as an element which, though dividing continents from each other, yet promotes the greatest communication between them: but these furnish merely teleological judgements. To call the ocean sublime we must regard it as poets do, merely by what strikes the eye; if it is at rest, as a clear mirror of water only bounded by the heaven; if it is restless, as an abyss threatening to overwhelm everything. The like is to be said of the Sublime and Beautiful in the human figure. We must not regard as the determining grounds of our judgement the

concepts of the purposes which all our limbs serve, and we must not allow this coincidence to *influence* our aesthetical judgement (for then it would no longer be pure); although it is certainly a necessary condition of aesthetical satisfaction that there should be no conflict between them. Aesthetical purposiveness is the conformity to law of the Judgement in its *freedom*. The satisfaction in the object depends on the relation in which we wish to place the Imagination; always provided that it by itself entertains the mind in free occupation. If, on the other hand, the judgement be determined by anything else, — whether sensation or concept, — although it may be conformable to law, it cannot be the act of a *free* Judgement.

If then we speak of intellectual beauty or sublimity, these expressions are, *first*, not quite accurate, because beauty and sublimity are aesthetical modes of representation, which would not be found in us at all if we were pure intelligences (or even regarded ourselves as such in thought). *Secondly*, although both, as objects of an intellectual (moral) satisfaction, are so far compatible with aesthetical satisfaction that they *rest* upon no interest, yet they are difficult to unite with it, because they are meant to *produce* an interest. This, if its presentation is to harmonise with the satisfaction in the aesthetical judgement, could only arise by means of a sensible interest that we combine with it in the presentation; and thus damage would be done to the intellectual purposiveness, and it would lose its purity.

The object of a pure and unconditioned intellectual satisfaction is the Moral Law in that might which it exercises in us over all mental motives *that precede it*. This might only makes itself aesthetically known to us through sacrifices (which causing a feeling of deprivation, though on behalf of internal freedom, in return discloses in us an unfathomable depth of this supersensible faculty, with consequences extending beyond our ken); thus the satisfaction on the aesthetical side (in relation to sensibility) is negative, i.e. against this interest, but regarded from the intellectual side it is positive and combined with an interest. Hence it follows that the intellectual, in itself purposive, (moral) good, aesthetically judged, must be represented as sublime rather than beautiful, so that it rather awakens the feeling of respect (which disdains charm) than that of love and familiar inclination; for human nature does not attach itself to this good spontaneously, but only by the authority which Reason exercises over Sensibility. Conversely also, that which we call sublime in nature, whether external or internal (e.g. certain affections), is only represented as a might in the mind to overcome [*certain*][54*] hindrances of the Sensibility by means of moral fundamental propositions, and only thus does it interest.

I will dwell a moment on this latter point. The Idea of the Good conjoined with affection is called *enthusiasm*. This state of mind seems to be sublime, to the extent that we commonly assert that nothing great could be done without it. Now every affection[55*] is blind, either in the choice of its purpose, or, if this be supplied by Reason, in its accomplishment; for it is a mental movement which makes it impossible to exercise a free deliberation about fundamental propositions so as to determine ourselves thereby. It can therefore in no way deserve the approval of the Reason. Nevertheless, aesthetically, enthusiasm is sublime, because it is a tension of forces produced by Ideas, which give an impulse to the mind, that operates far more powerfully and lastingly than the impulse arising from sensible representations. But (which seems strange) the *absence of affection* (*apatheia, phlegma in significatu bono*) in a mind that vigorously follows its unalterable principles is sublime, and in a far preferable way, because it has also on its side the satisfaction of pure Reason.[56*] It is only a mental state of this kind that is called noble; and this expression is subsequently applied to things, e.g. a building, a garment, literary style, bodily presence, etc., when these do not so much arouse *astonishment* (the affection produced by the representation of novelty exceeding our expectations), as *admiration* (astonishment that does not cease when the novelty disappears); and this is the case when Ideas agree in their presentation undesignedly and artlessly with the aesthetical satisfaction.

Every affection of the STRENUOUS kind (viz. that excites the consciousness of our power to overcome every obstacle — *animi strenui*) is *aesthetically sublime*, e.g. wrath, even despair (i.e. *the*

despair of indignation, *not of* faintheartedness). But affections of the LANGUID kind (which make the very effort of resistance an object of pain — *animum languidum*) have nothing *noble* in themselves, but they may be reckoned under the sensuously beautiful. *Emotions*, which may rise to the strength of affections, are very different. We have both *spirited* and *tender* emotions. The latter, if they rise to the height of affections, are worthless; the propensity to them is called *sentimentality*. A sympathetic grief that will not admit of consolation, or one referring to imaginary evils to which we deliberately surrender ourselves — being deceived by fancy — as if they were actual, indicates and produces a tender,[57*] though weak, soul — which shows a beautiful side and which can be called fanciful, though not enthusiastic. Romances, lacrymose plays, shallow moral precepts, which toy with (falsely) so-called moral dispositions, but in fact make the heart languid, insensible to the severe precept of duty, and incapable of all respect for the worth of humanity in our own person, and for the rights of men (a very different thing from their happiness), and in general incapable of all steady principle; even a religious discourse,[58*] which recommends a cringing, abject seeking of favour and ingratiation of ourselves, which proposes the abandonment of all confidence in our own faculties in opposition to the evil within us, instead of a sturdy resolution to endeavour to overcome our inclinations by means of those powers which with all our frailty yet remain to us; that false humility which sets the only way of pleasing the Supreme Being in self-depreciation, in whining hypocritical repentance and in a mere passive state of mind — these are not compatible with any frame of mind that can be counted beautiful, still less with one which is to be counted sublime.

But even stormy movements of mind which may be connected under the name of edification with Ideas of religion, or — as merely belonging to culture — with Ideas containing a social interest, can in no way, however they strain the Imagination, lay claim to the honour of being *sublime* presentations, unless they leave after them a mental mood which, although only indirectly, has influence upon the mind's consciousness of its strength, and its resolution in reference to that which involves pure intellectual purposiveness (the supersensible). For otherwise all these emotions belong only to *motion*, which one would fain enjoy for the sake of health. The pleasant exhaustion, consequent upon such disturbance produced by the play of the affections, is an enjoyment of our well-being arising from the restored equilibrium of the various vital forces. This in the end amounts to the same thing as that state which Eastern voluptuaries find so delightful, when they get their bodies as it were kneaded and all their muscles and joints softly pressed and bent; only that in this case the motive principle is for the most part external, in the other case it is altogether internal. Many a man believes himself to be edified by a sermon, when indeed there is no edification at all (no system of good maxims); or to be improved by a tragedy, when he is only glad at his ennui being happily dispelled. So the Sublime must always have reference to the *disposition*, i.e. to the maxims which furnish to the intellectual [part] and to the Ideas of Reason a superiority over sensibility.

We need not fear that the feeling of the sublime will lose by so abstract a mode of presentation, — which is quite negative in respect of what is sensible, — for the Imagination, although it finds nothing beyond the sensible to which it can attach itself, yet feels itself unbounded by this removal of its limitations; and thus that very abstraction is a presentation of the Infinite, which can be nothing but a mere negative presentation, but which yet expands the soul. Perhaps there is no sublimer passage in the Jewish Law than the command, *Thou shalt not make to thyself any graven image, nor the likeness of anything which is in heaven or on the earth or under the earth*, etc. This command alone can explain the enthusiasm that the Jewish people in their moral period felt for their religion, when they compared themselves with other peoples; or explain the pride which Mahommedanism inspires. The same is true of the moral law and of the tendency to morality in us. It is quite erroneous to fear that if we deprive this [tendency] of all that can recommend it to sense it will only involve a cold lifeless assent and no moving force or emotion. It is quite the other way, for where the senses see nothing more before them, and the

unmistakable and indelible Idea of morality remains, it would be rather necessary to moderate the impetus of an unbounded Imagination, to prevent it from rising to enthusiasm, than through fear of the powerlessness of these Ideas to seek aid for them in images and childish ritual. Thus governments have willingly allowed religion to be abundantly provided with the latter accessories; and seeking thereby to relieve their subjects of trouble, they have also sought to deprive them of the faculty of extending their spiritual powers beyond the limits that are arbitrarily assigned to them, and by means of which they can be the more easily treated as mere passive[59*] beings.

This pure, elevating, merely negative presentation of morality brings with it, on the other hand, no danger of *fanaticism*, which is *a delusion that we can will ourselves to see something beyond all bounds of sensibility*, i.e. to dream in accordance with fundamental propositions (or to go mad with Reason); and this is so just because this presentation is merely negative. For the *inscrutableness of the Idea of Freedom* quite cuts it off from any positive presentation; but the moral law is in itself sufficiently and originally determinant in us, so that it does not permit us to cast a glance at any ground of determination external to itself. If enthusiasm is comparable to *madness*, fanaticism is comparable to *monomania*; of which the latter is least of all compatible with the sublime, because in its detail it is ridiculous. In enthusiasm, regarded as an affection, the Imagination is without bridle; in fanaticism, regarded as an inveterate, brooding passion, it is without rule. The first is a transitory accident which sometimes befalls the soundest Understanding; the second is a disease which unsettles it.

Simplicity (purposiveness without art) is as it were the style of Nature in the sublime, and so also of Morality which is a second (supersensible) nature; of which we only know the laws without being able to reach by intuition that supersensible faculty in ourselves which contains the ground of the legislation.

Now the satisfaction in the Beautiful, like that in the Sublime, is not alone distinguishable from other aesthetical judgements by its universal *communicability*, but also because, through this very property, it acquires an interest in reference to society (in which this communication is possible). We must, however, remark that *separation from all society* is regarded as sublime, if it rests upon Ideas that overlook all sensible interest. To be sufficient for oneself, and consequently to have no need of society, without at the same time being unsociable, i.e. without flying from it, is something bordering on the sublime; as is any dispensing with wants. On the other hand, to fly from men from *misanthropy*, because we bear ill-will to them, or from *anthropophoby* (shyness), because we fear them as foes, is partly hateful, partly contemptible. There is indeed a misanthropy (very improperly so-called), the tendency to which frequently appears with old age in many right-thinking men; which is philanthropic enough as far as *goodwill* to men is concerned, but which through long and sad experience is far removed from *satisfaction* with men. Evidence of this is afforded by the propensity to solitude, the fantastic wish for a secluded country seat, or (in the case of young persons) by the dream of the happiness of passing one's life with a little family upon some island unknown to the rest of the world; a dream of which story-tellers or writers of Robinsonades know how to make good use. Falsehood, ingratitude, injustice, the childishness of the purposes regarded by ourselves as important and great, in the pursuit of which men inflict upon each other all imaginable evils, are so contradictory to the Idea of what men might be if they would, and conflict so with our lively wish to see them better, that, in order that we may not hate them (since we cannot love them), the renunciation of all social joys seems but a small sacrifice. This sadness — not the sadness (of which sympathy is the cause) for the evils which fate brings upon others, — but for those things which men do to one another (which depends upon an antipathy in fundamental propositions), is sublime, because it rests upon Ideas, whilst the former can only count as beautiful. — The brilliant and thorough *Saussure*,[60*] in his account of his Alpine travels, says of one of the Savoy mountains, called *Bonhomme*, "There reigns there a certain *insipid sadness*." He therefore recognised an *interesting* sadness, that the sight of a solitude might inspire, to which men might wish to transport themselves that they might neither hear nor experience any more of the world; which, however, would not be quite so

inhospitable that it would offer only an extremely painful retreat. — I make this remark solely with the design of indicating again that even depression (not dejected sadness) may be counted among the *sturdy* affections, if it has its ground in moral Ideas. But if it is grounded on sympathy and, as such, is amiable, it belongs merely to the *languid* affections. [I make this remark] to call attention to the state of mind which is *sublime* only in the first case.

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We can now compare the above Transcendental Exposition of aesthetical judgements with the Physiological worked out by *Burke* and by many clear-headed men among us, in order to see whither a merely empirical exposition of the Sublime and Beautiful leads. *Burke*, who deserves to be regarded as the most important author who adopts this mode of treatment, infers by this method "that the feeling of the Sublime rests on the impulse towards self-preservation and on *fear*, i.e. on a pain, which not going so far as actually to derange the parts of the body, produces movements which, since they purify the finer or grosser vessels of dangerous or troublesome stoppages, are capable of exciting pleasant sensations; not indeed pleasure, but a kind of satisfying horror, a certain tranquillity tinged with terror."[61*] The Beautiful, which he founded on love (which he wishes to keep quite separate from desire), he reduces to "the relaxing, slackening, and enervating of the fibres of the body, and a consequent weakening, languor, and exhaustion, a fainting, dissolving, and melting away for enjoyment."[62*] And he confirms this explanation not only by cases in which the Imagination in combination with the Understanding can excite in us the feeling of the Beautiful or of the Sublime, but by cases in which it is combined with sensation. — As psychological observations, these analyses of the phenomena of our mind are exceedingly beautiful, and afford rich material for the favourite investigations of empirical anthropology. It is also not to be denied that all representations in us, whether, objectively viewed, they are merely sensible or are quite intellectual, may yet subjectively be united to gratification or grief, however imperceptible either may be; because they all affect the feeling of life, and none of them, so far as it is a modification of the subject, can be indifferent. And so, as Epicurus maintained, all *gratification* or *grief* may ultimately be corporeal, whether it arises from the representations of the Imagination or the Understanding; because life without a feeling of bodily organs would be merely a consciousness of existence, without any feeling of well-being or the reverse, i.e. of the furthering or the checking of the vital powers. For the mind is by itself alone life (the principle of life), and hindrances or furtherances must be sought outside it and yet in the man, consequently in union with his body.

If, however, we place the satisfaction in the object altogether in the fact that it gratifies us by charm or emotion, we must not assume that any *other* man agrees with the aesthetical judgement which *we* pass; for as to these each one rightly consults his own individual sensibility. But in that case all censorship of taste would disappear, except indeed the example afforded by the accidental agreement of others in their judgements were regarded as *commanding* our assent; and this principle we should probably resist, and should appeal to the natural right of subjecting the judgement, which rests on the immediate feeling of our own well-being, to our own sense and not to that of any other man.

If then the judgement of taste is not to be valid merely *egoistically*, but according to its inner nature, — i.e. on account of itself and not on account of the examples that others give of their taste, — to be necessarily valid *pluralistically*, if we regard it as a judgement which may exact the adhesion of every one; then there must lie at its basis some *a priori* principle (whether objective or subjective) to which we can never attain by seeking out the empirical laws of mental changes. For these only enable us to know how we judge, but do not prescribe to us how we ought to judge. They do not supply an *unconditioned* command,[63*] such as judgements of taste presuppose, inasmuch as they require that the satisfaction be *immediately* connected with the representation. Thus the empirical exposition of aesthetical judgements

may be a beginning of a collection of materials for a higher investigation; but a transcendental discussion of this faculty is also possible, and is an essential part of the Critique of Taste. For if it had not *a priori* principles, it could not possibly pass sentence on the judgements of others, and it could not approve or blame them with any appearance of right.

The remaining part of the Analytic of the Aesthetical Judgement contains first the

DEDUCTION OF [PURE[64*]] AESTHETICAL JUDGEMENTS

§ 30. The Deduction of aesthetical judgements on the objects of nature must not be directed to what we call Sublime in nature, but only to the Beautiful.

The claim of an aesthetical judgement to universal validity for every subject requires, as a judgement resting on some *a priori* principle, a Deduction (or legitimatising of its pretensions) in addition to its Exposition; if it is concerned with satisfaction or dissatisfaction in the *form of the Object*. Of this kind are judgements of taste about the Beautiful in Nature. For in that case the purposiveness has its ground in the Object and in its figure, although it does not indicate the reference of this to other objects according to concepts (for a cognitive judgement), but merely has to do in general with the apprehension of this form, so far as it shows itself conformable in the mind to the *faculty* of concepts and to that of their presentation (which is identical with that of apprehension). We can thus, in respect of the Beautiful in nature, suggest many questions touching the cause of this purposiveness of their forms, e.g. to explain why nature has scattered abroad beauty with such profusion, even in the depth of the ocean, where the human eye (for which alone that purposiveness exists) but seldom penetrates.

But the Sublime in nature — if we are passing upon it a pure aesthetical judgement, not mixed up with any concepts of perfection or objective purposiveness, in which case it would be a teleological judgement — may be regarded as quite formless or devoid of figure, and yet as the object of a pure satisfaction; and it may display a subjective purposiveness in the given representation. And we ask if, for an aesthetical judgement of this kind, — over and above the Exposition of what is thought in it, — a Deduction also of its claim to any (subjective) *a priori* principle may be demanded?

To which we may answer that the Sublime in nature is improperly so called, and that properly speaking the word should only be applied to a state of mind, or rather to its foundation in human nature. The apprehension of an otherwise formless and unpurposive object gives merely the occasion, through which we become conscious of such a state; the object is thus *employed* as subjectively purposive, but is not judged as such *in itself* and on account of its form (it is, as it were, a *species finalis accepta, non data*). Hence our Exposition of judgements concerning the Sublime in nature was at the same time their Deduction. For when we analysed the reflection of the Judgement in such acts, we found in them a purposive relation of the cognitive faculties, which must be ascribed ultimately to the faculty of purposes (the will), and hence is itself purposive *a priori*. This then immediately involves the Deduction, i.e. the justification of the claim of such a judgement to universal and necessary validity.

We shall therefore only have to seek for the deduction of judgements of Taste, i.e. of judgements about the Beauty of natural things; we shall thus treat satisfactorily the problem with which the whole faculty of aesthetical Judgement is concerned.

§ 31. Of the method of deduction of judgements of Taste

A Deduction, i.e. the guarantee of the legitimacy of a class of judgements, is only obligatory if the judgement lays claim to necessity. This it does, if it demands even subjective universality or the agreement of every one, although it is not a judgement of cognition but only one of pleasure or pain in a given object; i.e. it assumes a subjective purposiveness thoroughly valid for every one, which must not be

based on any concept of the thing, because the judgement is one of taste.

We have before us in the latter case no cognitive judgement — neither a theoretical one based on the concept of a *Nature* in general formed by the Understanding, nor a (pure) practical one based on the Idea of *Freedom*, as given *a priori* by Reason. Therefore we have to justify *a priori* the validity neither of a judgement which represents what a thing is, nor of one which prescribes that I ought to do something in order to produce it. We have merely to prove for the Judgement generally the *universal validity* of a singular judgement that expresses the subjective purposiveness of an empirical representation of the form of an object; in order to explain how it is possible that a thing can please in the mere act of judging it (without sensation or concept), and how the satisfaction of one man can be proclaimed as a rule for every other; just as the act of judging of an object for the sake of a *cognition* in general has universal rules.

If now this universal validity is not to be based on any collecting of the suffrages of others, or on any questioning of them as to the kind of sensations they have, but is to rest, as it were, on an autonomy of the judging subject in respect of the feeling of pleasure (in the given representation), i.e. on his own taste, and yet is not to be derived from concepts; then a judgement like this — such as the judgement of taste is, in fact — has a twofold logical peculiarity. *First*, there is its *a priori* universal validity, which is not a logical universality in accordance with concepts, but the universality of a singular judgement. *Secondly*, it has a necessity (which must always rest on *a priori* grounds), which however does not depend on any *a priori* grounds of proof, through the representation of which the assent that every one concedes to the judgement of taste could be exacted.

The solution of these logical peculiarities, wherein a judgement of taste is different from all cognitive judgements — if we at the outset abstract from all content, viz. from the feeling of pleasure, and merely compare the aesthetical form with the form of objective judgements as logic prescribes it — is sufficient by itself for the deduction of this singular faculty. We shall then represent and elucidate by examples these characteristic properties of taste.

§ 32. First peculiarity of the judgement of Taste

The judgement of taste determines its object in respect of satisfaction (in its beauty) with an accompanying claim for the assent of *every one*, just as if it were objective.

To say that "this flower is beautiful" is the same as to assert its proper claim to satisfy every one. By the pleasantness of its smell it has no such claim. A smell which one man enjoys gives another a headache. Now what are we to presume from this except that beauty is to be regarded as a property of the flower itself, which does not accommodate itself to any diversity of persons or of their sensitive organs, but to which these must accommodate themselves if they are to pass any judgement upon it? And yet this is not so. For a judgement of taste consists in calling a thing beautiful just because of that characteristic in respect of which it accommodates itself to our mode of apprehension.

Moreover, it is required of every judgement which is to prove the taste of the subject, that the subject shall judge by himself, without needing to grope about empirically among the judgements of others, and acquaint himself previously as to their satisfaction or dissatisfaction with the same object; thus his judgement should be pronounced *a priori*, and not be a mere imitation because the thing actually gives universal pleasure. One would think, however, that an *a priori* judgement must contain a concept of the Object, for the cognition of which it contains the principle; but the judgement of taste is not based upon concepts at all, and is in general not a cognitive but an aesthetical judgement.

Thus a young poet does not permit himself to be dissuaded from his conviction that his poem is beautiful, by the judgement of the public or of his friends; and if he gives ear to them he does so, not because he now judges differently, but because, although (in regard to him) the whole public has false taste, in his desire for applause he finds reason for accommodating himself to the common error (even

against his judgement). It is only at a later time, when his Judgement has been sharpened by exercise, that he voluntarily departs from his former judgements; just as he proceeds with those of his judgements which rest upon Reason. Taste [merely][65*] claims autonomy. To make the judgements of others the determining grounds of his own would be heteronomy.

That we, and rightly, recommend the works of the ancients as models and call their authors classical, thus forming among writers a kind of noble class who give laws to the people by their example, seems to indicate *a posteriori* sources of taste, and to contradict the autonomy of taste in every subject. But we might just as well say that the old mathematicians, — who are regarded up to the present day as supplying models not easily to be dispensed with for the supreme profundity and elegance of their synthetical methods, — prove that our Reason is only imitative, and that we have not the faculty of producing from it in combination with intuition rigid proofs by means of the construction of concepts.[66*] There is no use of our powers, however free, no use of Reason itself (which must create all its judgements *a priori* from common sources) which would not give rise to faulty attempts, if every subject had always to begin anew from the rude basis of his natural state, and if others had not preceded him with their attempts. Not that these make mere imitators of those who come after them, but rather by their procedure they put others on the track of seeking in themselves principles and so of pursuing their own course, often a better one. Even in religion — where certainly every one has to derive the rule of his conduct from himself, because he remains responsible for it and cannot shift the blame of his transgressions upon others, whether his teachers or his predecessors — there is never as much accomplished by means of universal precepts, either obtained from priests or philosophers or got from oneself, as by means of an example of virtue or holiness which, exhibited in history, does not dispense with the autonomy of virtue based on the proper and original Idea of morality (*a priori*), or change it into a mechanical imitation. *Following*, involving something precedent, not “imitation,” is the right expression for all influence that the products of an exemplary author may have upon others. And this only means that we draw from the same sources as our predecessor did, and learn from him only the way to avail ourselves of them. But of all faculties and talents Taste, because its judgement is not determinable by concepts and precepts, is just that one which most needs examples of what has in the progress of culture received the longest approval; that it may not become again uncivilised and return to the crudeness of its first essays.

§ 33. Second peculiarity of the judgement of Taste

The judgement of taste is not determinable by grounds of proof, just as if it were merely *subjective*.

If a man, *in the first place*, does not find a building, a prospect, or a poem beautiful, a hundred voices all highly praising it will not force his inmost agreement. He may indeed feign that it pleases him in order that he may not be regarded as devoid of taste; he may even begin to doubt whether he has formed his taste on a knowledge of a sufficient number of objects of a certain kind (just as one, who believes that he recognises in the distance as a forest, something which all others regard as a town, doubts the judgement of his own sight). But he clearly sees that the agreement of others gives no valid proof of the judgement about beauty. Others might perhaps see and observe for him; and what many have seen in one way, although he believes that he has seen it differently, might serve him as an adequate ground of proof of a theoretical and consequently logical judgement. But that a thing has pleased others could never serve as the basis of an aesthetical judgement. A judgement of others which is unfavourable to ours may indeed rightly make us scrutinise our own with care, but it can never convince us of its incorrectness. There is therefore no empirical *ground of proof* which would force a judgement of taste upon any one.

Still less, *in the second place*, can an *a priori* proof determine according to definite rules a judgement about beauty. If a man reads me a poem of his or brings me to a play, which does not after all suit my taste, he may bring forward in proof of the beauty of his poem *Batteux*[67*] or *Lessing* or still more ancient

and famous critics of taste, and all the rules laid down by them; certain passages which displease me may agree very well with rules of beauty (as they have been put forth by these writers and are universally recognised): but I stop my ears, I will listen to no arguments and no reasoning; and I will rather assume that these rules of the critics are false, or at least that they do not apply to the case in question, than admit that my judgement should be determined by grounds of proof *a priori*. For it is to be a judgement of Taste and not of Understanding or Reason.

It seems that this is one of the chief reasons why this aesthetical faculty of judgement has been given the name of Taste. For though a man enumerate to me all the ingredients of a dish, and remark that each is separately pleasant to me and further extol with justice the wholesomeness of this particular food — yet am I deaf to all these reasons; I try the dish with *my* tongue and my palate, and thereafter (and not according to universal principles) do I pass my judgement.

In fact the judgement of Taste always takes the form of a singular judgement about an Object. The Understanding can form a universal judgement by comparing the Object in point of the satisfaction it affords with the judgement of others upon it: e.g. "all tulips are beautiful." But then this is not a judgement of taste but a logical judgement, which takes the relation of an Object to taste as the predicate of things of a certain species. That judgement, however, in which I find an individual given tulip beautiful, i.e. in which I find my satisfaction in it to be universally valid, is alone a judgement of taste. Its peculiarity consists in the fact that, although it has merely subjective validity, it claims the assent of *all* subjects, exactly as it would do if it were an objective judgement resting on grounds of knowledge, that could be established by a proof.

§ 34. There is no objective principle of Taste possible

By a principle of taste I mean a principle under the condition of which we could subsume the concept of an object and thus infer by means of a syllogism that the object is beautiful. But that is absolutely impossible. For I must feel the pleasure immediately in the representation of the object, and of that I can be persuaded by no grounds of proof whatever. Although, as *Hume* says,[68*] all critics can reason more plausibly than cooks, yet the same fate awaits them. They cannot expect the determining ground of their judgement [to be derived] from the force of the proofs, but only from the reflection of the subject upon its own proper state (of pleasure or pain), all precepts and rules being rejected.

But although critics can and ought to pursue their reasonings so that our judgements of taste may be corrected and extended, it is not with a view to set forth the determining ground of this kind of aesthetical judgements in a universally applicable formula, which is impossible; but rather to investigate the cognitive faculties and their exercise in these judgements, and to explain by examples the reciprocal subjective purposiveness, the form of which, as has been shown above, in a given representation, constitutes the beauty of the object. Therefore the Critique of Taste is only subjective as regards the representation through which an Object is given to us; viz. it is the art or science of reducing to rules the reciprocal relation between the Understanding and the Imagination in the given representation (without reference to any preceding sensation or concept). That is, it is the art or science of reducing to rules their accordance or discordance, and of determining them with regard to their conditions. It is an *art*, if it only shows this by examples; it is a *science* if it derives the possibility of such judgements from the nature of these faculties, as cognitive faculties in general. We have here, in Transcendental Criticism, only to do with the latter. It should develop and justify the subjective principle of taste, as an *a priori* principle of the Judgement. This Critique, as an art, merely seeks to apply, in the judging of objects, the physiological (here psychological), and therefore empirical rules, according to which taste actually proceeds (without taking any account of their possibility); and it criticises the products of beautiful art just as, regarded as a science, it criticises the faculty by which they are judged.

§ 35. The principle of Taste is the subjective principle of Judgement in general

The judgement of taste is distinguished from a logical judgement in this, that the latter subsumes a representation under the concept of the Object, while the former does not subsume it under any concept; because otherwise the necessary universal agreement [in these judgements] would be capable of being enforced by proofs. Nevertheless it is like the latter in this, that it claims universality and necessity, though not according to concepts of the Object, and consequently a merely subjective necessity. Now, because the concepts in a judgement constitute its content (what belongs to the cognition of the Object), but the judgement of taste is not determinable by concepts, it is based only on the subjective formal condition of a judgement in general. The subjective condition of all judgements is the faculty of Judgement itself. This when used with reference to a representation by which an object is given, requires the accordance of two representative powers: viz. Imagination (for the intuition and comprehension of the manifold) and Understanding (for the concept as a representation of the unity of this comprehension). Now because no concept of the Object lies here at the basis of the judgement, it can only consist in the subsumption of the Imagination itself (in the case of a representation by which an object is given) under the conditions that the Understanding requires to pass from intuition to concepts. That is, because the freedom of the Imagination consists in the fact that it schematises without any concept, the judgement of taste must rest on a mere sensation of the reciprocal activity of the Imagination in its *freedom* and the Understanding with its *conformity to law*. It must therefore rest on a feeling, which makes us judge the object by the purposiveness of the representation (by which an object is given) in respect of the furtherance of the cognitive faculty in its free play. Taste, then, as subjective Judgement, contains a principle of subsumption, not of intuitions under concepts, but of the *faculty* of intuitions or presentations (i.e. the Imagination) under the *faculty* of the concepts (i.e. the Understanding); so far as the former *in its freedom* harmonises with the latter *in its conformity to law*.

In order to discover this ground of legitimacy by a Deduction of the judgements of taste we can only take as a clue the formal peculiarities of this kind of judgements, and consequently can only consider their logical form.

§ 36. Of the problem of a Deduction of judgements of Taste

The concept of an Object in general can immediately be combined with the perception of an object, containing its empirical predicates, so as to form a cognitive judgement; and it is thus that a judgement of experience is produced.[69*] At the basis of this lie *a priori* concepts of the synthetical unity of the manifold of intuition, by which the manifold is thought as the determination of an Object. These concepts (the Categories) require a Deduction, which is given in the Critique of pure Reason; and by it we can get the solution of the problem, how are synthetical *a priori* cognitive judgements possible? This problem concerns then the *a priori* principles of the pure Understanding and its theoretical judgements.

But with a perception there can also be combined a feeling of pleasure (or pain) and a satisfaction, that accompanies the representation of the Object and serves instead of its predicate; thus there can result an aesthetical non-cognitive judgement. At the basis of such a judgement — if it is not a mere judgement of sensation but a formal judgement of reflection, which imputes the same satisfaction necessarily to every one, — must lie some *a priori* principle; which may be merely subjective (if an objective one should prove impossible for judgements of this kind), but also as such may need a Deduction, that we may thereby comprehend how an aesthetical judgement can lay claim to necessity. On this is founded the problem with which we are now occupied, how are judgements of taste possible? This problem then has to do with the *a priori* principles of the pure faculty of Judgement in *aesthetical* judgements; i.e. judgements in which it has not (as in theoretical ones) merely to subsume under objective concepts of

Understanding, and in which it is subject to a law, but in which it is, itself, subjectively, both object and law.

This problem then may be thus represented: how is a judgement possible, in which merely from *our own* feeling of pleasure in an object, independently of its concept, we judge that this pleasure attaches to the representation of the same Object *in every other subject*, and that *a priori* without waiting for the accordance of others?

It is easy to see that judgements of taste are synthetical, because they go beyond the concept and even beyond the intuition of the Object, and add to that intuition as predicate something that is not a cognition, viz. a feeling of pleasure (or pain). Although the predicate (of the *personal* pleasure bound up with the representation) is empirical, nevertheless, as concerns the required assent of *every one* the judgements are *a priori*, or desire to be regarded as such; and this is already involved in the expressions of this claim. Thus this problem of the Critique of Judgement belongs to the general problem of transcendental philosophy, how are synthetical *a priori* judgements possible?

§ 37. What is properly asserted a priori of an object in a judgement of Taste

That the representation of an object is immediately bound up with pleasure can only be internally perceived, and if we did not wish to indicate anything more than this it would give a merely empirical judgement. For I cannot combine a definite feeling (of pleasure or pain) with any representation except where there is at bottom an *a priori* principle in the Reason determining the Will. In that case the pleasure (in the moral feeling) is the consequence of the principle, but cannot be compared with the pleasure in taste, because it requires a definite concept of a law; and the latter pleasure, on the contrary, must be bound up with the mere act of judging, prior to all concepts. Hence also all judgements of taste are singular judgements, because they do not combine their predicate of satisfaction with a concept, but with a given individual empirical representation.

And so it is not the pleasure, but the *universal validity of this pleasure*, perceived as mentally bound up with the mere judgement upon an object, which is represented *a priori* in a judgement of taste as a universal rule for the Judgement and valid for every one. It is an empirical judgement [to say] that I perceive and judge an object with pleasure. But it is an *a priori* judgement [to say] that I find it beautiful, i.e. I attribute this satisfaction necessarily to every one.

§ 38. Deduction of judgements of Taste

If it be admitted that in a pure judgement of taste the satisfaction in the object is combined with the mere act of judging its form, it is nothing else than its subjective purposiveness for the Judgement which we feel to be mentally combined with the representation of the object. The Judgement, as regards the formal rules of its action, apart from all matter (whether sensation or concept), can only be directed to the subjective conditions of its employment in general (it is applied[70*] neither to a particular mode of sense nor to a particular concept of the Understanding); and consequently to that subjective [element] which we can presuppose in all men (as requisite for possible cognition in general). Thus the agreement of a representation with these conditions of the Judgement must be capable of being assumed as valid *a priori* for every one. I.e. we may rightly impute to every one the pleasure or the subjective purposiveness of the representation for the relation between the cognitive faculties in the act of judging a sensible object in general.[71*]

Remark

This Deduction is thus easy, because it has no need to justify the objective reality of any concept, for Beauty is not a concept of the Object and the judgement of taste is not cognitive. It only maintains that we

are justified in presupposing universally in every man those subjective conditions of the Judgement which we find in ourselves; and further, that we have rightly subsumed the given Object under these conditions. The latter has indeed unavoidable difficulties which do not beset the logical Judgement. There we subsume under concepts, but in the aesthetical Judgement under a merely sensible relation between the Imagination and Understanding mutually harmonising in the representation of the form of the Object, — in which case the subsumption may easily be fallacious. Yet the legitimacy of the claim of the Judgement in counting upon universal assent is not thus annulled; it reduces itself merely to the correctness of the principle of judging validly for every one from subjective grounds. For as to the difficulty or doubt concerning the correctness of the subsumption under that principle, it makes the legitimacy of the claim of an aesthetical judgement in general to such validity and the principle of the same, as little doubtful, as the like faulty (though neither so commonly nor readily faulty) subsumption of the logical Judgement under its principle can make the latter, an objective principle, doubtful. But if the question were to be, how is it possible to assume nature *a priori* to be a complex of objects of taste? this problem has reference to Teleology, because it must be regarded as a purpose of nature essentially belonging to its concept to exhibit forms that are purposive for our Judgement. But the correctness of this latter assumption is very doubtful, whereas the efficacy of natural beauties is patent to experience.

§ 39. Of the communicability of a Sensation

If sensation, as the real in perception, is related to knowledge, it is called sensation of the senses; and its specific quality may be represented as generally communicable in a uniform way, if we assume that every one has senses like our own. But this cannot at all be presupposed of any single sensation. To a man who is deficient in the sense of smell, this kind of sensation cannot be communicated; and even if it is not wholly deficient, we cannot be certain that he gets exactly the same sensation from a flower that we have. But even more must we represent men as differing in respect of the *pleasantness* or *unpleasantness* involved in the sensation from the same object of sense; and it is absolutely not to be required that every man should take pleasure in the same objects. Pleasure of this kind, because it comes into the mind through the senses, in respect of which therefore we are passive, we may call the pleasure of *enjoyment*.

Satisfaction in an action because of its moral character is on the other hand not the pleasure of enjoyment, but of spontaneity and its accordance with the Idea of its destination. But this feeling, called moral, requires concepts, and presents not free purposiveness, but purposiveness that is conformable to law; it therefore admits of being universally communicated only by means of Reason, and, if the pleasure is to be homogeneous for every one, by very definite practical concepts of Reason.

Pleasure in the Sublime in nature, regarded as a pleasure of rational contemplation, also makes claim to universal participation; but it presupposes, besides, a different feeling, viz. that of our supersensible destination, which, however obscurely, has a moral foundation. But that other men will take account of it, and will find a satisfaction in the consideration of the wild greatness of nature (that certainly cannot be ascribed to its aspect, which is rather terrifying), I am not absolutely justified in supposing. Nevertheless, in consideration of the fact that on every suitable occasion regard should be had to these moral dispositions, I can impute such satisfaction to every man, but only by means of the moral law which on its side again is based on concepts of Reason.

On the contrary, pleasure in the Beautiful is neither a pleasure of enjoyment nor of a law-abiding activity, nor even of rational contemplation in accordance with Ideas, but of mere reflection. Without having as rule any purpose or fundamental proposition, this pleasure accompanies the ordinary apprehension of an object by the Imagination, as faculty of intuition, in relation with the Understanding, as faculty of concepts, by means of a procedure of the Judgement which it must also exercise on behalf of the commonest experience; only that in the latter case it is in order to perceive an empirical objective

concept, in the former case (in aesthetical judgements) merely to perceive the accordance of the representation with the harmonious (subjectively purposive) activity of both cognitive faculties in their freedom, i.e. to feel with pleasure the mental state produced by the representation. This pleasure must necessarily depend for every one on the same conditions, for they are subjective conditions of the possibility of a cognition in general; and the proportion between these cognitive faculties requisite for Taste is also requisite for that ordinary sound Understanding which we have to presuppose in every one. Therefore he who judges with taste (if only he does not go astray in this act of consciousness and mistake matter for form or charm for beauty) may impute to every one subjective purposiveness, i.e. his satisfaction in the Object, and may assume his feeling to be universally communicable and that without the mediation of concepts.

§ 40. Of Taste as a kind of sensus communis

We often give to the Judgement, if we are considering the result rather than the act of its reflection, the name of a sense, and we speak of a sense of truth, or of a sense of decorum, of justice, etc. And yet we know, or at least we ought to know, that these concepts cannot have their place in Sense, and further, that Sense has not the least capacity for expressing universal rules; but that no representation of truth, fitness, beauty, or justice, and so forth, could come into our thoughts if we could not rise beyond Sense to higher faculties of cognition. *The common Understanding of men*, which, as the mere sound (not yet cultivated) Understanding, we regard as the least to be expected from any one claiming the name of man, has therefore the doubtful honour of being given the name of common sense (*sensus communis*); and in such a way that by the name *common* (not merely in our language, where the word actually has a double signification, but in many others) we understand *vulgar*, that which is everywhere met with, the possession of which indicates absolutely no merit or superiority.

But under the *sensus communis* we must include the Idea of a *communal* sense, i.e. of a faculty of judgement, which in its reflection takes account (*a priori*) of the mode of representation of all other men in thought; in order *as it were* to compare its judgement with the collective Reason of humanity, and thus to escape the illusion arising from the private conditions that could be so easily taken for objective, which would injuriously affect the judgement. This is done by comparing our judgement with the possible rather than the actual judgements of others, and by putting ourselves in the place of any other man, by abstracting from the limitations which contingently attach to our own judgement. This, again, is brought about by leaving aside as much as possible the matter of our representative state, i.e. sensation, and simply having respect to the formal peculiarities of our representation or representative state. Now this operation of reflection seems perhaps too artificial to be attributed to the faculty called *common* sense; but it only appears so, when expressed in abstract formulae. In itself there is nothing more natural than to abstract from charm or emotion if we are seeking a judgement that is to serve as a universal rule.

The following Maxims of common human Understanding do not properly come in here, as parts of the Critique of Taste; but yet they may serve to elucidate its fundamental propositions. They are: 1° to think for oneself; 2° to put ourselves in thought in the place of every one else; 3° always to think consistently. The first is the maxim of *unprejudiced* thought; the second of *enlarged* thought; the third of *consecutive* thought.[72*] The first is the maxim of a Reason never *passive*. The tendency to such passivity, and therefore to heteronomy of the Reason, is called *prejudice*; and the greatest prejudice of all is to represent nature as not subject to the rules that the Understanding places at its basis by means of its own essential law, i.e. *is* superstition. Deliverance from superstition is called *enlightenment*;[73*] because although this name belongs to deliverance from prejudices in general, yet superstition specially (*in sensu eminenti*) deserves to be called a prejudice. For the blindness in which superstition places us, which it even imposes on us as an obligation, makes the need of being guided by others, and the consequent passive state of our Reason,

peculiarly noticeable. As regards the second maxim of the mind, we are otherwise wont to call him limited (*borné*, the opposite of *enlarged*) whose talents attain to no great use (especially as regards intensity). But here we are not speaking of the faculty of cognition, but of the *mode of thought* which makes a purposive use thereof. However small may be the area or the degree to which a man's natural gifts reach, yet it indicates a man of *enlarged thought* if he disregards the subjective private conditions of his own judgement, by which so many others are confined, and reflects upon it from a *universal standpoint* (which he can only determine by placing himself at the standpoint of others). The third maxim, viz. that of *consecutive* thought, is the most difficult to attain, and can only be attained by the combination of both the former, and after the constant observance of them has grown into a habit. We may say that the first of these maxims is the maxim of Understanding, the second of Judgement, and the third of Reason.

I take up again the threads interrupted by this digression, and I say that Taste can be called *sensus communis* with more justice than sound Understanding can; and that the aesthetical Judgement rather than the intellectual may bear the name of a communal sense,[74]* if we are willing to use the word "sense" of an effect of mere reflection upon the mind: for then we understand by sense the feeling of pleasure. We could even define Taste as the faculty of judging of that which makes *universally communicable*, without the mediation of a concept, our feeling in a given representation.

The skill that men have in communicating their thoughts requires also a relation between the Imagination and the Understanding in order to associate intuitions with concepts, and concepts again with those concepts, which then combine in a cognition. But in that case the agreement of the two mental powers is *according to law*, under the constraint of definite concepts. Only where the Imagination in its freedom awakens the Understanding, and is put by it into regular play without the aid of concepts, does the representation communicate itself not as a thought but as an internal feeling of a purposive state of the mind.

Taste is then the faculty of judging *a priori* of the communicability of feelings that are bound up with a given representation (without the mediation of a concept).

If we could assume that the mere universal communicability of a feeling must carry in itself an interest for us with it (which, however, we are not justified in concluding from the character of a merely reflective Judgement), we should be able to explain why the feeling in the judgement of taste comes to be imputed to every one, so to speak, as a duty.

§ 41. Of the empirical interest in the Beautiful

That the judgement of taste by which something is declared beautiful must have no interest *as its determining ground* has been sufficiently established above. But it does not follow that after it has been given as a pure aesthetical judgement, no interest can be combined with it. This combination, however, can only be indirect, i.e. *taste must first of all be represented as combined with something else, in order that we may unite with the satisfaction of mere reflection upon an object a* pleasure in its existence (as that wherein all interest consists). For here also in aesthetical judgements what we say in cognitive judgements (of things in general) is valid; *a posse ad esse non valet consequentia*. This something else may be empirical, viz. an inclination proper to human nature, or intellectual, as the property of the Will of being capable of *a priori* determination by Reason. Both these involve a satisfaction in the presence of an Object, and so can lay the foundation for an interest in what has by itself pleased without reference to any interest whatever.

Empirically the Beautiful interests only in *society*. If we admit the impulse to society as natural to man, and his fitness for it, and his propension towards it, i.e. sociability, *as a requisite for man as a being destined for society, and so as a property belonging to* humanity, *we cannot escape from regarding taste as a faculty for judging everything in respect of which we can communicate our* feeling to all

other men, and so as a means of furthering that which every one's natural inclination desires.

A man abandoned by himself on a desert island would adorn neither his hut nor his person; nor would he seek for flowers, still less would he plant them, in order to adorn himself therewith. It is only in society that it occurs to him to be not merely a man, but a refined man after his kind (the beginning of civilisation). For such do we judge him to be who is both inclined and apt to communicate his pleasure to others, and who is not contented with an Object if he cannot feel satisfaction in it in common with others. Again, every one expects and requires from every one else this reference to universal communication [of pleasure], as it were from an original compact dictated by humanity itself. Thus, doubtless, in the beginning only those things which attracted the senses, e.g. colours for painting oneself (roucou among the Carabs and cinnabar among the Iroquois), flowers, mussel shells, beautiful feathers, etc., — but in time beautiful forms also (e.g. in their canoes, and clothes, etc.), which bring with them no gratification, or satisfaction of enjoyment — were important in society, and were combined with great interest. Until at last civilisation, having reached its highest point, makes out of this almost the main business of refined inclination; and sensations are only regarded as of worth in so far as they can be universally communicated. Here, although the pleasure which every one has in such an object is inconsiderable and in itself without any marked interest, yet the Idea of its universal communicability increases its worth in an almost infinite degree.

But this interest that indirectly attaches to the Beautiful through our inclination to society, and consequently is empirical, is of no importance for us here; because we have only to look to what may have a reference, although only indirectly, to the judgement of taste *a priori*. For if even in this form an interest bound up therewith should discover itself, taste would discover a transition of our judging faculty from sense-enjoyment to moral feeling; and so not only would we be the better guided in employing taste purposively, but there would be thus presented a link in the chain of the human faculties *a priori*, on which all legislation must depend. We can only say thus much about the empirical interest in objects of taste and in taste itself. Since it is subservient to inclination, however refined the latter may be, it may easily be confounded with all the inclinations and passions, which attain their greatest variety and highest degree in society; and the interest in the Beautiful, if it is grounded thereon, can only furnish a very ambiguous transition from the Pleasant to the Good. But whether this can or cannot be furthered by taste, taken in its purity, is what we now have to investigate.

§ 42. Of the intellectual interest in the Beautiful

With the best intentions those persons who refer all activities, to which their inner natural dispositions impel men, to the final purpose of humanity, viz. the morally good, have regarded the taking an interest in the Beautiful in general as a mark of good moral character. But it is not without reason that they have been contradicted by others who rely on experience; for this shows that connoisseurs in taste, not only often but generally, are given up to idle, capricious, and mischievous passions, and that they could perhaps make less claim than others to any pre-eminent attachment to moral principles. Thus it would seem that the feeling for the Beautiful is not only (as actually is the case) specifically different from the Moral feeling; but that the interest which can be bound up with it is hardly compatible with moral interest, and certainly has no inner affinity therewith.

Now I admit at once that the interest in the *Beautiful of Art* (under which I include the artificial use of natural beauties for adornment and so for vanity) furnishes no proof whatever of a disposition attached to the morally good or even inclined thereto. But on the other hand, I maintain that to take an *immediate interest* in the Beauty of Nature (not merely to have taste in judging it) is always a mark of a good soul; and that when this interest is habitual it at least indicates a frame of mind favourable to the moral feeling, if it is voluntarily bound up with the *contemplation of nature*. It is to be remembered, however, that I here

speak strictly of the beautiful *forms* of Nature, and I set aside the *charms*, that she is wont to combine so abundantly with them; because, though the interest in the latter is indeed immediate, it is only empirical.

He who by himself (and without any design of communicating his observations to others) regards the beautiful figure of a wild flower, a bird, an insect, etc., with admiration and love — who would not willingly miss it in Nature, although it may bring him some hurt, who still less wants any advantage from it — *he* takes an immediate and also an intellectual interest in the beauty of Nature. I.e. it is not merely the form of the product of nature which pleases him, but its very presence pleases him, the charms of sense having no share in this pleasure and no purpose whatever being combined with it.

But it is noteworthy that if we secretly deceived this lover of the beautiful by planting in the ground artificial flowers (which can be manufactured exactly like natural ones), or by placing artificially carved birds on the boughs of trees, and he discovered the deceit, the immediate interest that he previously took in them would disappear at once; though, perhaps, a different interest, viz. the interest of vanity in adorning his chamber with them for the eyes of others, would take its place. This thought then must accompany our intuition and reflection on beauty, viz. that nature has produced it; and on this alone is based the immediate interest that we take in it. Otherwise, there remains a mere judgement of taste, either devoid of all interest, or bound up with a mediate interest, viz. in that it has reference to society; which latter [interest] furnishes no certain indications of a morally good disposition.

This superiority of natural to artificial beauty in that it alone arouses an immediate interest, although as regards form the first may be surpassed by the second, harmonises with the refined and well-grounded habit of thought of all men who have cultivated their moral feeling. If a man who has taste enough to judge of the products of beautiful Art with the greatest accuracy and refinement willingly leaves a chamber where are to be found those beauties that minister to vanity or to any social joys, and turns to the beautiful in Nature in order to find, as it were, delight for his spirit in a train of thought that he can never completely evolve, we will regard this choice of his with veneration, and attribute to him a beautiful soul, to which no connoisseur or lover [of Art] can lay claim on account of the interest he takes in his [artistic] objects. — What now is the difference in our estimation of these two different kinds of Objects, which in the judgement of mere taste it is hard to compare in point of superiority?

We have a faculty of mere aesthetical Judgement by which we judge forms without the aid of concepts, and find a satisfaction in this mere act of judgement; this we make into a rule for every one, without this judgement either being based on or producing any interest. — On the other hand, we have also a faculty of intellectual Judgement which determines an *a priori* satisfaction for the mere forms of practical maxims (so far as they are in themselves qualified for universal legislation); this we make into a law for every one, without our judgement being based on any interest whatever, *though in this case it produces such an interest*. The pleasure or pain in the former judgement is called that of taste, in the latter, that of moral feeling.

But it also interests Reason that the Ideas (for which in moral feeling it arouses an immediate interest) should have objective reality; i.e. that nature should at least show a trace or give an indication that it contains in itself some ground for assuming a regular agreement of its products with our entirely disinterested satisfaction (which we recognise *a priori* as a law for every one, without being able to base it upon proofs). Hence Reason must take an interest in every expression on the part of nature of an agreement of this kind. Consequently, the mind cannot ponder upon the beauty of *Nature* without finding itself at the same time interested therein. But this interest is akin to moral, and he who takes such an interest in the beauties of nature can do so only in so far as he previously has firmly established his interest in the morally good. If, therefore, the beauty of Nature interests a man immediately we have reason for attributing to him, at least, a basis for a good moral disposition.

It will be said that this account of aesthetical judgements, as akin to the moral feeling, seems far too studied to be regarded as the true interpretation of that cipher through which Nature speaks to us

figuratively in her beautiful forms. However, in the first place, this immediate interest in the beautiful is actually not common; but is peculiar to those whose mental disposition either has already been cultivated in the direction of the good or is eminently susceptible of such cultivation. In that case the analogy between the pure judgement of taste which, independently of any interest, causes us to feel a satisfaction, and also represents it *a priori* as suitable to humanity in general, and the moral judgement that does the same thing from concepts without any clear, subtle, and premeditated reflection — this analogy leads to a similar immediate interest in the objects of the former as in those of the latter; only that in the one case the interest is free, in the other it is based on objective laws. To this is to be added our admiration for Nature, which displays itself in its beautiful products as Art, not merely by chance, but as it were designedly, in accordance with a regular arrangement, and as purposiveness without purpose. This latter, as we never meet with it outside ourselves, we naturally seek in ourselves; and, in fact, in that which constitutes the ultimate purpose of our being, viz. our moral destination. (Of this question as to the ground of the possibility of such natural purposiveness we shall first speak in the Teleology.)

It is easy to explain why the satisfaction in the pure aesthetical judgement in the case of beautiful Art is not combined with an immediate interest as it is in the case of beautiful Nature. For the former is either such an imitation of the latter that it reaches the point of deception and then produces the same effect as natural beauty (for which it is taken); or it is an art obviously directed designedly to our satisfaction. In the latter case the satisfaction in the product would, it is true, be brought about immediately by taste, but it would be only a mediate interest in the cause lying at its root, viz. an art that can only interest by means of its purpose and never in itself. It will, perhaps, be said that this is also the case, if an Object of nature interests us by its beauty only so far as it is associated with a moral Idea. But it is not the Object itself which immediately interests us, but its character in virtue of which it is qualified for such association, which therefore essentially belongs to it.

The charms in beautiful Nature, which are so often found, as it were, blended with beautiful forms, may be referred to modifications either of light (colours) or of sound (tones). For these are the only sensations that imply not merely a sensible feeling but also reflection upon the form of these modifications of Sense; and thus they involve in themselves as it were a language by which nature speaks to us, which thus seems to have a higher sense. Thus the white colour of lilies seems to determine the mind to Ideas of innocence; and the seven colours in order from the red to the violet seem to suggest the Ideas of (1) Sublimity, (2) Intrepidity, (3) Candour, (4) Friendliness, (5) Modesty, (6) Constancy, (7) Tenderness. The song of birds proclaims gladsomeness and contentment with existence. At least so we interpret nature, whether it have this design or not. But the interest which we here take in beauty has only to do with the beauty of Nature; it vanishes altogether as soon as we notice that we are deceived and that it is only Art — vanishes so completely that taste can no longer find the thing beautiful or sight find it charming. What is more highly praised by poets than the bewitching and beautiful note of the nightingale in a lonely copse on a still summer evening by the soft light of the moon? And yet we have instances of a merry host, where no such songster was to be found, deceiving to their great contentment the guests who were staying with him to enjoy the country air, by hiding in a bush a mischievous boy who knew how to produce this sound exactly like nature (by means of a reed or a tube in his mouth). But as soon as we are aware that it is a cheat, no one will remain long listening to the song which before was counted so charming. And it is just the same with the songs of all other birds. It must be Nature or be regarded as Nature, if we are to take an immediate *interest* in the Beautiful as such; and still more is this the case if we can require that others should take an interest in it too. This happens as a matter of fact when we regard as coarse and ignoble the mental attitude of those persons who have no *feeling* for beautiful Nature (for thus we describe a susceptibility to interest in its contemplation), and who confine themselves to eating and drinking — to the mere enjoyments of sense.

§ 43. *Of Art in general*

(1). *Art* is distinguished from Nature, as doing (*facere*) is distinguished from acting or working generally (*agere*), and as the product or result of the former is distinguished as *work* (*opus*) from the working (*effectus*) of the latter.

By right we ought only to describe as Art, production through freedom, i.e. through a will that places Reason at the basis of its actions. For although we like to call the product of bees (regularly built cells of wax) a work of art, this is only by way of analogy: as soon as we feel that this work of theirs is based on no proper rational deliberation, we say that it is a product of Nature (of instinct), and as Art only ascribe it to their Creator.

If, as sometimes happens, in searching through a bog we come upon a bit of shaped wood, we do not say: this is a product of Nature, but, of Art. Its producing cause has conceived a purpose to which the bit of wood owes its form. Elsewhere too we should see art in everything which is made so that a representation of it in its cause must have preceded its actuality (as even in the case of the bees), though the effect could not have been *thought* by the cause. But if we call anything absolutely a work of art in order to distinguish it from a natural effect, we always understand by that a work of man.

(2). *Art* regarded as human skill differs from *science* (as *can* from *know*) as a practical faculty does from a theoretical, as Technic does from Theory (as mensuration from geometry). And so what we *can* do, as soon as we merely *know* what ought to be done and therefore are sufficiently cognisant of the desired effect, is not called Art. Only that which a man, even if he knows it completely, may not therefore have the skill to accomplish, belongs to Art. *Camper*[75*] describes very exactly how the best shoes must be made, but he certainly could not make one.[76*]

(3). *Art* also differs from *handicraft*; the first is called *free*, the other may be called mercenary. We regard the first as if it could only prove purposive as play, i.e. as occupation that is pleasant in itself. But the second is regarded as if it could only be compulsorily imposed upon one as work, i.e. as occupation which is unpleasant (a trouble) in itself, and which is only attractive on account of its effect (e.g. the wage). Whether or not in the graded list of the professions we ought to count watchmakers as artists, but smiths only as handicraftsmen, would require another point of view from which to judge than that which we are here taking up; viz. [we should have to consider] the proportion of talents which must be assumed requisite in these several occupations. Whether or not, again, under the so-called seven free arts some may be included which ought to be classed as sciences, and many that are akin rather to handicraft, I shall not here discuss. But it is not inexpedient to recall that in all free arts there is yet requisite something compulsory, or, as it is called, *mechanism*, without which the *spirit*, which must be free in art and which alone inspires the work, would have no body and would evaporate altogether; e.g. in poetry there must be an accuracy and wealth of language, and also prosody and metre. [It is not inexpedient, I say, to recall this], for many modern educators believe that the best way to produce a free art is to remove it from all constraint, and thus to change it from work into mere play.

§ 44. *Of beautiful Art*

There is no Science of the Beautiful, but only a Critique of it; and there is no such thing as beautiful Science, but only beautiful Art. For as regards the first point, if it could be decided scientifically, i.e. by proofs, whether a thing was to be regarded as beautiful or not, the judgement upon beauty would belong to science and would not be a judgement of taste. And as far as the second point is concerned, a science which should be beautiful as such is a nonentity. For if in such a science we were to ask for grounds and proofs, we would be put off with tasteful phrases (bon-mots). — The source of the common expression, *beautiful science*, is without doubt nothing else than this, as it has been rightly remarked, that for beautiful

art in its entire completeness much science is requisite; e.g. a knowledge of ancient languages, a learned familiarity with classical authors, history, a knowledge of antiquities, etc. And hence these historical sciences, because they form the necessary preparation and basis for beautiful art, and also partly because under them is included the knowledge of the products of beautiful art (rhetoric and poetry), have come to be called beautiful sciences by a confusion of words.

If art which is adequate to the *cognition* of a possible object performs the actions requisite therefore merely in order to make it actual, it is *mechanical* art; but if it has for its immediate design the feeling of pleasure, it is called *aesthetical* art. This is again either *pleasant* or *beautiful*. It is the first, if its purpose is that the pleasure should accompany the representations [of the object] regarded as mere *sensations*; it is the second if they are regarded as *modes of cognition*.

Pleasant arts are those that are directed merely to enjoyment. Of this class are all those charming arts that can gratify a company at table; e.g. the art of telling stories in an entertaining way, of starting the company in frank and lively conversation, of raising them by jest and laugh to a certain pitch of merriment;[77*] when, as people say, there may be a great deal of gossip at the feast, but no one will be answerable for what he says, because they are only concerned with momentary entertainment, and not with any permanent material for reflection or subsequent discussion. (Among these are also to be reckoned the way of arranging the table for enjoyment, and, at great feasts, the management of the music. This latter is a wonderful thing. It is meant to dispose to gaiety the minds of the guests, regarded solely as a pleasant noise, without any one paying the least attention to its composition; and it favours the free conversation of each with his neighbour.) Again, to this class belong all games which bring with them no further interest than that of making the time pass imperceptibly.

On the other hand, beautiful art is a mode of representation which is purposive for itself, and which, although devoid of [definite] purpose, yet furthers the culture of the mental powers in reference to social communication.

The universal communicability of a pleasure carries with it in its very concept that the pleasure is not one of enjoyment, from mere sensation, but must be derived from reflection; and thus aesthetical art, as the art of beauty, has for standard the reflective Judgement and not sensation.

§ 45. Beautiful Art is an art, in so far as it seems like nature

In a product of beautiful art we must become conscious that it is Art and not Nature; but yet the purposiveness in its form must seem to be as free from all constraint of arbitrary rules as if it were a product of mere nature. On this feeling of freedom in the play of our cognitive faculties, which must at the same time be purposive, rests that pleasure which alone is universally communicable, without being based on concepts. Nature is beautiful because it looks like Art; and Art can only be called beautiful if we are conscious of it as Art while yet it looks like Nature.

For whether we are dealing with natural or with artificial beauty we can say generally: *That is beautiful which pleases in the mere act of judging it* (not in the sensation of it, or by means of a concept). Now art has always a definite design of producing something. But if this something were bare sensation (something merely subjective), which is to be accompanied with pleasure, the product would please in the act of judgement only by mediation of sensible feeling. And again, if the design were directed towards the production of a definite Object, then, if this were attained by art, the Object would only please by means of concepts. But in both cases the art would not please *in the mere act of judging*; i.e. it would not please as beautiful, but as mechanical.

Hence the purposiveness in the product of beautiful art, although it is designed, must not seem to be designed; i.e. *beautiful art must* look like nature, although we are conscious of it as art. But a product of art appears like nature when, although its agreement with the rules, according to which alone the product

can become what it ought to be, is *punctiliously* observed, yet this is not *painfully* apparent; [the form of the schools does not obtrude itself][78*] — it shows no trace of the rule having been before the eyes of the artist and having fettered his mental powers.

§ 46. Beautiful Art is the art of genius

Genius is the talent (or natural gift) which gives the rule to Art. Since talent, as the innate productive faculty of the artist, belongs itself to Nature, we may express the matter thus: *Genius* is the innate mental disposition (*ingenium*) *through which* Nature gives the rule to Art.

Whatever may be thought of this definition, whether it is merely arbitrary or whether it is adequate to the concept that we are accustomed to combine with the word *genius* (which is to be examined in the following paragraphs), we can prove already beforehand that according to the signification of the word here adopted, beautiful arts must necessarily be considered as arts of *genius*.

For every art presupposes rules by means of which in the first instance a product, if it is to be called artistic, is represented as possible. But the concept of beautiful art does not permit the judgement upon the beauty of a product to be derived from any rule, which has a *concept* as its determining ground, and therefore has at its basis a concept of the way in which the product is possible. Therefore, beautiful art cannot itself devise the rule according to which it can bring about its product. But since at the same time a product can never be called Art without some precedent rule, Nature in the subject must (by the harmony of its faculties) give the rule to Art; i.e. beautiful Art is only possible as a product of Genius.

We thus see (1) that genius is a *talent* for producing that for which no definite rule can be given; it is not a mere aptitude for what can be learnt by a rule. Hence *originality* must be its first property. (2) But since it also can produce original nonsense, its products must be models, i.e. exemplary; and they consequently ought not to spring from imitation, but must serve as a standard or rule of judgement for others. (3) It cannot describe or indicate scientifically how it brings about its products, but it gives the rule just as nature does. Hence the author of a product for which he is indebted to his genius does not himself know how he has come by his Ideas; and he has not the power to devise the like at pleasure or in accordance with a plan, and to communicate it to others in precepts that will enable them to produce similar products. (Hence it is probable that the word genius is derived from *genius*, that peculiar guiding and guardian spirit given to a man at his birth, from whose suggestion these original Ideas proceed.) (4) Nature by the medium of genius does not prescribe rules to Science, but to Art; and to it only in so far as it is to be beautiful Art.

§ 47. Elucidation and confirmation of the above explanation of Genius

Every one is agreed that genius is entirely opposed to the *spirit of imitation*. Now since learning is nothing but imitation, it follows that the greatest ability and teachableness (capacity) regarded *quâ* teachableness, cannot avail for genius. Even if a man thinks or invents for himself, and does not merely take in what others have taught, even if he discovers many things in art and science, this is not the right ground for calling such a (perhaps great) *head*, a genius (as opposed to him who because he can only learn and imitate is called a shallow-pate). For even these things could be learned, they lie in the natural path of him who investigates and reflects according to rules; and they do not differ specifically from what can be acquired by industry through imitation. Thus we can readily learn all that *Newton* has set forth in his immortal work on the Principles of Natural Philosophy, however great a head was required to discover it; but we cannot learn to write spirited poetry, however express may be the precepts of the art and however excellent its models. The reason is that *Newton* could make all his steps, from the first elements of geometry to his own great and profound discoveries, intuitively plain and definite as regards

consequence, not only to himself but to every one else. But a *Homer* or a *Wieland* cannot show how his Ideas, so rich in fancy and yet so full of thought, come together in his head, simply because he does not know and therefore cannot teach others. In Science then the greatest discoverer only differs in degree from his laborious imitator and pupil; but he differs specifically from him whom Nature has gifted for beautiful Art. And in this there is no depreciation of those great men to whom the human race owes so much gratitude, as compared with nature's favourites in respect of the talent for beautiful art. For in the fact that the former talent is directed to the ever-advancing greater perfection of knowledge and every advantage depending on it, and at the same time to the imparting this same knowledge to others — in this it has a great superiority over [the talent of] those who deserve the honour of being called geniuses. For art stands still at a certain point; a boundary is set to it beyond which it cannot go, which presumably has been reached long ago and cannot be extended further. Again, artistic skill cannot be communicated; it is imparted to every artist immediately by the hand of nature; and so it dies with him, until nature endows another in the same way, so that he only needs an example in order to put in operation in a similar fashion the talent of which he is conscious.

If now it is a natural gift which must prescribe its rule to art (as beautiful art), of what kind is this rule? It cannot be reduced to a formula and serve as a precept, for then the judgement upon the beautiful would be determinable according to concepts; but the rule must be abstracted from the fact, i.e. *from the product, on which others may try their own talent by using it as a model, not to be* copied *but to be* imitated. How this is possible is hard to explain. The Ideas of the artist excite like Ideas in his pupils if nature has endowed them with a like proportion of their mental powers. Hence models of beautiful art are the only means of handing down these Ideas to posterity. This cannot be done by mere descriptions, especially not in the case of the arts of speech, and in this latter classical models are only to be had in the old dead languages, now preserved only as "the learned languages."

Although mechanical and beautiful art are very different, the first being a mere art of industry and learning and the second of genius, yet there is no beautiful art in which there is not a mechanical element that can be comprehended by rules and followed accordingly, and in which therefore there must be something *scholastic* as an essential condition. For [in every art] some purpose must be conceived; otherwise we could not ascribe the product to art at all, and it would be a mere product of chance. But in order to accomplish a purpose, definite rules from which we cannot dispense ourselves are requisite. Now since the originality of the talent constitutes an essential (though not the only) element in the character of genius, shallow heads believe that they cannot better show themselves to be full-blown geniuses than by throwing off the constraint of all rules; they believe, in effect, that one could make a braver show on the back of a wild horse than on the back of a trained animal. Genius can only furnish rich *material* for products of beautiful art; its execution and its *form* require talent cultivated in the schools, in order to make such a use of this material as will stand examination by the Judgement. But it is quite ridiculous for a man to speak and decide like a genius in things which require the most careful investigation by Reason. One does not know whether to laugh more at the impostor who spreads such a mist round him that we cannot clearly use our Judgement and so use our Imagination the more, or at the public which naïvely imagines that his inability to cognise clearly and to comprehend the masterpiece before him arises from new truths crowding in on him in such abundance that details (duly weighed definitions and accurate examination of fundamental propositions) seem but clumsy work.

§ 48. Of the relation of Genius to Taste

For *judging* of beautiful objects as such, *taste* is requisite; but for beautiful art, i.e. *for the* production *of such objects,* genius is requisite.

If we consider genius as the talent for beautiful art (which the special meaning of the word implies) and

in this point of view analyse it into the faculties which must concur to constitute such a talent, it is necessary in the first instance to determine exactly the difference between natural beauty, the judging of which requires only Taste, and artificial beauty, whose possibility (to which reference must be made in judging such an object) requires Genius.

A natural beauty is a *beautiful thing*; artificial beauty is a *beautiful representation* of a thing.

In order to judge of a natural beauty as such I need not have beforehand a concept of what sort of thing the object is to be; i.e. I need not know its material purposiveness (the purpose), but its mere form pleases by itself in the act of judging it without any knowledge of the purpose. But if the object is given as a product of art, and as such is to be declared beautiful, then, because art always supposes a purpose in the cause (and its causality), there must be at bottom in the first instance a concept of what the thing is to be. And as the agreement of the manifold in a thing with its inner destination, its purpose, constitutes the perfection of the thing, it follows that in judging of artificial beauty the perfection of the thing must be taken into account; but in judging of natural beauty (as *such*) there is no question at all about this. — It is true that in judging of objects of nature, especially objects endowed with life, e.g. a man or a horse, their objective purposiveness also is commonly taken into consideration in judging of their beauty; but then the judgement is no longer purely aesthetical, i.e. a mere judgement of taste. Nature is no longer judged inasmuch as it appears like art, but in so far as it *is* actual (although superhuman) art; and the teleological judgement serves as the basis and condition of the aesthetical, as a condition to which the latter must have respect. In such a case, e.g. if it is said "that is a beautiful woman," we think nothing else than this: nature represents in her figure the purposes in view in the shape of a woman's figure. For we must look beyond the mere form to a concept, if the object is to be thought in such a way by means of a logically conditioned aesthetical judgement.

Beautiful art shows its superiority in this, that it describes as beautiful things which may be in nature ugly or displeasing.[79*] The Furies, diseases, the devastations of war, etc., may [even regarded as calamitous],[80*] be described as very beautiful, and even represented in a picture. There is only one kind of ugliness which cannot be represented in accordance with nature, without destroying all aesthetical satisfaction and consequently artificial beauty; viz. that which excites *disgust*. For in this peculiar sensation, which rests on mere imagination, the object is represented as it were obtruding itself for our enjoyment while we strive against it with all our might. And the artistic representation of the object is no longer distinguished from the nature of the object itself in our sensation, and thus it is impossible that it can be regarded as beautiful. The art of sculpture again, because in its products art is almost interchangeable with nature, excludes from its creations the immediate representation of ugly objects; e.g. it represents death by a beautiful genius, the warlike spirit by Mars, and permits [all such things] to be represented only by an allegory or attribute[81*] that has a pleasing effect, and thus only indirectly by the aid of the interpretation of Reason, and not for the mere aesthetical Judgement.

So much for the beautiful representation of an object, which is properly only the form of the presentation of a concept, and the means by which the latter is communicated universally. — But to give this form to the product of beautiful art, mere taste is requisite. By taste, after he has exercised and corrected it by manifold examples from art or nature, the artist checks his work; and after many, often toilsome, attempts to content taste he finds the form which satisfies him. Hence this form is not, as it were, a thing of inspiration or the result of a free swing of the mental powers, but of a slow and even painful process of improvement, by which he seeks to render it adequate to his thought, without detriment to the freedom of the play of his powers.

But taste is merely a judging and not a productive faculty; and what is appropriate to it is not therefore a work of beautiful art. It may be only a product belonging to useful and mechanical art or even to science, produced according to definite rules that can be learned and must be exactly followed. But the pleasing form that is given to it is only the vehicle of communication, and a mode, as it were, of presenting it, in

respect of which we remain free to a certain extent, although it is combined with a definite purpose. Thus we desire that table appointments, a moral treatise, even a sermon, should have in themselves this form of beautiful art, without it seeming to be *sought*: but we do not therefore call these things works of beautiful art. Under the latter class are reckoned a poem, a piece of music, a picture gallery, etc.; and in some would-be works of beautiful art we find genius without taste, while in others we find taste without genius.

§ 49. Of the faculties of the mind that constitute Genius

We say of certain products of which we expect that they should at least in part appear as beautiful art, they are without *spirit*[82*]; although we find nothing to blame in them on the score of taste. A poem may be very neat and elegant, but without spirit. A history may be exact and well arranged, but without spirit. A festal discourse may be solid and at the same time elaborate, but without spirit. Conversation is often not devoid of entertainment, but yet without spirit: even of a woman we say that she is pretty, an agreeable talker, and courteous, but without spirit. What then do we mean by spirit?

Spirit, in an aesthetical sense, is the name given to the animating principle of the mind. But that whereby this principle animates the soul, the material which it applies to that [purpose], is that which puts the mental powers purposively into swing, i.e. into such a play as maintains itself and strengthens the [mental] powers in their exercise.

Now I maintain that this principle is no other than the faculty of presenting *aesthetical Ideas*. And by an aesthetical Idea I understand that representation of the Imagination which occasions much thought, without, however, any definite thought, i.e. *any* concept, being capable of being adequate to it; it consequently cannot be completely compassed and made intelligible by language. — We easily see that it is the counterpart (pendant) of a *rational Idea*, which conversely is a concept to which no *intuition* (or representation of the Imagination) can be adequate.

The Imagination (as a productive faculty of cognition) is very powerful in creating another nature, as it were, out of the material that actual nature gives it. We entertain ourselves with it when experience proves too commonplace, and by it we remould experience, always indeed in accordance with analogical laws, but yet also in accordance with principles which occupy a higher place in Reason (laws too which are just as natural to us as those by which Understanding comprehends empirical nature). Thus we feel our freedom from the law of association (which attaches to the empirical employment of Imagination), so that the material which we borrow from nature in accordance with this law can be worked up into something different which surpasses nature.

Such representations of the Imagination we may call *Ideas*, partly because they at least strive after something which lies beyond the bounds of experience, and so seek to approximate to a presentation of concepts of Reason (intellectual Ideas), thus giving to the latter the appearance of objective reality, — but especially because no concept can be fully adequate to them as internal intuitions. The poet ventures to realise to sense, rational Ideas of invisible beings, the kingdom of the blessed, hell, eternity, creation, etc.; or even if he deals with things of which there are examples in experience, — e.g. death, envy and all vices, also love, fame, and the like, — he tries, by means of Imagination, which emulates the play of Reason in its quest after a maximum, to go beyond the limits of experience and to present them to Sense with a completeness of which there is no example in nature. It is, properly speaking, in the art of the poet, that the faculty of aesthetical Ideas can manifest itself in its full measure. But this faculty, considered in itself, is properly only a talent (of the Imagination).

If now we place under a concept a representation of the Imagination belonging to its presentation, but which occasions solely by itself more thought than can ever be comprehended in a definite concept, and which therefore enlarges aesthetically the concept itself in an unbounded fashion, — the Imagination is here creative, and it brings the faculty of intellectual Ideas (the Reason) into movement; i.e. a movement,

occasioned by a representation, towards more thought (though belonging, no doubt, to the concept of the object) than can be grasped in the representation or made clear.

Those forms which do not constitute the presentation of a given concept itself but only, as approximate representations of the Imagination, express the consequences bound up with it and its relationship to other concepts, are called (aesthetical) *attributes* of an object, whose concept as a rational Idea cannot be adequately presented. Thus Jupiter's eagle with the lightning in its claws is an attribute of the mighty king of heaven, as the peacock is of its magnificent queen. They do not, like *logical attributes*, represent what lies in our concepts of the sublimity and majesty of creation, but something different, which gives occasion to the Imagination to spread itself over a number of kindred representations, that arouse more thought than can be expressed in a concept determined by words. They furnish an *aesthetical Idea*, which for that rational Idea takes the place of logical presentation; and thus as their proper office they enliven the mind by opening out to it the prospect into an illimitable field of kindred representations. But beautiful art does this not only in the case of painting or sculpture (in which the term "attribute" is commonly employed): poetry and rhetoric also get the spirit that animates their works simply from the aesthetical attributes of the object, which accompany the logical and stimulate the Imagination, so that it thinks more by their aid, although in an undeveloped way, than could be comprehended in a concept and therefore in a definite form of words. — For the sake of brevity I must limit myself to a few examples only.

When the great King[83*] in one of his poems expresses himself as follows:

"Oui, finissons sans trouble et mourons sans regrets,
En laissant l'univers comblé de nos bienfaits.
Ainsi l'astre du jour au bout de sa carrière,
Répand sur l'horizon une douce lumière;
Et les derniers rayons qu'il darde dans les airs,
Sont les derniers soupirs qu'il donne à l'univers;"

he quickens his rational Idea of a cosmopolitan disposition at the end of life by an attribute which the Imagination (in remembering all the pleasures of a beautiful summer day that are recalled at its close by a serene evening) associates with that representation, and which excites a number of sensations and secondary representations for which no expression is found. On the other hand, an intellectual concept may serve conversely as an attribute for a representation of sense and so can quicken this latter by means of the Idea of the supersensible; but only by the aesthetical [element], that subjectively attaches to the concept of the latter, being here employed. Thus, for example, a certain poet[84*] says, in his description of a beautiful morning:

"The sun arose
As calm from virtue springs."

The consciousness of virtue, even if one only places oneself in thought in the position of a virtuous man, diffuses in the mind a multitude of sublime and restful feelings and a boundless prospect of a joyful future, to which no expression measured by a definite concept completely attains.[85*]

In a word the aesthetical Idea is a representation of the Imagination associated with a given concept, which is bound up with such a multiplicity of partial representations in its free employment, that for it no expression marking a definite concept can be found; and such a representation, therefore, adds to a concept much ineffable thought, the feeling of which quickens the cognitive faculties, and with language, which is the mere letter, binds up spirit also.

The mental powers, therefore, whose union (in a certain relation) constitutes *genius* are Imagination

and Understanding. In the employment of the Imagination for cognition it submits to the constraint of the Understanding and is subject to the limitation of being conformable to the concept of the latter. On the other hand, in an aesthetical point of view it is free to furnish unsought, over and above that agreement with a concept, abundance of undeveloped material for the Understanding; to which the Understanding paid no regard in its concept, but which it applies, though not objectively for cognition, yet subjectively to quicken the cognitive powers and therefore also indirectly to cognitions. Thus genius properly consists in the happy relation [between these faculties], which no science can teach and no industry can learn, by which Ideas are found for a given concept; and on the other hand, we thus find for these Ideas the *expression*, by means of which the subjective state of mind brought about by them, as an accompaniment of the concept, can be communicated to others. The latter talent is properly speaking what is called spirit; for to express the ineffable element in the state of mind implied by a certain representation and to make it universally communicable — whether the expression be in speech or painting or statuary — this requires a faculty of seizing the quickly passing play of Imagination and of unifying it in a concept (which is even on that account original and discloses a new rule that could not have been inferred from any preceding principles or examples), that can be communicated without any constraint [of rules].[86][*]

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If after this analysis we look back to the explanation given above of what is called *genius*, we find: *first*, that it is a talent for Art, not for Science, in which clearly known rules must go beforehand and determine the procedure. *Secondly*, as an artistic talent it presupposes a definite concept of the product, as the purpose, and therefore Understanding; but it also presupposes a representation (although an indeterminate one) of the material, i.e. of the intuition, for the presentment of this concept; and, therefore, a relation between the Imagination and the Understanding. *Thirdly*, it shows itself not so much in the accomplishment of the proposed purpose in a presentment of a definite *concept*, as in the enunciation or expression of *aesthetical Ideas*, which contain abundant material for that very design; and consequently it represents the Imagination as free from all guidance of rules and yet as purposive in reference to the presentment of the given concept. Finally, in the *fourth* place, the unsought undesigned subjective purposiveness in the free accordance of the Imagination with the legality of the Understanding presupposes such a proportion and disposition of these faculties as no following of rules, whether of science or of mechanical imitation, can bring about, but which only the nature of the subject can produce.

In accordance with these suppositions genius is the exemplary originality of the natural gifts of a subject in the *free* employment of his cognitive faculties. In this way the product of a genius (as regards what is to be ascribed to genius and not to possible learning or schooling) is an example, not to be imitated (for then that which in it is genius and constitutes the spirit of the work would be lost), but to be followed, by another genius; whom it awakens to a feeling of his own originality and whom it stirs so to exercise his art in freedom from the constraint of rules, that thereby a new rule is gained for art, and thus his talent shows itself to be exemplary. But because a genius is a favourite of nature and must be regarded by us as a rare phenomenon, his example produces for other good heads a school, i.e. a methodical system of teaching according to rules, so far as these can be derived from the peculiarities of the products of his spirit. For such persons beautiful art is so far imitation, to which nature through the medium of a genius supplied the rule.

But this imitation becomes a mere *aping*, if the scholar *copies* everything down to the deformities, which the genius must have let pass only because he could not well remove them without weakening his Idea. This mental characteristic is meritorious only in the case of a genius. A certain *audacity* in expression — and in general many a departure from common rules — becomes him well, but it is in no way worthy of imitation; it always remains a fault in itself which we must seek to remove, though the

genius is as it were privileged to commit it, because the inimitable rush of his spirit would suffer from over-anxious carefulness. *Mannerism* is another kind of aping, viz. of mere *peculiarity* (originality) in general; by which a man separates himself as far as possible from imitators, without however possessing the talent to be at the same time *exemplary*. — There are indeed in general two ways (*modi*) in which such a man may put together his notions of expressing himself; the one is called a *manner* (*modus aestheticus*), the other a *method* (*modus logicus*). They differ in this, that the former has no other standard than the *feeling* of unity in the presentment, but the latter follows definite *principles*; hence the former alone avails for beautiful art. But an artistic product is said to show *mannerism* only when the exposition of the artist's Idea is *founded* on its very singularity, and is not made appropriate to the Idea itself. The ostentatious (*précieux*), contorted, and affected [manner, adopted] to differentiate oneself from ordinary persons (though devoid of spirit) is like the behaviour of a man of whom we say, that he hears himself talk, or who stands and moves about as if he were on a stage in order to be stared at; this always betrays a bungler.

§ 50. Of the combination of Taste with Genius in the products of beautiful Art

To ask whether it is more important for the things of beautiful art that Genius or Taste should be displayed, is the same as to ask whether in it more depends on Imagination or on Judgement. Now, since in respect of the first an art is rather said to be *full of spirit*, but only deserves to be called a *beautiful* art on account of the second; this latter is at least, as its indispensable condition (*conditio sine qua non*), the most important thing to which one has to look in the judging of art as beautiful art. Abundance and originality of Ideas are less necessary to beauty than the accordance of the Imagination in its freedom with the conformity to law of the Understanding. For all the abundance of the former produces in lawless freedom nothing but nonsense; on the other hand, the Judgement is the faculty by which it is adjusted to the Understanding.

Taste, like the Judgement in general, is the discipline (or training) of Genius; it clips its wings closely, and makes it cultured and polished; but, at the same time, it gives guidance as to where and how far it may extend itself, if it is to remain purposive. And while it brings clearness and order into the multitude of the thoughts, it makes the Ideas susceptible of being permanently and, at the same time, universally assented to, and capable of being followed by others, and of an ever-progressive culture. If, then, in the conflict of these two properties in a product something must be sacrificed, it should be rather on the side of genius; and the Judgement, which in the things of beautiful art gives its decision from its own proper principles, will rather sacrifice the freedom and wealth of the Imagination than permit anything prejudicial to the Understanding.

For beautiful art, therefore, *Imagination*, *Understanding*, *Spirit*, and *Taste* are requisite.[87*]

§ 51. Of the division of the beautiful arts

We may describe beauty in general (whether natural or artificial) as the *expression* of aesthetical Ideas; only that in beautiful Art this Idea must be occasioned by a concept of the Object; whilst in beautiful Nature the mere reflection upon a given intuition, without any concept of what the object is to be, is sufficient for the awakening and communicating of the Idea of which that Object is regarded as the *expression*.

If, then, we wish to make a division of the beautiful arts, we cannot choose a more convenient principle, at least tentatively, than the analogy of art with the mode of expression of which men avail themselves in speech, in order to communicate to one another as perfectly as possible not merely their concepts but also their sensations.[88*] — This is done by *word*, *deportment*, and *tone* (articulation,

gesticulation, and modulation). It is only by the combination of these three kinds of expression that communication between the speaker [and his hearers] can be complete. For thus thought, intuition, and sensation are transmitted to others simultaneously and conjointly.

There are, therefore, only three kinds of beautiful arts; the arts of *speech*, the *formative* arts, and the art of the *play of sensations* (as external sensible impressions). We may also arrange a division by dichotomy; thus beautiful art may be divided into the art of expression of thoughts and of intuitions; and these further subdivided in accordance with their form or their matter (sensation). But this would appear to be too abstract, and not so accordant with ordinary concepts.

(1) The arts of SPEECH are *rhetoric* and *poetry*. *Rhetoric* is the art of carrying on a serious business of the Understanding as if it were a free play of the Imagination; *poetry*, the art of conducting a free play of the Imagination as if it were a serious business of the Understanding.

The *orator*, then, promises a serious business, and in order to entertain his audience conducts it as if it were a mere *play* with Ideas. The *poet* merely promises an entertaining play with Ideas, and yet it has the same effect upon the Understanding as if he had only intended to carry on its business. The combination and harmony of both cognitive faculties, Sensibility and Understanding, which cannot dispense with one another, but which yet cannot well be united without constraint and mutual prejudice, must appear to be undesigned and so to be brought about by themselves: otherwise it is not *beautiful* art. Hence, all that is studied and anxious must be avoided in it, for beautiful art must be free art in a double sense. It is not a work like that of a tradesman, the magnitude of which can be judged, exacted, or paid for, according to a definite standard; and again, though the mind is occupied, still it feels itself contented and stimulated, without looking to any other purpose (independently of reward.)

The orator therefore gives something which he does not promise, viz. an entertaining play of the Imagination; but he also fails to supply what he did promise, which is indeed his announced business, viz. the purposive occupation of the Understanding. On the other hand, the poet promises little and announces a mere play with Ideas; but he supplies something which is worth occupying ourselves with, because he provides in this play food for the Understanding, and by the aid of Imagination gives life to his concepts. [Thus the orator on the whole gives less, the poet more, than he promises.][89*]

(2) The FORMATIVE arts, or those by which expression is found for Ideas in *sensible intuition* (not by representations of mere Imagination that are aroused by words), are either arts of *sensible truth* or of *sensible illusion*. The former is called *Plastic*, the latter *Painting*. Both express Ideas by figures in space; the former makes figures cognisable by two senses, sight and touch (although not by the latter as far as beauty is concerned); the latter only by one, the first of these. The aesthetical Idea (the archetype or original image) is fundamental for both in the Imagination, but the figure which expresses this (the ectype or copy) is either given in its bodily extension (as the object itself exists), or as it paints itself on the eye (according to its appearance when projected on a flat surface). In the first case[90*] the condition given to reflection may be either the reference to an actual purpose or only the semblance of it.

To *Plastic*, the first kind of beautiful formative Art, belong *Sculpture* and *Architecture*. The *first* presents corporeally concepts of things, *as they might have existed in nature* (though as beautiful art it has regard to aesthetical purposiveness). The *second* is the art of presenting concepts of things that are possible *only through Art*, and whose form has for its determining ground not nature but an arbitrary purpose, with the view of presenting them with aesthetical purposiveness. In the latter the chief point is a certain *use* of the artistic object, by which condition the aesthetical Ideas are limited. In the former the main design is the mere *expression* of aesthetical Ideas. Thus statues of men, gods, animals, etc., are of the first kind; but temples, splendid buildings for public assemblies, even dwelling-houses, triumphal arches, columns, mausoleums, and the like, erected in honourable remembrance, belong to Architecture. Indeed all house furniture (upholsterer's work and such like things which are for use) may be reckoned under this art; because the suitability of a product for a certain use is the essential thing in an

architectural work. On the other hand, a mere *piece of sculpture*, which is simply made for show and which is to please in itself, is as a corporeal presentation a mere imitation of nature, though with a reference to aesthetical Ideas; in it *sensible truth* is not to be carried so far that the product ceases to look like art and looks like a product of the elective will.

Painting, as the second kind of formative art, which presents a *sensible illusion* artificially combined with Ideas, I would divide into the art of the beautiful *depicting of nature* and that of the beautiful *arrangement of its products*. The first is *painting proper*, the second is the art of *landscape gardening*. The first gives only the illusory appearance of corporeal extension; the second gives this in accordance with truth, but only the appearance of utility and availableness for other purposes than the mere play of the Imagination in the contemplation of its forms.[91*] This latter is nothing else than the ornamentation of the soil with a variety of those things (grasses, flowers, shrubs, trees, even ponds, hillocks, and dells) which nature presents to an observer, only arranged differently and in conformity with certain Ideas. But, again, the beautiful arrangement of corporeal things is only apparent to the eye, like painting; the sense of touch cannot supply any intuitive presentation of such a form. Under painting in the wide sense I would reckon the decoration of rooms by the aid of tapestry, bric-a-brac, and all beautiful furniture which is merely available to be *looked* at; and the same may be said of the art of tasteful dressing (with rings, snuff-boxes, etc.). For a bed of various flowers, a room filled with various ornaments (including under this head even ladies' finery), make at a fête a kind of picture; which, like pictures properly so-called (that are not intended to *teach* either history or natural science), has in view merely the entertainment of the Imagination in free play with Ideas, and the occupation of the aesthetical Judgement without any definite purpose. The detailed work in all this decoration may be quite distinct in the different cases and may require very different artists; but the judgement of taste upon whatever is beautiful in these various arts is always determined in the same way: viz. it only judges the forms (without any reference to a purpose) as they present themselves to the eye either singly or in combination, according to the effect they produce upon the Imagination. — But that formative art may be compared (by analogy) with deportment in speech is justified by the fact that the spirit of the artist supplies by these figures a bodily expression to his thought and its mode, and makes the thing itself as it were speak in mimic language. This is a very common play of our fancy, which attributes to lifeless things a spirit suitable to their form by which they speak to us.

(3) The art of the BEAUTIFUL PLAY OF SENSATIONS (externally stimulated), which admits at the same time of universal communication, can be concerned with nothing else than the proportion of the different degrees of the disposition (tension) of the sense, to which the sensation belongs, i.e. with its tone. In this far-reaching signification of the word it may be divided into the artistic play of the sensations of hearing and sight, i.e. *into* Music *and the* Art of colour. — It is noteworthy that these two senses, besides their susceptibility for impressions so far as these are needed to gain concepts of external objects, are also capable of a peculiar sensation bound up therewith, of which we cannot strictly decide whether it is based on sense or reflection. This susceptibility may sometimes be wanting, although in other respects the sense, as regards its use for the cognition of Objects, is not at all deficient but is peculiarly fine. That is, we cannot say with certainty whether colours or tones (sounds) are merely pleasant sensations or whether they form in themselves a beautiful play of sensations, and as such bring with them in aesthetical judgement a satisfaction in their form. If we think of the velocity of the vibrations of light, or in the second case of the air, which probably far surpasses all our faculty of judging immediately in perception the time interval between them, we must believe that it is only the *effect* of these vibrations upon the elastic parts of our body that is felt, but that the *time interval* between them is not remarked or brought into judgement; and thus that only pleasantness and not beauty of composition is bound up with colours and tones. But on the other hand, *first*, we think of the mathematical [element] which enables us to pronounce on the proportion between these oscillations in music and thus to judge of them; and by analogy with which we

easily may judge of the distinctions between colours. *Secondly*, we recall instances (although they are rare) of men who with the best sight in the world cannot distinguish colours, and with the sharpest hearing cannot distinguish tones; whilst for those who can do this the perception of an altered quality (not merely of the degree of sensation) in the different intensities in the scale of colours and tones is definite; and further, the very number of these is fixed by *intelligible* differences. Thus we may be compelled to see that both kinds of sensations are to be regarded not as mere sensible impressions, but as the effects of a judgement passed upon the form in the play of divers sensations. The difference in our definition, according as we adopt the one or the other opinion in judging of the grounds of Music, would be just this: either, as we have done, we must explain it as the beautiful play of sensations (of hearing), or else as a play of *pleasant* sensations. According to the former mode of explanation music is represented altogether as a *beautiful* art; according to the latter, as a *pleasant* art (at least in part).

§ 52. Of the combination of beautiful arts in one and the same product

Rhetoric may be combined with a pictorial presentation of its subjects and objects in a *theatrical piece*; poetry may be combined with music in a *song*, and this again with pictorial (theatrical) presentation in an *opera*; the play of sensations in music may be combined with the play of figures in the *dance*, and so on. Even the presentation of the sublime, so far as it belongs to beautiful art, may combine with beauty in a *tragedy in verse*, in a *didactic poem*, in an *oratorio*; and in these combinations beautiful art is yet more artistic. Whether it is also more beautiful may in some of these cases be doubted (since so many different kinds of satisfaction cross one another). Yet in all beautiful art the essential thing is the form, which is purposive as regards our observation and judgement, where the pleasure is at the same time cultivation and disposes the spirit to Ideas, and consequently makes it susceptible of still more of such pleasure and entertainment. The essential element is not the matter of sensation (charm or emotion), which has only to do with enjoyment; this leaves behind nothing in the Idea, and it makes the spirit dull, the object gradually distasteful, and the mind, on account of its consciousness of a disposition that conflicts with purpose in the judgement of Reason, discontented with itself and peevish.

If the beautiful arts are not brought into more or less close combination with moral Ideas, which alone bring with them a self-sufficing satisfaction, this latter fate must ultimately be theirs. They then serve only as a distraction, of which we are the more in need the more we avail ourselves of them to disperse the discontent of the mind with itself; so that we thus render ourselves ever more useless and ever more discontented. The beauties of nature are generally of most benefit in this point of view, if we are early accustomed to observe, appreciate, and admire them.

§ 53. Comparison of the respective aesthetical worth of the beautiful arts

Of all the arts *poetry* (which owes its origin almost entirely to genius and will least be guided by precept or example) maintains the first rank. It expands the mind by setting the Imagination at liberty; and by offering within the limits of a given concept amid the unbounded variety of possible forms accordant therewith, that which unites the presentment of this concept with a wealth of thought, to which no verbal expression is completely adequate; and so rising aesthetically to Ideas. It strengthens the mind by making it feel its faculty — free, spontaneous and independent of natural determination — of considering and judging nature as a phenomenon in accordance with aspects which it does not present in experience either for Sense or Understanding, and therefore of using it on behalf of, and as a sort of schema for, the supersensible. It plays with illusion, which it produces at pleasure, but without deceiving by it; for it declares its exercise to be mere play, which however can be purposively used by the Understanding. — Rhetoric, in so far as this means the art of persuasion, i.e. of deceiving by a beautiful show (*ars*

oratoria), and not mere elegance of speech (eloquence and style), is a Dialectic, which borrows from poetry only so much as is needful to win minds to the side of the orator before they have formed a judgement, and to deprive them of their freedom; it cannot therefore be recommended either for the law courts or for the pulpit. For if we are dealing with civil law, with the rights of individual persons, or with lasting instruction and determination of people's minds to an accurate knowledge and a conscientious observance of their duty, it is unworthy of so important a business to allow a trace of any exuberance of wit and imagination to appear, and still less any trace of the art of talking people over and of captivating them for the advantage of any chance person. For although this art may sometimes be directed to legitimate and praiseworthy designs, it becomes objectionable, when in this way maxims and dispositions are spoiled in a subjective point of view, though the action may objectively be lawful. It is not enough to do what is right; we should practise it solely on the ground that it is right. Again, the mere concept of this species of matters of human concern, when clear and combined with a lively presentation of it in examples, without any offence against the rules of euphony of speech or propriety of expression, has by itself for Ideas of Reason (which collectively constitute eloquence), sufficient influence upon human minds; so that it is not needful to add the machinery of persuasion, which, since it can be used equally well to beautify or to hide vice and error, cannot quite lull the secret suspicion that one is being artfully overreached. In poetry everything proceeds with honesty and candour. It declares itself to be a mere entertaining play of the Imagination, which wishes to proceed as regards form in harmony with the laws of the Understanding; and it does not desire to steal upon and ensnare the Understanding by the aid of sensible presentation.[92][*]

After poetry, *if we are to deal with charm and mental movement*, I would place that art which comes nearest to the art of speech and can very naturally be united with it, viz. *the art of tone*. For although it speaks by means of mere sensations without concepts, and so does not, like poetry, leave anything over for reflection, it yet moves the mind in a greater variety of ways and more intensely, although only transitorily. It is, however, rather enjoyment than culture (the play of thought that is incidentally excited by its means is merely the effect of a kind of mechanical association); and in the judgement of Reason it has less worth than any other of the beautiful arts. Hence, like all enjoyment, it desires constant change, and does not bear frequent repetition without producing weariness. Its charm, which admits of universal communication, appears to rest on this, that every expression of speech has in its context a tone appropriate to the sense. This tone indicates more or less an affection of the speaker, and produces it also in the hearer; which affection excites in its turn in the hearer the Idea that is expressed in speech by the tone in question. Thus as modulation is as it were a universal language of sensations intelligible to every man, the art of tone employs it by itself alone in its full force, viz. as a language of the affections, and thus communicates universally according to the laws of association the aesthetical Ideas naturally combined therewith. Now these aesthetical Ideas are not concepts or determinate thoughts. Hence the form of the composition of these sensations (harmony and melody) only serves instead of the form of language, by means of their proportionate accordance, to express the aesthetical Idea of a connected whole of an unspeakable wealth of thought, corresponding to a certain theme which produces the dominating affection in the piece. This can be brought mathematically under certain rules, because it rests in the case of tones on the relation between the number of vibrations of the air in the same time, so far as these tones are combined simultaneously or successively. To this mathematical form, although not represented by determinate concepts, alone attaches the satisfaction that unites the mere reflection upon such a number of concomitant or consecutive sensations with this their play, as a condition of its beauty valid for every man. It is this alone which permits Taste to claim in advance a rightful authority over every one's judgement.

But in the charm and mental movement produced by Music, Mathematic has certainly not the slightest share. It is only the indispensable condition (*conditio sine qua non*) of that proportion of the impressions

in their combination and in their alternation by which it becomes possible to gather them together and prevent them from destroying one another, and to harmonise them so as to produce a continual movement and animation of the mind, by means of affections consonant therewith, and thus a delightful personal enjoyment.

If, on the other hand, we estimate the worth of the Beautiful Arts by the culture they supply to the mind, and take as a standard the expansion of the faculties which must concur in the Judgement for cognition, Music will have the lowest place among them (as it has perhaps the highest among those arts which are valued for their pleasantness), because it merely plays with sensations. The formative arts are far before it in this point of view; for in putting the Imagination in a free play, which is also accordant with the Understanding, they at the same time carry on a serious business. This they do by producing a product that serves for concepts as a permanent self-commendatory vehicle for promoting their union with sensibility and thus, as it were, the urbanity of the higher cognitive powers. These two species of art take quite different courses; the first proceeds from sensations to indeterminate Ideas, the second from determinate Ideas to sensations. The latter produce *permanent*, the former only *transitory* impressions. The Imagination can recall the one and entertain itself pleasantly therewith; but the other either vanish entirely, or if they are recalled involuntarily by the Imagination they are rather wearisome than pleasant.[93*] Besides, there attaches to Music a certain want of urbanity from the fact that, chiefly from the character of its instruments, it extends its influence further than is desired (in the neighbourhood), and so as it were obtrudes itself, and does violence to the freedom of others who are not of the musical company. The Arts which appeal to the eyes do not do this; for we need only turn our eyes away, if we wish to avoid being impressed. The case of music is almost like that of the delight derived from a smell that diffuses itself widely. The man who pulls his perfumed handkerchief out of his pocket attracts the attention of all round him, even against their will, and he forces them, if they are to breathe at all, to enjoy the scent; hence this habit has gone out of fashion.[94*]

Among the formative arts I would give the palm to painting; partly because as the art of delineation it lies at the root of all the other formative arts, and partly because it can penetrate much further into the region of Ideas, and can extend the field of intuition in conformity with them further than the others can.

§ 54. Remark

As we have often shown, there is an essential difference between *what satisfies simply in the act of judging it*, and that which *gratifies* (pleases in sensation). We cannot ascribe the latter to every one, as we can the former. Gratification (the causes of which may even be situate in Ideas) appears always to consist in a feeling of the furtherance of the whole life of the man, and consequently, also of his bodily well-being, i.e. his health; so that *Epicurus*, who gave out that all gratification was at bottom bodily sensation, may, perhaps, not have been wrong, but only misunderstood himself when he reckoned intellectual and even practical satisfaction under gratification. If we have this distinction in view we can explain how a gratification may dissatisfy the man who sensibly feels it (e.g. the joy of a needy but well-meaning man at becoming the heir of an affectionate but penurious father); or how a deep grief may satisfy the person experiencing it (the sorrow of a widow at the death of her excellent husband); or how a gratification can in addition satisfy (as in the sciences that we pursue); or how a grief (e.g. hatred, envy, revenge) can moreover dissatisfy. The satisfaction or dissatisfaction here depends on Reason, and is the same as *approbation* or *disapprobation*; but gratification and grief can only rest on the feeling or prospect of a possible (on whatever grounds) well-being *or* its opposite.

All changing free play of sensations (that have no design at their basis) gratifies, because it promotes the feeling of health. In the judgement of Reason we may or may not have any satisfaction in its object or even in this gratification; and this latter may rise to the height of an affection, although we take no interest

in the object, at least none that is proportionate to the degree of the affection. We may subdivide this free play of sensations into the *play of fortune* [games of chance], the *play of tone* [music], and the *play of thought* [wit]. The *first* requires an *interest*, whether of vanity or of selfishness; which, however, is not nearly so great as the interest that attaches to the way in which we are striving to procure it. The *second* requires merely the change of *sensations*, all of which have a relation to affection, though they have not the degree of affection, and excite aesthetical Ideas. The *third* springs merely from the change of representations in the Judgement; by it, indeed, no thought that brings an interest with it is produced, but yet the mind is animated thereby.

How much gratification games must afford, without any necessity of placing at their basis an interested design, all our evening parties show; for hardly any of them can be carried on without a game. But the affections of hope, fear, joy, wrath, scorn, are put in play by them, alternating every moment; and they are so vivid that by them, as by a kind of internal motion, all the vital processes of the body seem to be promoted, as is shown by the mental vivacity excited by them, although nothing is gained or learnt thereby. But as the beautiful does not enter into games of chance, we will here set them aside. On the other hand, music and that which excites laughter are two different kinds of play with aesthetical Ideas, or with representations of the Understanding through which ultimately nothing is thought; and yet they can give lively gratification merely by their changes. Thus we recognise pretty clearly that the animation in both cases is merely bodily, although it is excited by Ideas of the mind; and that the feeling of health produced by a motion of the intestines corresponding to the play in question makes up that whole gratification of a gay party, which is regarded as so refined and so spiritual. It is not the judging the harmony in tones or sallies of wit, — which serves only in combination with their beauty as a necessary vehicle, — but the furtherance of the vital bodily processes, the affection that moves the intestines and the diaphragm, in a word, the feeling of health (which without such inducements one does not feel) that makes up the gratification felt by us; so that we can thus reach the body through the soul and use the latter as the physician of the former.

In music this play proceeds from bodily sensations to aesthetical Ideas (the Objects of our affections), and then from these back again to the body with redoubled force. In the case of jokes (the art of which, just like music, should rather be reckoned as pleasant than beautiful) the play begins with the thoughts which together occupy the body, so far as they admit of sensible expression; and as the Understanding stops suddenly short at this presentment, in which it does not find what it expected, we feel the effect of this slackening in the body by the oscillation of the organs, which promotes the restoration of equilibrium and has a favourable influence upon health.

In everything that is to excite a lively convulsive laugh there must be something absurd (in which the Understanding, therefore, can find no satisfaction). Laughter is an affection arising from the sudden transformation of a strained expectation into nothing.[95*] This transformation, which is certainly not enjoyable by the Understanding, yet indirectly gives it very active enjoyment for a moment. Therefore its cause must consist in the influence of the representation upon the body, and the reflex effect of this upon the mind; not, indeed, through the representation being objectively an object of gratification[96*] (for how could a delusive expectation gratify?), but simply through it as a mere play of representations bringing about an equilibrium of the vital powers in the body.

Suppose this story to be told: An Indian at the table of an Englishman in Surat, when he saw a bottle of ale opened and all the beer turned into froth and overflowing, testified his great astonishment with many exclamations. When the Englishman asked him, “What is there in this to astonish you so much?” he answered, “I am not at all astonished that it should flow out, but I do wonder how you ever got it in.” At this story we laugh, and it gives us hearty pleasure; not because we deem ourselves cleverer than this ignorant man, or because of anything else in it that we note as satisfactory to the Understanding, but because our expectation was strained [for a time] and then was suddenly dissipated into nothing. Again:

The heir of a rich relative wished to arrange for an imposing funeral, but he lamented that he could not properly succeed; "for" (said he) "the more money I give my mourners to look sad, the more cheerful they look!"[97*] When we hear this story we laugh loud, and the reason is that an expectation is suddenly transformed into nothing. We must note well that it does not transform itself into the positive opposite of an expected object — for then there would still be something, which might even be a cause of grief — but it must be transformed into nothing. For if a man arouses great expectations in us when telling a story, and at the end we see its falsehood immediately, it displeases us; e.g. the story of the people whose hair in consequence of great grief turned gray in one night. But if a wag, to repair the effect of this story, describes very circumstantially the grief of the merchant returning from India to Europe with all his wealth in merchandise who was forced to throw it overboard in a heavy storm, and who grieved thereat so much that his *wig* turned gray the same night — we laugh and it gives us gratification. For we treat our own mistake in the case of an object otherwise indifferent to us, or rather the Idea which we are following out, as we treat a ball which we knock to and fro for a time, though our only serious intention is to seize it and hold it fast. It is not the mere rebuff of a liar or a simpleton that arouses our gratification; for the latter story told with assumed seriousness would set a whole company in a roar of laughter, while the former would ordinarily not be regarded as worth attending to.

It is remarkable that in all such cases the jest must contain something that is capable of deceiving for a moment. Hence, when the illusion is dissipated, the mind turns back to try it once again, and thus through a rapidly alternating tension and relaxation it is jerked back and put into a state of oscillation. This, because the strain on the cord as it were is suddenly (and not gradually) relaxed, must occasion a mental movement, and an inner bodily movement harmonising therewith, which continues involuntarily and fatigues, even while cheering us (the effects of a motion conducive to health).

For if we admit that with all our thoughts is harmonically combined a movement in the organs of the body, we shall easily comprehend how to this sudden transposition of the mind, now to one now to another standpoint in order to contemplate its object, may correspond an alternating tension and relaxation of the elastic portions of our intestines, which communicates itself to the diaphragm (like that which ticklish people feel). In connexion with this the lungs expel the air at rapidly succeeding intervals, and thus bring about a movement beneficial to health; which alone, and not what precedes it in the mind, is the proper cause of the gratification in a thought that at bottom represents nothing. — *Voltaire* said that heaven had given us two things to counterbalance the many miseries of life, *hope* and *sleep*.[98*] He could have added *laughter*, if the means of exciting it in reasonable men were only as easily attainable, and the requisite wit or originality of humour were not so rare, as the talent is common of imagining things which break one's head, *as mystic dreamers do, or which* break one's neck, *as your genius does, or which* break one's heart, as sentimental romance-writers (and even moralists of the same kidney) do.

We may therefore, as it seems to me, readily concede to *Epicurus* that all gratification, even that which is occasioned through concepts, excited by aesthetical Ideas, is *animal*, i.e. bodily sensation; without the least prejudice to the *spiritual* feeling of respect for moral Ideas, which is not gratification at all but an esteem for self (for humanity in us), that raises us above the need of gratification, and even without the slightest prejudice to the less noble [feeling] of *taste*.

We find a combination of these two last in *naiveté*, which is the breaking out of the sincerity originally natural to humanity in opposition to that art of dissimulation which has become a second nature. We laugh at the simplicity that does not understand how to dissemble; and yet we are delighted with the simplicity of the nature which thwarts that art. We look for the commonplace manner of artificial utterance devised with foresight to make a fair show; and behold! it is the unspoiled innocent nature which we do not expect to find, and which he who displays it did not think of disclosing. That the fair but false show which generally has so much influence upon our judgement is here suddenly transformed into nothing, so that, as it were, the rogue in us is laid bare, produces a movement of the mind in two opposite directions, which

gives a wholesome shock to the body. But the fact that something infinitely better than all assumed manner, viz. purity of disposition (or at least the tendency thereto), is not quite extinguished yet in human nature, blends seriousness and high esteem with this play of the Judgement. But because it is only a transitory phenomenon and the veil of dissimulation is soon drawn over it again, there is mingled therewith a compassion which is an emotion of tenderness; this, as play, readily admits of combination with a good-hearted laugh, and ordinarily is actually so combined, and withal is wont to compensate him who supplies its material for the embarrassment which results from not yet being wise after the manner of men. — An art that is to be *naive* is thus a contradiction; but the representation of naiveté in a fictitious personage is quite possible, and is a beautiful though a rare art. Naiveté must not be confounded with open-hearted simplicity, which does not artificially spoil nature solely because it does not understand the art of social intercourse.

The *humorous* manner again may be classified as that which, as exhilarating us, is near akin to the gratification that proceeds from laughter; and belongs to the originality of spirit, but not to the talent of beautiful art. *Humour* in the good sense means the talent of being able voluntarily to put oneself into a certain mental disposition, in which everything is judged quite differently from the ordinary method (reversed, in fact), and yet in accordance with certain rational principles in such a frame of mind. He who is involuntarily subject to such mutations is called *a man of humours* [launisch]; but he who can assume them voluntarily and purposively (on behalf of a lively presentment brought about by the aid of a contrast that excites a laugh) — he and his manner of speech are called *humorous* [launigt]. This manner, however, belongs rather to pleasant than to beautiful art, because the object of the latter must always exhibit intrinsic worth, and hence requires a certain seriousness in the presentation, as taste does in the act of judgement.

SECOND DIVISION

DIALECTIC OF THE AESTHETICAL JUDGEMENT

§ 55

A faculty of Judgement that is to be dialectical must in the first place be rationalising, i.e. its judgements must claim universality[99*] and that *a priori*; for it is in the opposition of such judgements that Dialectic consists. Hence the incompatibility of aesthetical judgements of Sense (about the pleasant and the unpleasant) is not dialectical. And again, the conflict between judgements of Taste, so far as each man depends merely on his own taste, forms no Dialectic of taste; because no one proposes to make his own judgement a universal rule. There remains therefore no other concept of a Dialectic which has to do with taste than that of a Dialectic of the *Critique* of taste (not of taste itself) in respect of its *principles*; for here concepts that contradict one another (as to the ground of the possibility of judgements of taste in general) naturally and unavoidably present themselves. The transcendental Critique of taste will therefore contain a part which can bear the name of a Dialectic of the aesthetical Judgement, only if and so far as there is found an antinomy of the principles of this faculty which renders its conformity to law, and consequently also its internal possibility, doubtful.

§ 56. Representation of the antinomy of Taste

The first commonplace of taste is contained in the proposition, with which every tasteless person proposes to avoid blame: *every one has his own taste*. That is as much as to say that the determining ground of this judgement is merely subjective (gratification or grief), and that the judgement has no right to the necessary assent of others.

The second commonplace invoked even by those who admit for judgements of taste the right to speak with validity for every one is: *there is no disputing about taste*. That is as much as to say that the determining ground of a judgement of taste may indeed be objective, but that it cannot be reduced to definite concepts, and that consequently about the judgement itself nothing can be *decided* by proofs, although much may rightly be *contested*. For *contesting* [quarrelling] and *disputing* [controversy] are doubtless the same in this, that by means of the mutual opposition of judgements they seek to produce their accordance; but different in that the latter hopes to bring this about according to definite concepts as determining grounds, and consequently assumes *objective concepts* as grounds of the judgement. But where this is regarded as impracticable, controversy is regarded as alike impracticable.

We easily see that between these two commonplaces there is a proposition wanting, which, though it has not passed into a proverb, is yet familiar to every one, viz. *there may be a quarrel about taste* (although there can be no controversy). But this proposition involves the contradictory of the former one. For wherever quarrelling is permissible, there must be a hope of mutual reconciliation; and consequently we can count on grounds of our judgement that have not merely private validity, and therefore are not merely subjective. And to this the proposition, *every one has his own taste*, is directly opposed.

There emerges therefore in respect of the principle of taste the following Antinomy: —

(1) Thesis. The judgement of taste is not based upon concepts; for otherwise it would admit of controversy (would be determinable by proofs).

(2) Antithesis. The judgement of taste is based on concepts; for otherwise, despite its diversity, we

could not quarrel about it (we could not claim for our judgement the necessary assent of others).

§ 57. Solution of the antinomy of Taste

There is no possibility of removing the conflict between these principles that underlie every judgement of taste (which are nothing else than the two peculiarities of the judgement of taste exhibited above in the Analytic), except by showing that the concept to which we refer the Object in this kind of judgement is not taken in the same sense in both maxims of the aesthetical Judgement. This twofold sense or twofold point of view is necessary to our transcendental Judgement; but also the illusion which arises from the confusion of one with the other is natural and unavoidable.

The judgement of taste must refer to some concept; otherwise it could make absolutely no claim to be necessarily valid for every one. But it is not therefore capable of being proved *from* a concept; because a concept may be either determinable or in itself undetermined and undeterminable. The concepts of the Understanding are of the former kind; they are determinable through predicates of sensible intuition which can correspond to them. But the transcendental rational concept of the supersensible, which lies at the basis of all sensible intuition, is of the latter kind, and therefore cannot be theoretically determined further.

Now the judgement of taste is applied to objects of Sense, but not with a view of determining a *concept* of them for the Understanding; for it is not a cognitive judgement. It is thus only a private judgement, in which a singular representation intuitively perceived is referred to the feeling of pleasure; and so far would be limited as regards its validity to the individual judging. The object is *for me* an object of satisfaction; by others it may be regarded quite differently — every one has his own taste.

Nevertheless there is undoubtedly contained in the judgement of taste a wider reference of the representation of the Object (as well as of the subject), whereon we base an extension of judgements of this kind as necessary for every one. At the basis of this there must necessarily be a concept somewhere; though a concept which cannot be determined through intuition. But through a concept of this sort we know nothing, and consequently it can *supply no proof* for the judgement of taste. Such a concept is the mere pure rational concept of the supersensible which underlies the object (and also the subject judging it), regarded as an Object of sense and thus as phenomenon.[100*] For if we do not admit such a reference, the claim of the judgement of taste to universal validity would not hold good. If the concept on which it is based were only a mere confused concept of the Understanding, like that of perfection, with which we could bring the sensible intuition of the Beautiful into correspondence, it would be at least possible in itself to base the judgement of taste on proofs; which contradicts the thesis.

But all contradiction disappears if I say: the judgement of taste is based on a concept (viz. the concept of the general ground of the subjective purposiveness of nature for the Judgement); from which, however, nothing can be known and proved in respect of the Object, because it is in itself undeterminable and useless for knowledge. Yet at the same time and on that very account the judgement has validity for every one (though of course for each only as a singular judgement immediately accompanying his intuition); because its determining ground lies perhaps in the concept of that which may be regarded as the supersensible substrate of humanity.

The solution of an antinomy only depends on the possibility of showing that two apparently contradictory propositions do not contradict one another in fact, but that they may be consistent; although the explanation of the possibility of their concept may transcend our cognitive faculties. That this illusion is natural and unavoidable by human Reason, and also why it is so, and remains so, although it ceases to deceive after the analysis of the apparent contradiction, may be thus explained.

In the two contradictory judgements we take the concept, on which the universal validity of a judgement must be based, in the same sense; and yet we apply to it two opposite predicates. In the Thesis we mean

that the judgement of taste is not based upon *determinate* concepts; and in the Antithesis that the judgement of taste is based upon a concept, but an *indeterminate* one (viz. of the supersensible substrate of phenomena). Between these two there is no contradiction.

We can do nothing more than remove this conflict between the claims and counter-claims of taste. It is absolutely impossible to give a definite objective principle of taste, in accordance with which its judgements could be derived, examined, and established; for then the judgement would not be one of taste at all. The subjective principle, viz. the indefinite Idea of the supersensible in us, can only be put forward as the sole key to the puzzle of this faculty whose sources are hidden from us: it can be made no further intelligible.

The proper concept of taste, that is of a merely reflective aesthetical Judgement, lies at the basis of the antinomy here exhibited and adjusted. Thus the two apparently contradictory principles are reconciled — *both can be true*; which is sufficient. If, on the other hand, we assume, as some do, *pleasantness* as the determining ground of taste (on account of the singularity of the representation which lies at the basis of the judgement of taste), or, as others will have it, the principle of perfection (on account of the universality of the same), and settle the definition of taste accordingly; then there arises an antinomy which it is absolutely impossible to adjust except by showing that *both* the contrary (though not contradictory) *propositions are false*. And this would prove that the concept on which they are based is self-contradictory. Hence we see that the removal of the antinomy of the aesthetical Judgement takes a course similar to that pursued by the Critique in the solution of the antinomies of pure theoretical Reason. And thus here, as also in the Critique of practical Reason, the antinomies force us against our will to look beyond the sensible and to seek in the supersensible the point of union for all our *a priori* faculties; because no other expedient is left to make our Reason harmonious with itself.

Remark I.

As we so often find occasion in Transcendental Philosophy for distinguishing Ideas from concepts of the Understanding, it may be of use to introduce technical terms to correspond to this distinction. I believe that no one will object if I propose some. — In the most universal signification of the word, Ideas are representations referred to an object, according to a certain (subjective or objective) principle, but so that they can never become a cognition of it. They are either referred to an intuition, according to a merely subjective principle of the mutual harmony of the cognitive powers (the Imagination and the Understanding), and they are then called *aesthetical*; or they are referred to a concept according to an objective principle, although they can never furnish a cognition of the object and are called *rational Ideas*. In the latter case the concept is a *transcendent* one, which is different from a concept of the Understanding, to which an adequately corresponding experience can always be supplied, and which therefore is called *immanent*.

An *aesthetical Idea* cannot become a cognition, because it is an *intuition* (of the Imagination) for which an adequate concept can never be found. A *rational Idea* can never become a cognition, because it involves a concept (of the supersensible), corresponding to which an intuition can never be given.

Now I believe we might call the aesthetical Idea an *inexponible* representation of the Imagination, and a rational Idea an *indemonstrable* concept of Reason. It is assumed of both that they are not generated without grounds, but (according to the above explanation of an Idea in general) in conformity with certain principles of the cognitive faculties to which they belong (subjective principles in the one case, objective in the other).

Concepts of the Understanding must, as such, always be demonstrable [if by demonstration we understand, as in anatomy, merely *presentation*];[101*] i.e. the object corresponding to them must always be capable of being given in intuition (pure or empirical); for thus alone could they become cognitions. The concept of *magnitude* can be given *a priori* in the intuition of space, e.g. of a right line, etc.; the concept of *cause* in impenetrability, in the collision of bodies, etc. Consequently both can be authenticated by

means of an empirical intuition, i.e. the thought of them can be proved (demonstrated, verified) by an example; and this must be possible, for otherwise we should not be certain that the concept was not empty, i.e. *devoid of any* Object.

In Logic we ordinarily use the expressions demonstrable or indemonstrable only in respect of *propositions*, but these might be better designated by the titles respectively of *mediately and immediately certain* propositions; for pure Philosophy has also propositions of both kinds, i.e. true propositions, some of which are susceptible of proof and others not. It can, as philosophy, prove them on *a priori* grounds, but it cannot demonstrate them; unless we wish to depart entirely from the proper meaning of this word, according to which *to demonstrate* (*ostendere*, *exhibere*) is equivalent to presenting a concept in intuition (whether in proof or merely in definition). If the intuition is *a priori* this is called construction; but if it is empirical, then the Object is displayed by means of which objective reality is assured to the concept. Thus we say of an anatomist that he demonstrates the human eye, if by a dissection of this organ he makes intuitively evident the concept which he has previously treated discursively.

It hence follows that the rational concept of the supersensible substrate of all phenomena in general, or even of that which must be placed at the basis of our arbitrary will in respect of the moral law, viz. of transcendental freedom, is already, in kind, an indemonstrable concept and a rational Idea; while virtue is so, in degree. For there can be given in experience, as regards its quality, absolutely nothing corresponding to the former; whereas in the latter case no empirical product attains to the degree of that causality, which the rational Idea prescribes as the rule.

As in a rational Idea the *Imagination* with its intuitions does not attain to the given concept, so in an aesthetical Idea the *Understanding* by its concepts never attains completely to that internal intuition which the Imagination binds up with a given representation. Since, now, to reduce a representation of the Imagination to concepts is the same thing as to *expound* it, the aesthetical Idea may be called an *inexponible* representation of the Imagination (in its free play). I shall have occasion in the sequel to say something more of Ideas of this kind; now I only note that both kinds of Ideas, rational and aesthetical, must have their principles; and must have them in Reason — the one in the objective, the other in the subjective principles of its employment.

We can consequently explain *genius* as the faculty of *aesthetical Ideas*; by which at the same time is shown the reason why in the products of genius it is the nature (of the subject) and not a premeditated purpose that gives the rule to the art (of the production of the beautiful). For since the beautiful must not be judged by concepts, but by the purposive attuning of the Imagination to agreement with the faculty of concepts in general, it cannot be rule and precept which can serve as the subjective standard of that aesthetical but unconditioned purposiveness in beautiful art, that can rightly claim to please every one. It can only be that in the subject which is nature and cannot be brought under rules or concepts, i.e. the supersensible substrate of all his faculties (to which no concept of the Understanding extends), and consequently that with respect to which it is the final purpose given by the intelligible [part] of our nature to harmonise all our cognitive faculties. Thus alone is it possible that there should be *a priori* at the basis of this purposiveness, for which we can prescribe no objective principle, a principle subjective and yet of universal validity.

Remark II.

The following important remark occurs here: There are *three kinds of Antinomies* of pure Reason, which, however, all agree in this, that they compel us to give up the otherwise very natural hypothesis that objects of sense are things in themselves, and force us to regard them merely as phenomena, and to supply to them an intelligible substrate (something supersensible of which the concept is only an Idea, and supplies no proper knowledge). Without such antinomies Reason could never decide upon accepting a principle narrowing so much the field of its speculation, and could never bring itself to sacrifices by which so many otherwise brilliant hopes must disappear. For even now when, by way of compensation

for these losses, a greater field in a practical aspect opens out before it, it appears not to be able without grief to part from those hopes, and disengage itself from its old attachment.

That there are three kinds of antinomies has its ground in this, that there are three cognitive faculties, — Understanding, Judgement, and Reason; of which each (as a superior cognitive faculty) must have its *a priori* principles. For Reason, in so far as it judges of these principles and their use, inexorably requires, in respect of them all, the unconditioned for the given conditioned; and this can never be found if we consider the sensible as belonging to things in themselves, and do not rather supply to it, as mere phenomenon, something supersensible (the intelligible substrate of nature both external and internal) as the reality in itself [Sache an sich selbst]. There are then: (1) *For the cognitive faculty* an antinomy of Reason in respect of the theoretical employment of the Understanding extended to the unconditioned; (2) *for the feeling of pleasure and pain* an antinomy of Reason in respect of the aesthetical employment of the Judgement; and (3) *for the faculty of desire* an antinomy in respect of the practical employment of the self-legislative Reason; so far as all these faculties have their superior principles *a priori*, and, in conformity with an inevitable requirement of Reason, must judge and be able to determine their Object, *unconditionally* according to those principles.

As for the two antinomies of the theoretical and practical employment of the superior cognitive faculties, we have already shown their *unavoidableness*, if judgements of this kind are not referred to a supersensible substrate of the given Objects, as phenomena; and also the *possibility of their solution*, as soon as this is done. And as for the antinomies in the employment of the Judgement, in conformity with the requirements of Reason, and their solution which is here given, there are only two ways of avoiding them. *Either*: we must deny that any *a priori* principle lies at the basis of the aesthetical judgement of taste; we must maintain that all claim to necessary universal agreement is a groundless and vain fancy, and that a judgement of taste only deserves to be regarded as correct because *it happens* that many people agree about it; and this, not because we *assume* an *a priori* principle behind this agreement, but because (as in the taste of the palate) of the contingent similar organisation of the different subjects. *Or*: we must assume that the judgement of taste is really a disguised judgement of Reason upon the perfection discovered in a thing and the reference of the manifold in it to a purpose, and is consequently only called aesthetical on account of the confusion here attaching to our reflection, although it is at bottom teleological. In the latter case we could declare the solution of the antinomies by means of transcendental Ideas to be needless and without point, and thus could harmonise these laws of taste with Objects of sense, not as mere phenomena but as things in themselves. But we have shown in several places in the exposition of judgements of taste how little either of these expedients will satisfy.

However, if it be granted that our deduction at least proceeds by the right method, although it be not yet plain enough in all its parts, three Ideas manifest themselves. *First*, there is the Idea of the supersensible in general, without any further determination of it, as the substrate of nature. *Secondly*, there is the Idea of the same as the principle of the subjective purposiveness of nature for our cognitive faculty. And *thirdly*, there is the Idea of the same as the principle of the purposes of freedom, and of the agreement of freedom with its purposes in the moral sphere.

§ 58. Of the Idealism of the purposiveness of both Nature and Art as the unique principle of the aesthetical Judgement

To begin with, we can either place the principle of taste in the fact that it always judges in accordance with grounds which are empirical and therefore are only given *a posteriori* by sense, or concede that it judges on *a priori* grounds. The former would be the *empiricism* of the Critique of Taste; the latter its *rationalism*. According to the *former* the Object of our satisfaction would not differ from the *pleasant*; according to the latter, if the judgement rests on definite concepts, it would not differ from the *good*. Thus

all *beauty* would be banished from the world, and only a particular name, expressing perhaps a certain mingling of the two above-named kinds of satisfaction, would remain in its place. But we have shown that there are also *a priori* grounds of satisfaction which can subsist along with the principle of rationalism, although they cannot be comprehended in *definite concepts*.

On the other hand, the rationalism of the principle of taste is either that of the *realism* of the purposiveness, or of its *idealism*. Because a judgement of taste is not a cognitive judgement, and beauty is not a characteristic of the Object, considered in itself, the rationalism of the principle of taste can never be placed in the fact that the purposiveness in this judgement is thought as objective, i.e. that the judgement theoretically, and therefore also logically (although only in a confused way), refers to the perfection of the Object. It only refers *aesthetically* to the agreement of the representation of the Object in the Imagination with the essential principles of Judgement in general in the subject. Consequently, even according to the principle of rationalism, the judgement of taste and the distinction between its realism and idealism can only be settled thus. Either in the first case, this subjective purposiveness is assumed as an actual (designed) *purpose* of nature (or art) harmonising with our Judgement; or, in the second case, as a purposive harmony with the needs of Judgement, in respect of nature and its forms produced according to particular laws, which shows itself, without purpose, spontaneously, and contingently.

The beautiful formations in the kingdom of organised nature speak loudly for the realism of the aesthetical purposiveness of nature; since we might assume that behind the production of the beautiful there is an Idea of the beautiful in the producing cause, viz. a *purpose* in respect of our Imagination. Flowers, blossoms, even the shapes of entire plants; the elegance of animal formations of all kinds, unneeded for their proper use, but, as it were, selected for our taste; especially the charming variety so satisfying to the eye and the harmonious arrangement of colours (in the pheasant, in shell-fish, in insects, even in the commonest flowers), which, as it only concerns the surface and not the figure of these creations (though perhaps requisite in regard of their internal purposes), seems to be entirely designed for external inspection; these things give great weight to that mode of explanation which assumes actual purposes of nature for our aesthetical Judgement.

On the other hand, not only is Reason opposed to this assumption in its maxims, which bid us always avoid as far as possible unnecessary multiplication of principles; but nature everywhere shows in its free formations much mechanical tendency to the productions of forms which seem, as it were, to be made for the aesthetical exercise of our Judgement, without affording the least ground for the supposition that there is need of anything more than its mechanism, merely as nature, according to which, without any Idea lying at their root, they can be purposive for our judgement. But I understand by *free formations* of nature *those* whereby from a *fluid at rest*, through the volatilisation or separation of a portion of its constituents (sometimes merely of caloric), the remainder in becoming solid assumes a definite shape or tissue (figure or texture), which is different according to the specific difference of the material, but in the same material is constant. Here it is always presupposed that we are speaking of a perfect fluid, i.e. that the material in it is completely dissolved, and that it is not a mere medley of solid particles in a state of suspension.

Formation, then, takes place by a *shooting together*, i.e. *by a sudden solidification, not by a gradual transition from the fluid to the solid state, but all at once by a* saltus; which transition is also called *crystallisation*. The commonest example of this kind of formation is the freezing of water, where first icicles are produced, which combine at angles of 60°, while others attach themselves to each vertex, until it all becomes ice; and so that, while this is going on, the water does not gradually become viscous, but is as perfectly fluid as if its temperature were far higher, although it is absolutely ice-cold. The matter that disengages itself, which is dissipated suddenly at the moment of solidification, is a considerable quantum of caloric, the disappearance of which, as it was only required for preserving fluidity, leaves the new ice not in the least colder than the water which shortly before was fluid.

Many salts, and also rocks, of a crystalline figure, are produced thus from a species of earth dissolved

in water, we do not exactly know how. Thus are formed the glandular configurations of many minerals, the cubical sulphide of lead, the ruby silver ore, etc., in all probability in water and by the shooting together of particles, as they become forced by some cause to dispense with this vehicle and to unite in definite external shapes.

But also all kinds of matter, which have been kept in a fluid state by heat, and have become solid by cooling, show internally, when fractured, a definite texture. This makes us judge that if their own weight or the disturbance of the air had not prevented it, they would also have exhibited on the outer surface their specifically peculiar shapes. This has been observed in some metals on their inner surface, which have been hardened externally by fusion but are fluid in the interior, by the drawing off the internal fluid and the consequent undisturbed crystallisation of the remainder. Many of these mineral crystallisations, such as spars, hematite, arragonite, etc., often present beautiful shapes, the like of which art can only conceive; and the halo in the cavern of Antiparos[102*] is merely produced by water trickling down strata of gypsum.

The fluid state is, to all appearance, older than the solid state, and plants as well as animal bodies are fashioned out of fluid nutritive matter, so far as this forms itself in a state of rest. This last of course primarily combines and forms itself in freedom according to a certain original disposition directed towards purposes (which, as will be shown in Part II., must not be judged aesthetically but teleologically according to the principle of realism), but also perhaps in conformity with the universal law of the affinity of materials. Again, the watery fluids dissolved in an atmosphere that is a mixture of different gases, if they separate from the latter on account of cooling, produce snow figures, which in correspondence with the character of the special mixture of gases, often seem very artistic and are extremely beautiful. So, without detracting from the teleological principle by which we judge of organisation, we may well think that the beauty of flowers, of the plumage of birds, or of shell-fish, both in shape and colour, may be ascribed to nature and its faculty of producing forms in an aesthetically purposive way, in its freedom, without particular purposes adapted thereto, according to chemical laws by the arrangement of the material requisite for the organisation in question.

But what shows the principle of the *Ideality* of the purposiveness in the beauty of nature, as that which we always place at the basis of an aesthetical judgement, and which allows us to employ, as a ground of explanation for our representative faculty, no realism of purpose, is the fact that in judging beauty we invariably seek its gauge in ourselves *a priori*, and that our aesthetical Judgement is itself legislative in respect of the judgement whether anything is beautiful or not. This could not be, on the assumption of the Realism of the purposiveness of nature; because in that case we must have learned from nature what we ought to find beautiful, and the aesthetical judgement would be subjected to empirical principles. For in such an act of judging the important point is not, what nature is, or even, as a purpose, is in relation to us, but how we take it. There would be an objective purposiveness in nature if it had fashioned its forms for our satisfaction; and not a subjective purposiveness which depended upon the play of the Imagination in its freedom, where it is we who receive nature with favour, not nature which shows us favour. The property of nature that gives us occasion to perceive the inner purposiveness in the relation of our mental faculties in judging certain of its products — a purposiveness which is to be explained on supersensible grounds as necessary and universal — cannot be a natural purpose or be judged by us as such; for otherwise the judgement hereby determined would not be free, and would have at its basis heteronomy, and not, as beseems a judgement of taste, autonomy.

In beautiful Art the principle of the Idealism of purposiveness is still clearer. As in the case of the beautiful in Nature, an aesthetical Realism of this purposiveness cannot be perceived by sensations (for then the art would be only pleasant, not beautiful). But that the satisfaction produced by aesthetical Ideas must not depend on the attainment of definite purposes (as in mechanically designed art), and that consequently, in the very rationalism of the principle, the ideality of the purposes and not their reality must be fundamental, appears from the fact that beautiful Art, as such, must not be considered as a product

of Understanding and Science, but of Genius, and therefore must get its rule through *aesthetical* Ideas, which are essentially different from rational Ideas of definite purposes.

Just as the *ideality* of the objects of sense as phenomena is the only way of explaining the possibility of their forms being susceptible of *a priori* determination, so the *idealism* of purposiveness, in judging the beautiful in nature and art, is the only hypothesis under which Criticism can explain the possibility of a judgement of taste which demands *a priori* validity for every one (without grounding on concepts the purposiveness that is represented in the Object).

§ 59. Of Beauty as the symbol of Morality

Intuitions are always required to establish the reality of our concepts. If the concepts are empirical, the intuitions are called *examples*. If they are pure concepts of Understanding, the intuitions are called *schemata*. If we desire to establish the objective reality of rational concepts, i.e. of Ideas, on behalf of theoretical cognition, then we are asking for something impossible, because absolutely no intuition can be given which shall be adequate to them.

All *hypotyposis* (presentation, *subjectio sub adspectum*), or sensible illustration, is twofold. It is either *schematical*, when to a concept comprehended by the Understanding the corresponding intuition is given *a priori*; or it is *symbolical*. In the latter case to a concept only thinkable by the Reason, to which no sensible intuition can be adequate, an intuition is supplied with which accords a procedure of the Judgement analogous to what it observes in schematism: it accords with it, that is, in respect of the rule of this procedure merely, not of the intuition itself; consequently in respect of the form of reflection merely, and not of its content.

There is a use of the word *symbolical* that has been adopted by modern logicians, which is misleading and incorrect, i.e. *to speak of the* symbolical *mode of representation as if it were opposed to the* intuitive; for the symbolical is only a mode of the intuitive. The latter (the intuitive), that is, may be divided into the *schematical* and the *symbolical* modes of representation. Both are hypotyposes, i.e. presentations (*exhibitiones*); not mere *characterisations*, or designations of concepts by accompanying sensible signs which contain nothing belonging to the intuition of the Object, and only serve as a means for reproducing the concepts, according to the law of association of the Imagination, and consequently in a subjective point of view. These are either words, or visible (algebraical, even mimetical) signs, as mere expressions for concepts.[103][*]

All intuitions, which we supply to concepts *a priori*, are therefore either *schemata* or *symbols*, of which the former contain direct, the latter indirect, presentations of the concept. The former do this demonstratively; the latter by means of an analogy (for which we avail ourselves even of empirical intuitions) in which the Judgement exercises a double function; first applying the concept to the object of a sensible intuition, and then applying the mere rule of the reflection made upon that intuition to a quite different object of which the first is only the symbol. Thus a monarchical state is represented by a living body, if it is governed by national laws, and by a mere machine (like a hand-mill) if governed by an individual absolute will; but in both cases only *symbolically*. For between a despotic state and a hand-mill there is, to be sure, no similarity; but there is a similarity in the rules according to which we reflect upon these two things and their causality. This matter has not been sufficiently analysed hitherto, for it deserves a deeper investigation; but this is not the place to linger over it. Our language [i.e. German] is full of indirect presentations of this sort, in which the expression does not contain the proper schema for the concept, but merely a symbol for reflection. Thus the words *ground* (support, basis), *to depend* (to be held up from above), to *flow* from something (instead of, to follow), *substance* (as *Locke* expresses it, the support of accidents), and countless others, are not schematical but symbolical hypotyposes and expressions for concepts, not by means of a direct intuition, but only by analogy with it, i.e. by the

transference of reflection upon an object of intuition to a quite different concept to which perhaps an intuition can never directly correspond. If we are to give the name of cognition to a mere mode of representation (which is quite permissible if the latter is not a principle of the theoretical determination of what an object is in itself, but of the practical determination of what the Idea of it should be for us and for its purposive use), then all our knowledge of God is merely symbolical; and he who regards it as schematical, along with the properties of Understanding, Will, etc., which only establish their objective reality in beings of this world, falls into Anthropomorphism, just as he who gives up every intuitive element falls into Deism, by which nothing at all is cognised, not even in a practical point of view.

Now I say the Beautiful is the symbol of the morally Good, and that it is only in this respect (a reference which is natural to every man and which every man postulates in others as a duty) that it gives pleasure with a claim for the agreement of every one else. By this the mind is made conscious of a certain ennoblement and elevation above the mere sensibility to pleasure received through sense, and the worth of others is estimated in accordance with a like maxim of their Judgement. That is the *intelligible*, to which, as pointed out in the preceding paragraph, Taste looks; with which our higher cognitive faculties are in accord; and without which a downright contradiction would arise between their nature and the claims made by taste. In this faculty the Judgement does not see itself, as in empirical judging, subjected to a heteronomy of empirical laws; it gives the law to itself in respect of the objects of so pure a satisfaction, just as the Reason does in respect of the faculty of desire. Hence, both on account of this inner possibility in the subject and of the external possibility of a nature that agrees with it, it finds itself to be referred to something within the subject as well as without him, something which is neither nature nor freedom, but which yet is connected with the supersensible ground of the latter. In this supersensible ground, therefore, the theoretical faculty is bound together in unity with the practical, in a way which though common is yet unknown. We shall indicate some points of this analogy, while at the same time we shall note the differences.

(1) The beautiful pleases *immediately* (but only in reflective intuition, not, like morality, in its concept). (2) It pleases *apart from any interest* (the morally good is indeed necessarily bound up with an interest, though not with one which precedes the judgement upon the satisfaction, but with one which is first of all produced by it). (3) The *freedom* of the Imagination (and therefore of the sensibility of our faculty) is represented in judging the beautiful as harmonious with the conformity to law of the Understanding (in the moral judgement the freedom of the will is thought as the harmony of the latter with itself according to universal laws of Reason). (4) The subjective principle in judging the beautiful is represented as *universal*, i.e. as valid for every man, though not cognisable through any universal concept. (The objective principle of morality is also expounded as universal, i.e. for every subject and for every action of the same subject, and thus as cognisable by means of a universal concept). Hence the moral judgement is not only susceptible of definite constitutive principles, but is possible *only* by grounding its maxims on these in their universality.

A reference to this analogy is usual even with the common Understanding [of men], and we often describe beautiful objects of nature or art by names that seem to put a moral appreciation at their basis. We call buildings or trees majestic and magnificent, landscapes laughing and gay; even colours are called innocent, modest, tender, because they excite sensations which have something analogous to the consciousness of the state of mind brought about by moral judgements. Taste makes possible the transition, without any violent leap, from the charm of Sense to habitual moral interest; for it represents the Imagination in its freedom as capable of purposive determination for the Understanding, and so teaches us to find even in objects of sense a free satisfaction apart from any charm of sense.

APPENDIX

§ 60. Of the method of Taste

The division of a Critique into Elementology and Methodology, as preparatory to science, is not applicable to the Critique of taste, because there neither is nor can be a science of the Beautiful, and the judgement of taste is not determinable by means of principles. As for the scientific element in every art, which regards *truth* in the presentation of its Object, this is indeed the indispensable condition (*conditio sine qua non*) of beautiful art, but not beautiful art itself. There is therefore for beautiful art only a *manner* (*modus*), not a *method of teaching* (*methodus*). The master must show what the pupil is to do and how he is to do it; and the universal rules, under which at last he brings his procedure, serve rather for bringing the main points back to his remembrance when occasion requires, than for prescribing them to him. Nevertheless regard must be had here to a certain ideal, which art must have before its eyes, although it cannot be completely attained in practice. It is only through exciting the Imagination of the pupil to accordance with a given concept, by making him note the inadequacy of the expression for the Idea, to which the concept itself does not attain because it is an aesthetical Idea, and by severe criticism, that he can be prevented from taking the examples set before him as types and models for imitation, to be subjected to no higher standard or independent judgement. It is thus that genius, and with it the freedom of the Imagination, is stifled by its very conformity to law; and without these no beautiful art, and not even an accurately judging individual taste, is possible.

The propaedeutic to all beautiful art, regarded in the highest degree of its perfection, seems to lie, not in precepts, but in the culture of the mental powers by means of those elements of knowledge called *humaniora*, probably because *humanity* on the one side indicates the universal *feeling of sympathy*, and on the other the faculty of being able to *communicate* universally our inmost [feelings]. For these properties taken together constitute the characteristic social spirit[104*] of humanity by which it is distinguished from the limitations of animal life. The age and peoples, in which the impulse towards a law-abiding social life, by which a people becomes a permanent community, contended with the great difficulties presented by the difficult problem of uniting freedom (and therefore equality also) with compulsion (rather of respect and submission from a sense of duty than of fear) — such an age and such a people naturally first found out the art of reciprocal communication of Ideas between the cultivated and uncultivated classes and thus discovered how to harmonise the large-mindedness and refinement of the former with the natural simplicity and originality of the latter. In this way they first found that mean between the higher culture and simple nature which furnishes that true standard for taste as a sense common to all men which no universal rules can supply.

With difficulty will a later age dispense with those models, because it will be always farther from nature; and in fine, without having permanent examples before it, a concept will hardly be possible, in one and the same people, of the happy union of the law-abiding constraint of the highest culture with the force and truth of free nature which feels its own proper worth.

Now taste is at bottom a faculty for judging of the sensible illustration of moral Ideas (by means of a certain analogy involved in our reflection upon both these); and it is from this faculty also and from the greater susceptibility grounded thereon for the feeling arising from the latter (called moral feeling), that the pleasure is derived which taste regards as valid for mankind in general and not merely for the private feeling of each. Hence it appears plain that the true propaedeutic for the foundation of taste is the development of moral Ideas and the culture of the moral feeling; because it is only when sensibility is brought into agreement with this that genuine taste can assume a definite invariable form.

PART II

CRITIQUE OF THE TELEOLOGICAL JUDGEMENT

§ 61. Of the objective purposiveness of Nature

We have on transcendental principles good ground to assume a subjective purposiveness in nature, in its particular laws, in reference to its comprehensibility by human Judgement and to the possibility of the connexion of particular experiences in a system. This may be expected as possible in many products of nature, which, as if they were devised quite specially for our Judgement, contain a specific form conformable thereto; which through their manifoldness and unity serve at once to strengthen and to sustain the mental powers (that come into play in the employment of this faculty); and to which therefore we give the name of *beautiful* forms.

But that the things of nature serve one another as means to purposes, and that their possibility is only completely intelligible through this kind of causality — for this we have absolutely no ground in the universal Idea of nature, as the complex of the objects of sense. In the above-mentioned case, the representation of things, because it is something in ourselves, can be quite well thought *a priori* as suitable and useful for the internally purposive determination of our cognitive faculties; but that purposes, which neither are our own nor belong to nature (for we do not regard nature as an intelligent being), could or should constitute a particular kind of causality, at least a quite special conformity to law, — this we have absolutely no *a priori* reason for presuming. Yet more, experience itself cannot prove to us the actuality of this; there must then have preceded a rationalising subtlety which only sportively introduces the concept of purpose into the nature of things, but which does not derive it from Objects or from their empirical cognition. To this latter it is of more service to make nature comprehensible according to analogy with the subjective ground of the connexion of our representations, than to cognise it from objective grounds.

Further, objective purposiveness, as a principle of the possibility of things of nature, is so far removed from *necessary* connexion with the concept of nature, that it is much oftener precisely that upon which one relies to prove the contingency of nature and of its form. When, e.g. *we adduce the structure of a bird, the hollowness of its bones, the disposition of its wings for motion and of its tail for steering*, etc., *we say that all this is contingent in the highest degree according to the mere* nexus effectivus of nature, without calling in the aid of a particular kind of causality, namely that of purpose (*nexus finalis*). In other words, nature, considered as mere mechanism, could have produced its forms in a thousand other ways without stumbling upon the unity which is in accordance with such a principle. It is not in the concept of nature but quite apart from it that we can hope to find the least ground *a priori* for this.

Nevertheless the teleological act of judgement is rightly brought to bear, at least problematically, upon the investigation of nature; but only in order to bring it under principles of observation and inquiry according to the *analogy* with the causality of purpose, without any pretence to *explain* it thereby. It belongs therefore to the reflective and not to the determinant judgement. The concept of combinations and forms of nature in accordance with purposes is then at least *one principle more* for bringing its phenomena under rules where the laws of simply mechanical causality do not suffice. For we bring in a teleological ground, where we attribute causality in respect of an Object to the concept of an Object, as if it were to be found in nature (not in ourselves); or rather when we represent to ourselves the possibility of the Object after the analogy of that causality which we experience in ourselves, and consequently think

nature technically as through a special faculty. If we did not ascribe to it such a method of action, its causality would have to be represented as blind mechanism. If, on the contrary, we supply to nature causes acting *designedly*, and consequently place at its basis teleology, not merely as a *regulative* principle for the mere *judging* of phenomena, to which nature can be thought as subject in its particular laws, but as a *constitutive* principle of the *derivation* of its products from their causes; then would the concept of a natural purpose no longer belong to the reflective but to the determinant Judgement. Then, in fact, it would not belong specially to the Judgement (like the concept of beauty regarded as formal subjective purposiveness), but as a rational concept it would introduce into natural science a new causality, which we only borrow from ourselves and ascribe to other beings, without meaning to assume them to be of the same kind with ourselves.

FIRST DIVISION

ANALYTIC OF THE TELEOLOGICAL JUDGEMENT

§ 62. Of the objective purposiveness which is merely formal as distinguished from that which is material

All geometrical figures drawn on a principle display a manifold, oft admired, objective purposiveness; i.e. in reference to their usefulness for the solution of several problems by a single principle, or of the same problem in an infinite variety of ways. The purposiveness is here obviously objective and intellectual, not merely subjective and aesthetical. For it expresses the suitability of the figure for the production of many intended figures, and is cognised through Reason. But this purposiveness does not make the concept of the object itself possible, i.e. it is not regarded as possible merely with reference to this use.

In so simple a figure as the circle lies the key to the solution of a multitude of problems, each of which would demand various appliances; whereas the solution results of itself, as it were, as one of the infinite number of elegant properties of this figure. Are we, for example, asked to construct a triangle, being given the base and vertical angle? The problem is indeterminate, i.e. it can be solved in an infinite number of ways. But the circle embraces them altogether as the geometrical locus of the vertices of triangles satisfying the given conditions. Again, suppose that two lines are to cut one another so that the rectangle under the segments of the one should be equal to the rectangle under the segments of the other; the solution of the problem from this point of view presents much difficulty. But all chords intersecting inside a circle divide one another in this *proportion*. Other curved lines suggest other purposive solutions of which nothing was thought in the rule that furnished their construction. All conic sections in themselves and when compared with one another are fruitful in principles for the solution of a number of possible problems, however simple is the definition which determines their concept. — It is a true joy to see the zeal with which the old geometers investigated the properties of lines of this class, without allowing themselves to be led astray by the questions of narrow-minded persons, as to what use this knowledge would be. Thus they worked out the properties of the parabola without knowing the law of gravitation, which would have suggested to them its application to the trajectory of heavy bodies (for the motion of a heavy body can be seen to be parallel to the curve of a parabola). Again, they found out the properties of an ellipse without surmising that any of the heavenly bodies had weight, and without knowing the law of force at different distances from the point of attraction, which causes it to describe this curve in free motion. While they thus unconsciously worked for the science of the future, they delighted themselves with a purposiveness in the [essential] being of things which yet they were able to present completely *a priori* in its necessity. *Plato*, himself master of this science, hinted at such an original constitution of things in the discovery of which we can dispense with all experience, and at the power of the mind to produce from its supersensible principle the harmony of beings (where the properties of number come in, with which the mind plays in music). This [he touches upon] in the inspiration that raised him above the concepts of experience to Ideas, which seem to him to be explicable only through an intellectual affinity with the origin of all beings. No wonder that he banished from his school the man who was ignorant of geometry, since he thought he could derive from pure intuition, which has its home in the human spirit, that which *Anaxagoras* drew from empirical objects and their purposive combination. For in the very necessity of that which is purposive, and is constituted just as if it were designedly intended for our use,

— but at the same time seems to belong originally to the being of things without any reference to our use — lies the ground of our great admiration of nature, and that not so much external as in our own Reason. It is surely excusable that this admiration should through misunderstanding gradually rise to the height of fanaticism.

But this intellectual purposiveness, although no doubt objective (not subjective like aesthetical purposiveness), is in reference to its possibility merely formal (not real). It can only be conceived as purposiveness in general without any [definite] purpose being assumed as its basis, and consequently without teleology being needed for it. The figure of a circle is an intuition which is determined by means of the Understanding according to a principle. The unity of this principle which I arbitrarily assume and use as fundamental concept, applied to a form of intuition (space) which is met with in myself as a representation and yet *a priori*, renders intelligible the unity of many rules resulting from the construction of that concept, which are purposive for many possible designs. But this purposiveness does not imply a *purpose* or any other ground whatever. It is quite different if I meet with order and regularity in complexes of *things*, external to myself, enclosed within certain boundaries; as, e.g. in a garden, the order and regularity of the trees, flower-beds, and walks. These I cannot expect to derive *a priori* from my bounding of space made after a rule of my own; for this order and regularity are existing things which must be given empirically in order to be known, and not a mere representation in myself determined *a priori* according to a principle. So then the latter (empirical) purposiveness, as *real*, is dependent on the concept of a purpose.

But the ground of admiration for a perceived purposiveness, although it be in the being of things (so far as their concepts can be constructed), may very well be seen, and seen to be legitimate. The manifold rules whose unity (derived from a principle) excites admiration, are all synthetical and do not follow from the *concept* of the Object, e.g. of a circle; but require this Object to be given in intuition. Hence this unity gets the appearance of having empirically an external basis of rules distinct from our representative faculty; as if therefore the correspondence of the Object to that need of rules which is proper to the Understanding were contingent in itself, and therefore only possible by means of a purpose expressly directed thereto. Now because this harmony, notwithstanding all this purposiveness, is not cognised empirically but *a priori*, it should bring us of itself to this point — that space, through whose determination (by means of the Imagination, in accordance with a concept) the Object is alone possible, is not a characteristic of things external to me, but a mere mode of representation in myself. Hence, in the figure which I draw *in conformity with a concept*, i.e. *in my own mode of representing that which is given to me externally, whatever it may be in itself*, it is I that introduce the purposiveness; I get no empirical instruction from the Object about the purposiveness, and so I require in it no particular purpose external to myself. But because this consideration already calls for a critical employment of Reason, and consequently cannot be involved in the judging of the Object according to its properties; so this latter [judging] suggests to me immediately nothing but the unification of heterogeneous rules (even according to their very diversity) in a principle. This principle, without requiring any particular *a priori* basis external to my concept, or indeed, generally speaking, to my representation, is yet cognised *a priori* by me as true. Now *wonder* is a shock of the mind arising from the incompatibility of a representation, and the rule given by its means, with the principles already lying at its basis; which provokes a doubt as to whether we have rightly seen or rightly judged. *Admiration*, however, is wonder which ever recurs, despite the disappearance of this doubt. Consequently the latter is a quite natural effect of that observed purposiveness in the being of things (as phenomena). It cannot indeed be censured, whilst the unification of the form of sensible intuition (space) — with the faculty of concepts (the Understanding) — is inexplicable to us; and that not only on account of the union being just of the kind that it is, but because it is enlarging for the mind to surmise [the existence of] something lying outside our sensible representations in which, although unknown to us, the ultimate ground of that agreement may be met with. We are, it is

true, not necessitated to cognise this if we have only to do *a priori* with the formal purposiveness of our representations; but the fact that we are compelled to look out beyond it inspires at the same time an admiration for the object that impels us thereto.

We are accustomed to speak of the above-mentioned properties of geometrical figures or of numbers as *beautiful*, on account of a certain *a priori* purposiveness they have for all kinds of cognitive uses, this purposiveness being quite unexpected on account of the simplicity of the construction. We speak, e.g. *of this or that* beautiful property of the circle, which was discovered in this or that way. But there is no aesthetical act of judgement through which we find it purposive, no act of judgement without a concept which renders noticeable a mere *subjective* purposiveness in the free play of our cognitive faculties; but an intellectual act according to concepts which enables us clearly to cognise an objective purposiveness, i.e. availableness for all kinds of (infinitely manifold) purposes. We must rather call this *relative perfection* than a beauty of the mathematical figure. To speak thus of an *intellectual beauty* cannot in general be permissible; for otherwise the word beauty would lose all determinate significance, or the intellectual satisfaction all superiority over the sensible. We should rather call a *demonstration* of such properties beautiful, because through it the Understanding as the faculty of concepts, and the Imagination as the faculty of presenting them, feel themselves strengthened *a priori*. (This, when viewed in connexion with the precision introduced by Reason, is spoken of as elegant.) Here, however, the satisfaction, although it is based on concepts, is subjective; while perfection brings with itself an objective satisfaction.

§ 63. Of the relative, as distinguished from the inner, purposiveness of nature

Experience leads our Judgement to the concept of an objective and material purposiveness, i.e. to the concept of a purpose of nature, only when[105*] we have to judge of a relation of cause to effect which we find ourselves able to apprehend as legitimate only by presupposing the Idea of the effect of the causality of the cause as the fundamental condition, in the cause, of the possibility of the effect. This can take place in two ways. We may regard the effect directly as an art product, or only as material for the art of other possible natural beings; in other words, either as a purpose or as a means towards the purposive employment of other causes. This latter purposiveness is called utility (for man) or mere advantage (for other creatures), and is merely relative; while the former is an inner purposiveness of the natural being.

For example, rivers bring down with them all kinds of earth serviceable for the growth of plants which sometimes is deposited inland, often also at their mouths. The tide brings this mud to many coasts over the land or deposits it on the shore; and so, more especially if men give their aid so that the ebb shall not carry it back again, the fruit-bearing land increases in area, and the vegetable kingdom gains the place which formerly was the habitation of fish and shells. In this way has nature itself brought about most of the extensions of the land, and still continues to do so, although very slowly. — Now the question is whether this is to be judged a purpose of nature, because it contains utility for men. We cannot put it down to the account of the vegetable kingdom, because just as much is subtracted from sea-life as is added to land-life.

Or, to give an example of the advantageousness of certain natural things as means for other creatures (if we suppose them to be means), no soil is more suitable to pine trees than a sandy soil. Now the deep sea, before it withdrew from the land, left behind large tracts of sand in our northern regions, so that on this soil, so unfavourable for all cultivation, widely extended pine forests were enabled to grow, for the unreasoning destruction of which we frequently blame our ancestors. We may ask if this original deposit of tracts of sand was a purpose of nature for the benefit of the possible pine forests? So much is clear, that if we regard this as a purpose of nature, we must also regard the sand as a relative purpose, in reference to which the ocean strand and its withdrawal were means: for in the series of the mutually subordinated

members of a purposive combination, every member must be regarded as a purpose (though not as a final purpose), to which its proximate cause is the means. So too if cattle, sheep, horses, etc., are to exist, there must be grass on the earth, but there must also be saline plants in the desert if camels are to thrive; and again these and other herbivorous animals must be met with in numbers if there are to be wolves, tigers, and lions. Consequently the objective purposiveness, which is based upon advantage, is not an objective purposiveness of things in themselves; as if the sand could not be conceived for itself as an effect of a cause, viz. the sea, without attributing to the latter a purpose, and regarding the effect, namely, the sand, as a work of art. It is a merely relative purposiveness contingent upon the thing to which it is ascribed; and although in the examples we have cited, the different kinds of grass are to be judged as in themselves organised products of nature, and consequently as artificial, yet are they to be regarded, in reference to the beasts which feed upon them, as mere raw material.

But above all, though man, through the freedom of his causality, finds certain natural things of advantage for his designs — designs often foolish, such as using the variegated plumage of birds to adorn his clothes, or coloured earths and the juices of plants for painting his face; often again reasonable as when the horse is used for riding, the ox or (as in Minorca) the ass or pig for ploughing — yet we cannot even here assume a relative natural purpose. For his Reason knows how to give things a conformity with his own arbitrary fancies for which he was not at all predestined by nature. Only, *if* we assume that men are to live upon the earth, then the means must be there without which they could not exist as animals, and even as rational animals (in however low a degree of rationality); and thereupon those natural things, which are indispensable in this regard, must be considered as natural purposes.

We can hence easily see that external purposiveness (advantage of one thing in respect of others) can be regarded as an external natural purpose only under the condition, that the existence of that [being], to which it is immediately or distantly advantageous, is in itself a purpose of nature. Since that can never be completely determined by mere contemplation of nature, it follows that relative purposiveness, although it hypothetically gives indications of natural purposes, yet justifies no absolute teleological judgement.

Snow in cold countries protects the crops from the frost; it makes human intercourse easier (by means of sleighs). The Laplander finds in his country animals by whose aid this intercourse is brought about, i.e. reindeer, who find sufficient sustenance in a dry moss which they have to scratch out for themselves from under the snow, and who are easily tamed and readily permit themselves to be deprived of that freedom in which they could have remained if they chose. For other people in the same frozen regions marine animals afford rich stores; in addition to the food and clothing which are thus supplied, and the wood which is floated in by the sea to their dwellings, these marine animals provide material for fuel by which their huts are warmed. Here is a wonderful concurrence of many references of nature to one purpose; and all this applies to the cases of the Greenlander, the Lapp, the Samoyede, the inhabitant of Yakutsk, etc. But then we do not see why, generally, men must live there at all. Therefore to say that vapour falls out of the atmosphere in the form of snow, that the sea has its currents which float down wood that has grown in warmer lands, and that there are in it great sea monsters filled with oil, *because* the idea of advantage for certain poor creatures is fundamental for the cause which collects all these natural products, would be a very venturesome and arbitrary judgement. For even if there were none of this natural utility, we should miss nothing as regards the adequateness of natural causes to nature's constitution; much more even to desire such a tendency in, and to attribute such a purpose to, nature would be the part of a presumptuous and inconsiderate fancy. For indeed it might be observed that it could only have been the greatest unsociability among men which thus scattered them into such inhospitable regions.

§ 64. Of the peculiar character of things as natural purposes

In order to see that a thing is only possible as a purpose, that is, to be forced to seek the causality of its

origin not in the mechanism of nature but in a cause whose faculty of action is determined through concepts, it is requisite that its form be not possible according to mere natural laws, i.e. laws which can be cognised by us through the Understanding alone when applied to objects of Sense; but that even the empirical knowledge of it as regards its cause and effect presupposes concepts of Reason. This *contingency* of its form in all empirical natural laws in reference to Reason affords a ground for regarding its causality as possible only through Reason. For Reason, which must cognise the necessity of every form of a natural product in order to comprehend even the conditions of its genesis, cannot assume such [natural] necessity in that particular given form. The causality of its origin is then referred to the faculty of acting in accordance with purposes (a will); and the Object which can only thus be represented as possible is represented as a purpose.

If in a seemingly uninhabited country a man perceived a geometrical figure, say a regular hexagon, inscribed on the sand, his reflection busied with such a concept would attribute, although obscurely, the unity in the principle of its genesis to Reason, and consequently would not regard as a ground of the possibility of such a shape the sand, or the neighbouring sea, or the winds, or beasts with familiar footprints, or any other irrational cause. For the chance against meeting with such a concept, which is only possible through Reason, would seem so infinitely great, that it would be just as if there were no natural law, no cause in the mere mechanical working of nature capable of producing it; but as if only the concept of such an Object, as a concept which Reason alone can supply and with which it can compare the thing, could contain the causality for such an effect. This then would be regarded as a purpose, but as a product of *art*, not as a natural purpose (*vestigium hominis video*).[106*]

But in order to regard a thing cognised as a natural product as a purpose also — consequently as a *natural purpose*, if this is not a contradiction — something more is required. I would say provisionally: a thing exists as a natural purpose, if it is [although in a double sense][107*] both *cause and effect of itself*. For herein lies a causality the like of which cannot be combined with the mere concept of a nature without attributing to it a purpose; it can certainly be thought without contradiction, but cannot be comprehended. We shall elucidate the determination of this Idea of a natural purpose by an example, before we analyse it completely.

In the first place, a tree generates another tree according to a known natural law. But the tree produced is of the same genus; and so it produces itself *generically*. On the one hand, as effect it is continually self-produced; on the other hand, as cause it continually produces itself, and so perpetuates itself generically.

Secondly, a tree produces itself as an *individual*. This kind of effect no doubt we call growth; but it is quite different from any increase according to mechanical laws, and is to be reckoned as generation, though under another name. The matter that the tree incorporates it previously works up into a specifically peculiar quality, which natural mechanism external to it cannot supply; and thus it develops itself by aid of a material which, as compounded, is its own product. No doubt, as regards the constituents got from nature without, it must only be regarded as an educt; but yet in the separation and recombination of this raw material we see such an originality in the separating and formative faculty of this kind of natural being, as is infinitely beyond the reach of art, if the attempt is made to reconstruct such vegetable products out of elements obtained by their dissection or material supplied by nature for their sustenance.

Thirdly, each part of a tree generates itself in such a way that the maintenance of any one part depends reciprocally on the maintenance of the rest. A bud of one tree engrafted on the twig of another produces in the alien stock a plant of its own kind, and so also a scion engrafted on a foreign stem. Hence we may regard each twig or leaf of the same tree as merely engrafted or inoculated into it, and so as an independent tree attached to another and parasitically nourished by it. At the same time, while the leaves are products of the tree they also in turn give support to it; for the repeated defoliation of a tree kills it, and its growth thus depends on the action of the leaves upon the stem. The self-help of nature in case of injury in the vegetable creation, when the want of a part that is necessary for the maintenance of its

neighbours is supplied by the remaining parts; and the abortions or malformations in growth, in which certain parts, on account of casual defects or hindrances, form themselves in a new way to maintain what exists, and so produce an anomalous creature, I shall only mention in passing, though they are among the most wonderful properties of organised creatures.

§ 65. Things regarded as natural purposes are organised beings

According to the character alleged in the preceding section, a thing, which, though a natural product, is to be cognised as only possible as a natural purpose, must bear itself alternately as cause and as effect. This, however, is a somewhat inexact and indeterminate expression which needs derivation from a determinate concept.

Causal combination as thought merely by the Understanding is a connexion constituting an ever-progressive series (of causes and effects); and things which as effects presuppose others as causes cannot be reciprocally at the same time causes of these. This sort of causal combination we call that of effective causes (*nexus effectivus*). But on the other hand, a causal combination according to a concept of Reason (of purposes) can also be thought, which regarded as a series would lead either forwards or backwards; in this the thing that has been called the effect may with equal propriety be termed the cause of that of which it is the effect. In the practical department of human art we easily find connexions such as this; e.g. a house, no doubt, is the cause of the money received for rent, but also conversely the representation of this possible income was the cause of building the house. Such a causal connexion we call that of final causes (*nexus finalis*). We may perhaps suitably name the first the connexion of real causes, the second of those which are ideal; because from this nomenclature it is at once comprehended that there can be no more than these two kinds of causality.

For a thing to be a natural purpose in the *first* place it is requisite that its parts (as regards their being and their form) are only possible through their reference to the whole. For the thing itself is a purpose and so is comprehended under a concept or an Idea which must determine *a priori* all that is to be contained in it. But so far as a thing is only thought as possible in this way, it is a mere work of art; i.e. a product of one rational cause distinct from the matter (of the parts), whose causality (in the collection and combination of the parts) is determined through its Idea of a whole possible by their means (and consequently not through external nature).

But if a thing as a natural product is to involve in itself and in its internal possibility a reference to purposes, — i.e. to be possible only as a natural purpose, and without the causality of the concepts of rational beings external to itself, — then it is requisite *secondly* that its parts should so combine in the unity of a whole that they are reciprocally cause and effect of each other's form. Only in this way can the Idea of the whole conversely (reciprocally) determine the form and combination of all the parts; not indeed as cause — for then it would be an artificial product — but as the ground of cognition, for him who is judging it, of the systematic unity and combination of all the manifold contained in the given material.

For a body then which is to be judged in itself and its internal possibility as a natural purpose, it is requisite that its parts mutually depend upon each other both as to their form and their combination, and so produce a whole by their own causality; while conversely the concept of the whole may be regarded as its cause according to a principle (in a being possessing a causality according to concepts adequate to such a product). In this case then the connexion of *effective causes* may be judged as an *effect through final causes*.

In such a product of nature every part not only exists *by means of* the other parts, but is thought as existing *for the sake of* the others and the whole, that is as an (organic) instrument. Thus, however, it might be an artificial instrument, and so might be represented only as a purpose that is possible in general;

but also its parts are all organs reciprocally *producing* each other. This can never be the case with artificial instruments, but only with nature which supplies all the material for instruments (even for those of art). Only a product of such a kind can be called a *natural purpose*, and this because it is an *organised* and self-organising being.

In a watch one part is the instrument for moving the other parts, but the wheel is not the effective cause of the production of the others; no doubt one part is for the sake of the others, but it does not exist by their means. In this case the producing cause of the parts and of their form is not contained in the nature (of the material), but is external to it in a being which can produce effects according to Ideas of a whole possible by means of its causality. Hence a watch wheel does not produce other wheels, still less does one watch produce other watches, utilising (organising) foreign material for that purpose; hence it does not replace of itself parts of which it has been deprived, nor does it make good what is lacking in a first formation by the addition of the missing parts, nor if it has gone out of order does it repair itself — all of which, on the contrary, we may expect from organised nature. — An organised being is then not a mere machine, for that has merely *moving* power, but it possesses in itself *formative* power of a self-propagating kind which it communicates to its materials though they have it not of themselves; it organises them, in fact, and this cannot be explained by the mere mechanical faculty of motion.

We say of nature and its faculty in organised products far too little if we describe it as an *analogon of art*; for this suggests an artificer (a rational being) external to it. Much rather does it organise itself and its organised products in every species, no doubt after one general pattern but yet with suitable deviations, which self-preservation demands according to circumstances. We perhaps approach nearer to this inscrutable property, if we describe it as an *analogon of life*; but then we must either endow matter, as mere matter, with a property which contradicts its very being (hylozoism), or associate therewith an alien principle *standing in communion* with it (a soul). But in the latter case we must, if such a product is to be a natural product, either presuppose organised matter as the instrument of that soul, which does not make the soul a whit more comprehensible; or regard the soul as artificer of this structure and so remove the product from (corporeal) nature. To speak strictly, then, the organisation of nature has in it nothing analogous to any causality we know.[108*] Beauty in nature can be rightly described as an analogon of art, because it is ascribed to objects only in reference to reflection upon their *external* aspect, and consequently only on account of the form of their external surface. But *internal natural perfection*, as it belongs to those things which are only possible as *natural purposes*, and are therefore called organised beings, is not analogous to any physical, i.e. natural, faculty known to us; nay even, regarding ourselves as, in the widest sense, belonging to nature, it is not even thinkable or explicable by means of any exactly fitting analogy to human art.

The concept of a thing as in itself a natural purpose is therefore no constitutive concept of Understanding or of Reason, but it can serve as a regulative concept for the reflective Judgement, to guide our investigation about objects of this kind by a distant analogy with our own causality according to purposes generally, and in our meditations upon their ultimate ground. This latter use, however, is not in reference to the knowledge of nature or of its original ground, but rather to our own practical faculty of Reason, in analogy with which we considered the cause of that purposiveness.

Organised beings are then the only beings in nature which, considered in themselves and apart from any relation to other things, can be thought as possible only as purposes of nature. Hence they first afford objective reality to the concept of a *purpose of nature*, as distinguished from a practical purpose; and so they give to the science of nature the basis for a teleology, i.e. a mode of judgement about natural Objects according to a special principle which otherwise we should in no way be justified in introducing (because we cannot see *a priori* the possibility of this kind of causality).

§ 66. Of the principle of judging of internal purposiveness in organised beings

This principle, which is at the same time a definition, is as follows: An organised product of nature is one in which every part is reciprocally purpose, [end] and means. In it nothing is vain, without purpose, or to be ascribed to a blind mechanism of nature.

This principle, as regards its occasion, is doubtless derived from experience, viz. from that methodised experience called observation; but on account of the universality and necessity which it ascribes to such purposiveness it cannot rest solely on empirical grounds, but must have at its basis an *a priori* principle, although it be merely regulative and these purposes lie only in the idea of the judging [subject] and not in an effective cause. We may therefore describe the aforesaid principle as a *maxim* for judging of the internal purposiveness of organised beings.

It is an acknowledged fact that the dissectors of plants and animals, in order to investigate their structure and to find out the reasons, why and for what end such parts, such a disposition and combination of parts, and just such an internal form have been given them, assume as indisputably necessary the maxim that nothing in such a creature is *vain*; just as they lay down as the fundamental proposition of the universal science of nature, that *nothing* happens *by chance*. In fact, they can as little free themselves from this teleological proposition as from the universal physical proposition; for as without the latter we should have no experience at all, so without the former we should have no guiding thread for the observation of a species of natural things which we have thought teleologically under the concept of natural purposes.

Now this concept brings the Reason into a quite different order of things from that of a mere mechanism of nature, which is no longer satisfying here. An Idea is to be the ground of the possibility of the natural product. But because this is an absolute unity of representation, instead of the material being a plurality of things that can supply by itself no definite unity of composition, — if that unity of the Idea is to serve at all as the *a priori* ground of determination of a natural law of the causality of such a form of composition, — the purpose of nature must be extended to *everything* included in its product. For if we once refer action of this sort *on the whole* to any supersensible ground of determination beyond the blind mechanism of nature, we must judge of it altogether according to this principle; and we have then no reason to regard the form of such a thing as partly dependent on mechanism — for by such mixing up of disparate principles no certain rule of judging would be left.

For example, it may be that in an animal body many parts can be conceived as concretions according to mere mechanical laws (as the hide, the bones, the hair). And yet the cause which brings together the required matter, modifies it, forms it, and puts it in its appropriate place, must always be judged of teleologically; so that here everything must be considered as organised, and everything again in a certain relation to the thing itself is an organ.

§ 67. Of the principle of the teleological judging of nature in general as a system of purposes

We have already said above that the *external* purposiveness of natural things affords no sufficient warrant for using them as purposes of nature in order to explain their presence, and for regarding their contingently purposive effects as the grounds of their presence according to the principle of final causes. Thus we cannot take for natural purposes, *rivers* because they promote intercourse among inland peoples, *mountains* because they contain the sources of the rivers and for their maintenance in rainless seasons have a store of snow, or the *slope* of the land which carries away the water and leaves the country dry; because although this shape of the earth's surface be very necessary for the origin and maintenance of the vegetable and animal kingdoms, it has nothing in itself for the possibility of which we are forced to assume a causality according to purposes. The same is true of plants which man uses for his needs or his pleasures; of beasts, the camel, the ox, the horse, dog, etc., which are indispensable to him as well for

food as because they are used in his service in many different ways. In the case of things which we have no reason for regarding in themselves as purposes, such external relation can only be hypothetically judged as purposive.

To judge of a thing as a natural purpose on account of its internal form is something very different from taking the existence of that thing to be a purpose of nature. For the latter assertion we require not merely the concept of a possible purpose, but the knowledge of the final purpose (*scopus*) of nature. But this requires a reference of such knowledge to something supersensible far transcending all our teleological knowledge of nature, for the purpose of [the existence of][109*] nature must itself be sought beyond nature. The internal form of a mere blade of grass is sufficient to show that for our human faculty of judgement its origin is possible only according to the rule of purposes. But if we change our point of view and look to the use which other natural beings make of it, abandon the consideration of its internal organisation and only look to its externally purposive references, we shall arrive at no categorical purpose; all this purposive reference rests on an ever more distant condition, which, as unconditioned (the presence of a thing as final purpose), lies quite outside the physico-teleological view of the world. For example, grass is needful for the ox, which again is needful for man as a means of existence, but then we do not see why it is necessary that men should exist (a question this, which we shall not find so easy to answer if we sometimes cast our thoughts on the New Hollanders or the inhabitants of Tierra del Fuego). So conceived, the thing is not even a natural purpose, for neither it (nor its whole genus) is to be regarded as a natural product.

Hence it is only so far as matter is organised that it necessarily carries with it the concept of a natural purpose, because this its specific form is at the same time a product of nature. But this concept leads necessarily to the Idea of collective nature as a system in accordance with the rule of purposes, to which Idea all the mechanism of nature must be subordinated according to principles of Reason (at least in order to investigate natural phenomena therein). The principle of Reason belongs to it only as a subjective principle or a maxim: viz. everything in the World is some way good for something; nothing is vain in it. By the example that nature gives us in its organic products we are justified, nay called upon, to expect of it and of its laws nothing that is not purposive on the whole.

It is plain that this is not a principle for the determinant but only for the reflective Judgement; that it is regulative and not constitutive; and that we derive from it a clue by which we consider natural things in reference to an already given ground of determination according to a new law-abiding order; and extend our natural science according to a different principle, viz. that of final causes, but yet without prejudice to the principle of mechanical causality. Furthermore, it is in no wise thus decided, whether anything of which we judge by this principle, is a *designed* purpose of nature; whether the grass is for the ox or the sheep, or whether these and the other things of nature are here for men. It is well also from this side to consider the things which are unpleasant to us and are contrary to purpose in particular references. Thus, for example, we can say: The vermin that torment men in their clothes, their hair, or their beds, may be, according to a wise appointment of nature, a motive to cleanliness which is in itself an important means for the preservation of health. Or again the mosquitoes and other stinging insects that make the wildernesses of America so oppressive to the savages, may be so many goads to activity for these primitive men, [inducing them] to drain the marshes and bring light into the forests which intercept every breath of air, and in this way, as well as by cultivating the soil, to make their habitations more healthy. The same thing, which appears to men contradictory to nature in its inner organisation, if viewed in this light gives an entertaining, sometimes an instructive, outlook into a teleological order of things, to which, without such a principle, mere physical observation would not lead us by itself. Thus some persons regard the tapeworm as given to the men or animals in whom it resides, as a kind of set-off for some defect in their vital organs; now I would ask if dreams (without which we never sleep, though we seldom remember them) may not be a purposive ordinance of nature? For during the relaxation of all the moving

powers of the body, they serve to excite internally the vital organs by the medium of the Imagination and its great activity (which in this state generally rises to the height of affection). During sleep the Imagination commonly is more actively at play when the stomach is overloaded, in which case this excitement is the more necessary. Consequently, then, without this internal power of motion and this fatiguing unrest, on account of which we complain about our dreams (though in fact they are rather remedial), sleep even in a sound state of health would be a complete extinction of life.

Also the beauty of nature, i.e. its connexion with the free play of our cognitive faculties in apprehending and judging of its appearance, can be regarded as a kind of objective purposiveness of nature in its whole [content] as a system of which man is a member; if once the teleological judging of the same by means of the natural purposes which organised beings suggest to us, has justified for us the Idea of a great system of purposes of nature. We can regard it as a favour[110*] which nature has felt for us, that in addition to what is useful it has so profusely dispensed beauty and charm; and we can therefore love it, as well as regard it with respect on account of its immensity, and feel ourselves ennobled by such regard; just as if nature had established and adorned its splendid theatre precisely with this view.

We shall say only one thing more in this paragraph. If we have once discovered in nature a faculty of bringing forth products that can only be thought by us in accordance with the concept of final causes, we go further still. We venture to judge that things belong to a system of purposes, which yet do not (either in themselves or in their purposive relations) necessitate our seeking for any principle of their possibility beyond the mechanism of causes working blindly. For the first Idea, as concerns its ground, already brings us beyond the world of sense; since the unity of the supersensible principle must be regarded as valid in this way not merely for certain species of natural beings, but for the whole of nature as a system.

§ 68. Of the principle of Teleology as internal principle of natural science

The principles of a science are either internal to it and are then called domestic (*principia domestica*), or are based on concepts that can only find their place outside it and so are *foreign* principles (*peregrina*). Sciences that contain the latter, place at the basis of their doctrines auxiliary propositions (*lemmata*), i.e. they borrow some concept, and with it a ground of arrangement, from another science.

Every science is in itself a system, and it is not enough in it to build in accordance with principles and thus to employ a technical procedure, but we must go to work with it architectonically, as a building subsisting for itself; we must not treat it as an additional wing or part of another building, but as a whole in itself, although we may subsequently make a passage from it into that other or conversely.

If then we introduce into the context of natural science the concept of God in order to explain the purposiveness in nature, and subsequently use this purposiveness to prove that there is a God, there is no internal consistency in either science [i.e. either in natural science or theology]; and a delusive circle brings them both into uncertainty, because they have allowed their boundaries to overlap.

The expression, a purpose of nature, already sufficiently prevents the confusion of mixing up natural science and the occasion that it gives for judging *teleologically* of its objects, with the consideration of God, and so of a *theological* derivation of them. We must not regard it as insignificant, if one interchanges this expression with that of a divine purpose in the ordering of nature, or gives out the latter as more suitable and proper for a pious soul, because it must come in the end to deriving these purposive forms in nature from a wise author of the world. On the contrary, we must carefully and modestly limit ourselves to the expression, a purpose of nature, which asserts exactly as much as we know. Before we ask after the cause of nature itself, we find in nature, and in the course of its development, products of the same kind which are developed in it according to known empirical laws, in accordance with which natural science must judge of its objects, and, consequently, must seek in nature their causality according to the rule of purposes. So then it must not transgress its bounds in order to introduce into itself as a domestic principle

that, to whose concept no experience can be commensurate, upon which we are only entitled to venture after the completion of natural science.

Natural characteristics which demonstrate themselves *a priori*, and consequently admit of insight into their possibility from universal principles without any admixture of experience, although they carry with them a technical purposiveness, yet cannot, because they are absolutely necessary, be referred to the Teleology of nature, as to a method belonging to Physic for solving its problems. Arithmetical or geometrical analogies, as well as universal mechanical laws, — however strange and admirable may seem to us the union of different rules, quite independent of one another according to all appearance, in a single principle, — possess on that account no claim to be teleological grounds of explanation in Physic. Even if they deserve to be brought into consideration in the universal theory of the purposiveness of things of nature, yet they belong to another [science], i.e. Metaphysic, and constitute no internal principle of natural science; as with the empirical laws of natural purposes in organised beings, it is not only permissible but unavoidable to use the teleological *mode of judging* as a principle of the doctrine of nature in regard to a particular class of its objects.

So to the end that Physic may keep within its own bounds, it abstracts itself entirely from the question, whether natural purposes are *designed* or *undesigned*; for that would be to meddle in an extraneous business, in Metaphysic. It is enough that there are objects, alone *explicable* according to natural laws which we can only think by means of the Idea of purposes as principle, and also alone internally *cognisable* as concerns their internal form, in this way. In order, therefore, to remove the suspicion of the slightest assumption, — as if we wished to mix with our grounds of cognition something not belonging to Physic at all, viz. a supernatural cause, — we speak in Teleology, indeed, of nature as if the purposiveness therein were designed, but in such a way that this design is ascribed to nature, i.e. to matter. Now in this way there can be no misunderstanding, because no design in the proper meaning of the word can possibly be ascribed to inanimate matter; we thus give notice that this word here only expresses a principle of the reflective not of the determinant Judgement, and so is to introduce no particular ground of causality; but only adds for the use of the Reason a different kind of investigation from that according to mechanical laws, in order to supplement the inadequacy of the latter even for empirical research into all particular laws of nature. Hence we speak quite correctly in Teleology, so far as it is referred to Physic, of the wisdom, the economy, the forethought, the beneficence of Nature, without either making an intelligent being of it, for that would be preposterous; or even without presuming to place another intelligent Being above it as its Architect, for that would be presumptuous.[111*] But there should be only signified thereby a kind of causality of nature after the analogy of our own in the technical use of Reason, in order to have before us the rule according to which certain products of nature must be investigated.

But now why is it that Teleology usually forms no proper part of theoretical natural science, but is regarded as a propaedeutic or transition to Theology? This is done in order to restrict the study of nature, mechanically considered, to that which we can so subject to observation or experiment that we are able to produce it ourselves as nature does, or at least by similar laws. For we see into a thing completely only so far as we can make it in accordance with our concepts and bring it to completion. But organisation, as an inner purpose of nature, infinitely surpasses all our faculty of presenting the like by means of art. And as concerns the external contrivances of nature regarded as purposive (wind, rain, etc.), Physic, indeed, considers their mechanism, but it cannot at all present their reference to purposes, so far as this is a condition necessarily belonging to cause; for this necessity of connexion has to do altogether with the combination of our concepts and not with the constitution of things.

SECOND DIVISION

DIALECTIC OF THE TELEOLOGICAL JUDGEMENT

§ 69. What is an antinomy of the Judgement?

The *determinant* Judgement has for itself no principles which are the foundation of *concepts of Objects*. It has no autonomy, for it *subsumes* only under given laws or concepts as principles. Hence it is exposed to no danger of an antinomy of its own or to a conflict of its principles. So [we saw that] the transcendental Judgement which contains the conditions of subsuming under categories was for itself not *nomothetic*, but that it only indicated the conditions of sensuous intuition, under which reality (application) can be supplied to a given concept, as law of the Understanding, whereby the Judgement could never fall into discord with itself (at least as far as its principles are concerned).

But the *reflective* Judgement must subsume under a law, which is not yet given, and is therefore in fact only a principle of reflection upon objects, for which we are objectively quite in want of a law or of a concept of an Object that would be adequate as a principle for the cases that occur. Since now no use of the cognitive faculties can be permitted without principles, the reflective Judgement must in such cases serve as a principle for itself. This, because it is not objective and can supply no ground of cognition of the Object adequate for design, must serve as a mere subjective principle, for the purposive employment of our cognitive faculties, i.e. for reflecting upon a class of objects. Therefore in reference to such cases the reflective Judgement has its maxims — necessary maxims — on behalf of the cognition of natural laws in experience, in order to attain by their means to concepts, even concepts of Reason; since it has absolute need of such in order to learn merely to cognise nature according to its empirical laws. — Between these necessary maxims of the reflective Judgement there may be a conflict and consequently an antinomy, upon which a Dialectic bases itself. If each of two conflicting maxims has its ground in the nature of the cognitive faculties, this may be called a natural Dialectic, and an unavoidable illusion which we must expose and resolve in our Critique, to the end that it may not deceive us.

§ 70. Representation of this antinomy

So far as Reason has to do with nature, as the complex of objects of external sense, it can base itself partly upon laws which the Understanding itself prescribes *a priori* to nature, partly upon laws which it can extend indefinitely by means of the empirical determinations occurring in experience. To apply the former kind of laws, i.e. *the* universal laws of material nature in general, the Judgement needs no special principle of reflection, since it is there determinant because an objective principle is given to it through Understanding. But as regards the particular laws that can only be made known to us through experience, there can be under them such great manifoldness and diversity, that the Judgement must serve as its own principle in order to investigate and search into the phenomena of nature in accordance with a law. Such a guiding thread is needed, if we are only to hope for a connected empirical cognition according to a thoroughgoing conformity of nature to law, even its unity according to empirical laws. In this contingent unity of particular laws it may very well happen that the Judgement in its reflection proceeds from two maxims. One of these is suggested to it *a priori* by the mere Understanding; but the other is prompted by particular experiences, which bring the Reason into play in order to form a judgement upon corporeal nature and its laws in accordance with a particular principle. Hence it comes about that these two kinds of

maxims seem to be incapable of existing together, and consequently a Dialectic arises which leads the Judgement into error in the principle of its reflection.

The *first maxim* of Judgement is the *proposition*: all production of material things and their forms must be judged to be possible according to merely mechanical laws.

The *second maxim* is the counter-proposition: some products of material nature cannot be judged to be possible according to merely mechanical laws. (To judge them requires quite a different law of causality, namely, that of final causes.)

If these regulative principles of investigation be converted into constitutive principles of the possibility of Objects, they will run thus:

Proposition: All production of material things is possible according to merely mechanical laws.

Counter-proposition: Some production of material things is not possible according to merely mechanical laws.

In this latter aspect, as objective principles for the determinant Judgement, they would contradict each other; and consequently one of the two propositions must necessarily be false. We shall then, it is true, have an antinomy, but not of Judgement; there will be a conflict in the legislation of Reason. Reason, however, can prove neither the one nor the other of these fundamental propositions, because we can have *a priori* no determinant principle of the possibility of things according to mere empirical laws of nature.

On the other hand, as regards the first-mentioned maxims of a reflective Judgement, they involve no contradiction in fact. For if I say, I must *judge*, according to merely mechanical laws, of the possibility of all events in material nature, and consequently of all forms regarded as its products, I do not therefore say: *They are possible in this way alone* (apart from any other kind of causality). All that is implied is: I *must* always *reflect* upon them *according to the principle* of the mere mechanism of nature, and consequently investigate this as far as I can; because unless this lies at the basis of investigation, there can be no proper knowledge of nature at all. But this does not prevent us, if occasion offers, from following out the second maxim in the case of certain natural forms (and even by occasion of these in the whole of nature), in order to reflect upon them according to the principle of final causes, which is quite a different thing from explaining them according to the mechanism of nature. Reflection in accordance with the first maxim is thus not abrogated; on the contrary, we are told to follow it as far as we can. Nor is it said that these forms would not be possible in accordance with the mechanism of nature. It is only asserted that *human Reason* in following up this maxim and in this way could never find the least ground for that which constitutes the specific [character] of a natural purpose, although it would increase its knowledge of natural laws. Thus it is left undecided whether or not in the unknown inner ground of nature, physico-mechanical and purposive combination may be united in the same things in one principle. We only say that our Reason is not in a position so to unite them; and that therefore the Judgement (as *reflective* — from subjective grounds, not as determinant, in consequence of an objective principle of the possibility of things in themselves) is compelled to think a different principle from that of natural mechanism as the ground of the possibility of certain forms in nature.

§ 71. Preliminary to the solution of the above antinomy

We can in no way prove the impossibility of the production of organised natural products by the mere mechanism of nature, because we cannot see into the first inner ground of the infinite multiplicity of the particular laws of nature, which are contingent for us since they are only empirically known; and so we cannot arrive at the inner all-sufficient principle of the possibility of a nature (a principle which lies in the supersensible). Whether therefore the productive faculty of nature is sufficient for that which we judge to be formed or combined in accordance with the Idea of purposes, as well as for that which we believe to require merely a mechanical system [Maschinenwesen] of nature; or whether there lies at the basis of

things which we must necessarily judge as properly natural purposes, a quite different kind of original causality, which cannot be contained in material nature or in its intelligible substrate, viz. an architectonic Understanding — this is a question to which our Reason, very narrowly limited in respect of the concept of causality if it is to be specified *a priori*, can give no answer whatever. — But it is just as certain and beyond doubt that, in regard to our cognitive faculties, the mere mechanism of nature can furnish no ground of explanation of the production of organised beings. *For the reflective Judgement* it is therefore a quite correct fundamental proposition, that for that connexion of things according to final causes which is so plain, there must be thought a causality distinct from that of mechanism, viz. that of an (intelligent) cause of the world acting in accordance with purposes; but *for the determinant Judgement* this would be a hasty and unprovable proposition. In the first case it is a mere maxim of the Judgement, wherein the concept of that causality is a mere Idea, to which we by no means undertake to concede reality, but which we use as a guide to reflection, which remains thereby always open to all mechanical grounds of explanation and does not withdraw out of the world of Sense. In the second case the proposition would be an objective principle prescribed by Reason, to which the determinant Judgement must subject itself, whereby however it withdraws beyond the world of Sense into the transcendent and perhaps is led into error.

All appearance of an antinomy between the maxims of the proper physical (mechanical) and the teleological (technical) methods of explanation rests therefore on this; that we confuse a fundamental proposition of the reflective with one of the determinant Judgement, and the *autonomy* of the first (which has mere subjective validity for our use of Reason in respect of particular empirical laws) with the *heteronomy* of the second, which must regulate itself according to laws (universal or particular) given to it by the Understanding.

§ 72. Of the different systems which deal with the purposiveness of nature

No one has ever doubted the correctness of the proposition that judgement must be passed upon certain things of nature (organised beings) and their possibility in accordance with the concept of final causes, even if we only desire a *guiding thread* to learn how to cognise their constitution through observation, without aspiring to an investigation into their first origin. The question therefore can only be: whether this fundamental proposition is merely subjectively valid, i.e. is a mere maxim of our Judgement; or whether it is an objective principle of nature, in accordance with which, apart from its mechanism (according to the mere laws of motion), quite a different kind of causality attaches to it, viz. that of final causes, under which these laws (of moving forces) stand only as intermediate causes.

We could leave this question or problem quite undecided and unsolved speculatively; because if we content ourselves with speculation within the bounds of mere natural knowledge, we have enough in these maxims for the study of nature and for the tracking out of its hidden secrets, as far as human powers reach. There is then indeed a certain presentiment of our Reason or a hint as it were given us by nature, that, by means of this concept of final causes, we go beyond nature, and could unite it to the highest point in the series of causes, if we were to abandon or at least to lay aside for a time the investigation of nature (although we may not have advanced far in it), and seek thenceforth to find out whither this stranger in natural science, viz. the concept of natural purposes, would lead us.

But here these undisputed maxims pass over into problems opening out a wide field for difficulties. Does purposive connexion in nature *prove* a particular kind of causality? Or is it not rather, considered in itself and in accordance with objective principles, similar to the mechanism of nature, resting on one and the same ground? Only, as this ground in many natural products is often hidden too deep for our investigation, we make trial of a subjective principle, that of art, i.e. of causality according to Ideas, and we ascribe it to nature by analogy. This expedient succeeds in many cases, but seems in some to mislead,

and in no case does it justify us in introducing into natural science a particular kind of operation quite distinct from the causality according to the mere mechanical laws of nature. We give the name of *Technic* to the procedure (the causality) of nature, on account of the appearance of purpose that we find in its products; and we shall divide this into *designed* (*technica intentionalis*) and *undesigned* (*technica naturalis*). The first is meant to signify that the productive faculty of nature according to final causes must be taken for a particular kind of causality; the second that it is at bottom quite similar to the mechanism of nature, and that its contingent agreement with our artistic concepts and their rules should be explained as a mere subjective condition of judging it, and not, falsely, as a particular kind of natural production.

If we now speak of systems explanatory of nature in regard of final causes, it must be remarked that they all controvert each other dogmatically, i.e. as to objective principles of the possibility of things, whether there are causes which act designedly or whether they are quite without design. They do not dispute as to the subjective maxims, by which we merely judge of the causes of such purposive products. In this latter case *disparate* principles could very well be unified; but in the former, contradictorily opposed laws annul each other and cannot subsist together.

There are two sorts of systems as to the Technic of nature, i.e. its productive power in accordance with the rule of purposes; viz. *Idealism* or *Realism* of natural purposes. The first maintains that all purposiveness of nature is *undesigned*; the second that some (in organised beings) is *designed*. From this latter the hypothetical consequence can be deduced that the Technic of Nature, as concerns all its other products in reference to the whole of nature, is also designed, i.e. is a purpose.

(1) The *Idealism* of purposiveness (I always understand here by this, objective purposiveness) is either that of the *casuality* or the *fatality* of the determination of nature in the purposive form of its products. The former principle treats of the reference of matter to the physical basis of its form, viz. the laws of motion; the second, its reference to the *hyperphysical* basis of itself and of the whole of nature. The system of *casuality* that is ascribed to *Epicurus* or *Democritus* is, taken literally, so plainly absurd that it need not detain us. Opposed to this is the system of fatality, of which *Spinoza* is taken as the author, although it is much older according to all appearance. This, as it appeals to something supersensible to which our insight does not extend, is not so easy to controvert; but that is because its concept of the original Being is not possible to understand. But so much is clear, that on this theory the purposive combination in the world must be taken as undesigned; for although derived from an original Being, it is not derived from its Understanding or from any design on its part, but rather from the necessity of its nature and of the world-unity which emanates therefrom. Consequently the Fatalism of purposiveness is at the same time an Idealism.

(2) The *Realism* of the purposiveness of nature is also either physical or hyperphysical. The *former* bases the purposes in nature, by the analogy of a faculty acting with design, on the *life of matter* (either its own or the life of an inner principle in it, a world-soul) and is called *Hylozoism*. The *latter* derives them from the original ground of the universe, as from an intelligent Being (originally living), who produces them with design, and is *Theism*.[112*]

§ 73. None of the above systems give what they pretend

What do all these systems desire? They desire to explain our teleological judgements about nature, and they go so to work therewith that some deny their truth and, consequently, explain them as an Idealism of Nature (represented as Art); others recognise them as true, and promise to establish the possibility of a nature in accordance with the Idea of final causes.

(1) The systems which defend the Idealism of final causes in nature grant, it is true, on the one hand to their principle a causality in accordance with the laws of motion (through which [causality] natural things exist purposively); but they deny to it *intentionality*, i.e. that it designedly determines itself to this its

purposive production; in other words, they deny that the cause is a purpose. This is Epicurus's method of explanation, according to which the distinction between a Technic of nature and mere mechanism is altogether denied. Blind chance is taken as the explanatory ground not only of the agreement of the developed products with our concepts of the purpose, and consequently of [nature's] Technic; but also of the determination of the causes of this production in accordance with the laws of motion, and consequently of their mechanism. Thus nothing is explained, not even the illusion in our teleological judgements, and consequently, the would-be Idealism of these in no way established.

On the other hand, *Spinoza* wishes to dispense with all inquiries into the ground of the possibility of purposes of nature, and to take away all reality from this Idea. He allows their validity in general not as products but as accidents inhering in an original Being; and to this Being, as substrate of those natural things, he ascribes not causality in regard to them but mere subsistence. On account of its unconditioned necessity, and also that of all natural things as accidents inhering in it, he secures, it is true, to the forms of nature that unity of ground which is requisite for all purposiveness; but at the same time he tears away their contingence, without which no *unity of purpose* can be thought, and with it all *design*, inasmuch as he takes away all intelligence from the original ground of natural things.

But Spinozism does not furnish what it desires. It desires to afford an explanatory ground of the purposive connexion (which it does not deny) of the things of nature, and it merely speaks of the unity of the subject in which they all inhere. But even if we concede to it that the beings of the world exist in this way, such ontological unity is not therefore a *unity of purpose*, and does not make this in any way comprehensible. For this latter is a quite particular kind of unity which does not follow from the connexion of things (the beings of the world) in a subject (the original Being), but implies in itself reference to a *cause* which has Understanding; and even if we unite all these things in a simple subject, this never exhibits a purposive reference. For we do not think of them, first, as the inner *effects* of the substance, as if it were a *cause*; nor, secondly, of this cause as a cause producing effects *by means of its Understanding*. Without these formal conditions all unity is mere natural necessity; and, if it is ascribed as well to things which we represent as external to one another, blind necessity. But if we wish to give the name of purposiveness of nature to that which the schoolmen call the transcendental perfection of things (in reference to their proper being), according to which everything has in itself that which is requisite to make it one thing and not another, then we are only like children playing with words instead of concepts. For if all things must be thought as purposes, then to be a thing is the same as to be a purpose, and there is at bottom nothing which specially deserves to be represented as a purpose.

We hence see at once that Spinoza by his reducing our concepts of the purposive in nature to our own consciousness of existing in an all-embracing (though simple) Being, and by his seeking that form merely in the unity of this Being, must have intended to maintain not the realism, but the idealism of its purposiveness. Even this he was not able to accomplish, because the mere representation of the unity of the substrate cannot bring about the Idea of a purposiveness, even that which is only undesigned.

(2) Those who not only maintain the *Realism* of natural purposes, but also set about explaining it, believe that they can comprehend, at least as regards its possibility, a practical kind of causality, viz. that of causes working designedly; otherwise they could not undertake to supply this explanation. For to authorise even the most daring of hypotheses, at least the *possibility* of what we assume as basis must be *certain*, and we must be able to assure objective reality to its concept.

But the possibility of living matter cannot even be thought; its concept involves a contradiction because lifelessness, *inertia*, constitutes the essential character of matter. The possibility of matter endowed with life, and of collective nature regarded as an animal, can only be used in an inadequate way (in the interests of the hypothesis of purposiveness in the whole of nature), so far as it is manifested by experience in the organisation of nature on a small scale; but in no way can we have insight into its possibility *a priori*. There must then be a circle in the explanation, if we wish to derive the purposiveness

of nature in organised beings from the life of matter, and yet only know this life in organised beings, and can form no concept of its possibility without experience of this kind. Hylozoism, therefore, does not furnish what it promises.

Finally, *Theism* can just as little establish dogmatically the possibility of natural purposes as a key to Teleology; although it certainly is superior to all other grounds of explanation in that, through the Understanding which it ascribes to the original Being, it rescues in the best way the purposiveness of nature from Idealism, and introduces a causality acting with design for its production.

But we must first prove satisfactorily to the determinant Judgement the impossibility of the unity of purpose in matter resulting from its mere mechanism, before we are justified in placing the ground of this beyond nature in a determinate way. We can, however, advance no further than this. In accordance with the constitution and limits of our cognitive faculties (whilst we do not comprehend even the first inner ground of this mechanism) we must in no wise seek in matter a principle of determinate purposive references; but no other way of judging of the origination of its products as natural purposes remains to us than that by means of a supreme Understanding as cause of the world. But this is only a ground for the reflective, not for the determinant Judgement, and can justify absolutely no objective assertion.

§ 74. The reason that we cannot treat the concept of a Technic of nature dogmatically is the fact that a natural purpose is inexplicable

We deal with a concept dogmatically (even though it should be empirically conditioned) if we consider it as contained under another concept of the Object which constitutes a principle[113*] of Reason, and determine it in conformity with this. But we deal with it merely critically, if we consider it only in reference to our cognitive faculties and consequently to the subjective conditions of thinking it, without undertaking to decide anything about its Object. Dogmatic procedure with a concept is then that which is conformable to law for the determinant Judgement, critical procedure for the reflective Judgement.

Now the concept of a thing as a natural purpose is a concept which subsumes nature under a causality only thinkable through Reason, in order to judge in accordance with this principle about that which is given of the Object in experience. But in order to use it dogmatically for the determinant Judgement, we must be assured first of the objective reality of this concept, because otherwise we could subsume no natural thing under it. Again, the concept of a thing as a natural purpose is, no doubt, empirically conditioned, i.e. only possible under certain conditions given in experience, though not to be abstracted therefrom; but it is a concept only possible in accordance with a rational principle in the judgement about the object. Its objective reality, therefore (i.e. that an object in conformity with it is possible), cannot be comprehended and dogmatically established as such a principle; and we do not know whether it is merely a sophistical and objectively empty concept (*conceptus ratiocinans*), or a rational concept, establishing a cognition and confirmed by Reason (*conceptus ratiocinatus*).[114*] Therefore it cannot be dogmatically treated for the determinant Judgement, i.e. it is not only impossible to decide whether or not things of nature considered as natural purposes require for their production a causality of a quite peculiar kind (that acting on design); but the question cannot even be put, because the concept of a natural purpose is simply not susceptible of proof through Reason as regards its objective reality. That is, it is not constitutive for the determinant Judgement, but merely regulative for the reflective.

That it is not susceptible of proof is clear because (as concept of a *natural product*) it embraces in itself natural necessity, and at the same time (as purpose) a contingency of the form of the Object (in reference to the mere laws of nature) in the very same thing. Hence, if there is to be no contradiction here it must contain a ground for the possibility of the thing in nature, and also a ground of the possibility of this nature itself and of its reference to something which, not being empirically cognisable nature (supersensible), is therefore for us not cognisable at all. [This is requisite] if it is to be judged according

to a different kind of causality from that of natural mechanism when we wish to establish its possibility. The concept of a thing, then, as a natural purpose, is transcendent *for the determinant Judgement*, if we consider the Object through Reason (although for the reflective Judgement it certainly may be immanent in respect of the objects of experience). Hence for determinant judgements objective reality cannot be supplied to it; and so it is intelligible how all systems that one may project for the dogmatic treatment of the concept of natural purposes and of nature itself [considered] as a whole connected together by means of final causes, can decide nothing either by objective affirmation or by objective denial. For if things be subsumed under a concept that is merely problematical, its synthetical predicates (e.g. in the question whether the purpose of nature which we conceive for the production of things is designed or undesigned) can furnish only problematical judgements of the Object, whether affirmative or negative; and we do not know whether we are judging about something or about nothing. The concept of a causality through purposes (of art) has at all events objective reality, and also the concept of a causality according to the mechanism of nature. But the concept of a causality of nature according to the rule of purposes, — still more of a Being such as cannot be given us in experience, a Being who is the original cause of nature, — though it can be thought without contradiction, yet is of no avail for dogmatic determinations. For, since it cannot be derived from experience, and also is not requisite for the possibility thereof, its objective reality can in no way be assured. But even if this could be done, how can I number among the products of nature things which are definitely accounted products of divine art, when it is just the incapacity of nature to produce such things according to its own laws that made it necessary to invoke a cause different from it?

§ 75. The concept of an objective purposiveness of nature is a critical principle of Reason for the reflective Judgement

It is then one thing to say, “the production of certain things of nature or that of collective nature is only possible through a cause which determines itself to action according to design”; and quite another to say, “I can *according to the peculiar constitution of my cognitive faculties* judge concerning the possibility of these things and their production, in no other fashion than by conceiving for this a cause working according to design, i.e. a Being which is productive in a way analogous to the causality of an intelligence.” In the former case I wish to establish something concerning the Object, and am bound to establish the objective reality of an assumed concept; in the latter, Reason only determines the use of my cognitive faculties, conformably to their peculiarities and to the essential conditions of their range and their limits. Thus the former principle is an objective proposition for the determinant Judgement, the latter merely a subjective proposition for the reflective Judgement, i.e. a maxim which Reason prescribes to it.

We are in fact indispensably obliged to ascribe the concept of design to nature if we wish to investigate it, though only in its organised products, by continuous observation; and this concept is therefore an absolutely necessary maxim for the empirical use of our Reason. It is plain that once such a guiding thread for the study of nature is admitted and verified, we must at least try the said maxim of Judgement in nature as a whole; because thereby many of nature’s laws might discover themselves, which otherwise, on account of the limitation of our insight into its inner mechanism, would remain hidden. But though in regard to this latter employment that maxim of Judgement is certainly useful, it is not indispensable, for nature as a whole is not given as organised (in the narrow sense of the word above indicated). On the other hand, in regard to those natural products, which must be judged of as designed and not formed otherwise (if we are to have empirical knowledge of their inner constitution), this maxim of the reflective Judgement is essentially necessary; because the very thought of them as organised beings is impossible without combining therewith the thought of their designed production.

Now the concept of a thing whose existence or form we represent to ourselves as possible under the

condition of a purpose is inseparably bound up with the concept of its contingency (according to natural laws). Hence the natural things that we find possible only as purposes supply the best proof of the contingency of the world-whole; to the common Understanding and to the philosopher alike they are the only valid ground of proof for its dependence on and origin from a Being existing outside the world — a Being who must also be intelligent on account of that purposive form. Teleology then finds the consummation of its investigations only in Theology.

But what now in the end does the most complete Teleology prove? Does it prove that there is such an intelligent Being? No. It only proves that according to the constitution of our cognitive faculties and in the consequent combination of experience with the highest principles of Reason, we can form absolutely no concept of the possibility of such a world [as this] save by thinking a designedly-working supreme cause thereof. Objectively we cannot therefore lay down the proposition, there is an intelligent original Being; but only subjectively, for the use of our Judgement in its reflection upon the purposes in nature, which can be thought according to no other principle than that of a designing causality of a highest cause.

If we wished to establish on teleological grounds the above proposition dogmatically we should be beset with difficulties from which we could not extricate ourselves. For then the proposition must at bottom be reduced to the conclusion, that the organised beings in the world are no otherwise possible than by a designedly-working cause. And we should unavoidably have to assert that, because we can follow up these things in their causal combination only under the Idea of purposes, and cognise them only according to their conformity to law, we are thereby justified in assuming this as a condition necessary for every thinking and cognising being — a condition consequently attaching to the Object and not merely to our subject. But such an assertion we do not succeed in sustaining. For, since we do not, properly speaking, *observe* the purposes in nature as designed, but only in our reflection upon its products *think* this concept as a guiding thread for our Judgement, they are not given to us through the Object. It is quite impossible for us *a priori* to vindicate, as capable of assumption, such a concept according to its objective reality. It remains therefore a proposition absolutely resting upon subjective conditions alone, viz. of the Judgement reflecting in conformity with our cognitive faculties. If we expressed this proposition dogmatically as objectively valid, it would be: “There is a God.” But for us men there is only permissible the limited formula: “We cannot otherwise think and make comprehensible the purposiveness which must lie at the bottom of our cognition of the internal possibility of many natural things, than by representing it and the world in general as a product of an intelligent cause, [a God].”[115]*

Now if this proposition, based on an inevitably necessary maxim of our Judgement, is completely satisfactory from every *human* point of view for both the speculative and practical use of our Reason, I should like to know what we lose by not being able to prove it as also valid for higher beings, from objective grounds (which unfortunately are beyond our faculties). It is indeed quite certain that we cannot adequately cognise, much less explain, organised beings and their internal possibility, according to mere mechanical principles of nature; and we can say boldly it is alike certain that it is absurd for men to make any such attempt or to hope that another *Newton* will arise in the future, who shall make comprehensible by us the production of a blade of grass according to natural laws which no design has ordered.[116]* We must absolutely deny this insight to men. But then how do we know that in nature, if we could penetrate to the principle by which it specifies the universal laws known to us, there *cannot* lie hidden (in its mere mechanism) a sufficient ground of the possibility of organised beings without supposing any design in their production? would it not be judged by us presumptuous to say this? Probabilities here are of no account when we have to do with judgements of pure Reason. — We cannot therefore judge objectively, either affirmatively or negatively, concerning the proposition: “Does a Being acting according to design lie at the basis of what we rightly call natural purposes, as the cause of the world (and consequently as its author)?” So much only is sure, that if we are to judge according to what is permitted us to see by our own proper nature (the conditions and limitations of our Reason), we can place at the basis of the possibility

of these natural purposes nothing else than an intelligent Being. This alone is in conformity with the maxim of our reflective Judgement and therefore with a ground which, though subjective, is inseparably attached to the human race.

§ 76. Remark

This consideration, which very well deserves to be worked out in detail in Transcendental Philosophy, can come in here only in passing, by way of elucidation (not as a proof of what is here proposed).

Reason is a faculty of principles and proceeds in its extremest advance to the unconditioned; on the other hand, the Understanding stands at its service always only under a certain condition which must be given. But without concepts of Understanding, to which objective reality must be given, the Reason cannot form any objective (synthetical) judgement; and contains in itself, as theoretical Reason, absolutely no constitutive but merely regulative principles. We soon see that where the Understanding cannot follow, the Reason is transcendent, and shows itself in Ideas formerly established (as regulative principles), but not in objectively valid concepts. But the Understanding which cannot keep pace with Reason but yet is requisite for the validity of Objects, limits the validity of these Ideas to the subject, although [extending it] generally to all [subjects] of this kind. That is, the Understanding limits their validity to the condition, that according to the nature of our (human) cognitive faculties, or, generally, according to the concept which we *ourselves* can *make* of the faculty of a finite intelligent being, nothing else can or must be thought; though this is not to assert that the ground of such a judgement lies in the Object. We shall adduce some examples which, though they are too important and difficult to impose them on the reader as proved propositions, yet will give him material for thought and may serve to elucidate what we are here specially concerned with.

It is indispensably necessary for the human Understanding to distinguish between the possibility and the actuality of things. The ground for this lies in the subject and in the nature of our cognitive faculties. Such a distinction (between the possible and the actual) would not be given were there not requisite for knowledge two quite different elements, Understanding for concepts and sensible intuition for Objects corresponding to them. If our Understanding were intuitive it would have no objects but those which are actual. Concepts (which merely extend to the possibility of an object) and sensible intuitions (which give us something without allowing us to cognise it thus as an object) would both disappear. But now the whole of our distinction between the merely possible and the actual rests on this, that the former only signifies the positing of the representation of a thing in respect of our concept, and, in general, in respect of the faculty of thought; while the latter signifies the positing of the thing in itself [outside this concept].[117*] The distinction, then, of possible things from actual is one which has merely subjective validity for the human Understanding, because we can always have a thing in our thoughts although it is [really] nothing, or we can represent a thing as given although we have no concept of it. The propositions therefore — that things can be possible without being actual, and that consequently no conclusion can be drawn as to actuality from mere possibility — are quite valid for human Reason, without thereby proving that this distinction lies in things themselves. That this does not follow, and that consequently these propositions, though valid of Objects (in so far as our cognitive faculty, as sensuously conditioned, busies itself with Objects of sense), do not hold for things in general, appears from the irrepressible demand of Reason to assume something (the original ground) necessarily existing as unconditioned, in which possibility and actuality should no longer be distinguished, and for which Idea our Understanding has absolutely no concept; i.e. it can find no way of representing such a thing and its manner of existence. For if the Understanding *thinks* such a thing (which it may do at pleasure), the thing is merely represented as possible. If it is conscious of it as given in intuition, then is it actual; but nothing as to its possibility is thus thought. Hence the concept of an absolutely necessary Being is no doubt an indispensable Idea of

Reason, but yet it is a problematical concept unattainable by the human Understanding. It is indeed valid for the employment of our cognitive faculties in accordance with their peculiar constitution, but not valid of the Object. Nor is it valid for every knowing being, because I cannot presuppose in every such being thought and intuition as two distinct conditions of the exercise of its cognitive faculties, and consequently as conditions of the possibility and actuality of things. An Understanding into which this distinction did not enter, might say: All Objects that I know *are*, i.e. exist; and the possibility of some, which yet do not exist (i.e. the contingency or the contrasted necessity of those which do exist), might never come into the representation of such a being at all. But what makes it difficult for our Understanding to treat its concepts here as Reason does, is merely that for it, as human Understanding, that is transcendent (i.e. impossible for the subjective conditions of its cognition) which Reason makes into a principle appertaining to the Object. — Here the maxim always holds, that all Objects whose cognition surpasses the faculty of the Understanding are thought by us according to the subjective conditions of the exercise of that faculty which necessarily attach to our (human) nature. If judgements laid down in this way (and there is no other alternative in regard to transcendent concepts) cannot be constitutive principles determining the Object as it is, they will remain regulative principles adapted to the human point of view, immanent in their exercise and sure.

Just as Reason in the theoretical consideration of nature must assume the Idea of an unconditioned necessity of its original ground, so also it presupposes in the practical [sphere] its own (in respect of nature) unconditioned causality, or freedom, in that it is conscious of its own moral command. Here the objective necessity of the act, as a duty, is opposed to that necessity which it would have as an event, if its ground lay in nature and not in freedom (i.e. in the causality of Reason). The morally absolutely necessary act is regarded as physically quite contingent, since that which *ought* necessarily to happen often does not happen. It is clear then that it is owing to the subjective constitution of our practical faculty that the moral laws must be represented as commands, and the actions conforming to them as duties; and that Reason expresses this necessity not by an "*is*" (happens), but by an "ought to be." This would not be the case were Reason considered as in its causality independent of sensibility (as the subjective condition of its application to objects of nature), and so as cause in an intelligible world entirely in agreement with the moral law. For in such a world there would be no distinction between "ought to do" and "does," between a practical law of that which is possible through us, and the theoretical law of that which is actual through us. Though, therefore, an intelligible world in which everything would be actual merely because (as something good) it is possible, together with freedom as its formal condition, is for us a transcendent concept, not available as a constitutive principle to determine an Object and its objective reality; yet, because of the constitution of our (in part sensuous) nature and faculty it is, so far as we can represent it in accordance with the constitution of our Reason, for us and for all rational beings that have a connexion with the world of sense, a universal *regulative principle*. This principle does not objectively determine the constitution of freedom, as a form of causality, but it makes the rule of actions according to that Idea a command for every one, with no less validity than if it did so determine it.

In the same way we may concede thus much as regards the case in hand. Between natural mechanism and the Technic of nature, i.e. its purposive connexion, we should find no distinction, were it not that our Understanding is of the kind that must proceed from the universal to the particular. The Judgement then in respect of the particular can cognise no purposiveness and, consequently, can form no determinant judgements, without having a universal law under which to subsume that particular. Now the particular, as such, contains something contingent in respect of the universal, while yet Reason requires unity and conformity to law in the combination of particular laws of nature. This conformity of the contingent to law is called purposiveness; and the derivation of particular laws from the universal, as regards their contingent element, is impossible *a priori* through a determination of the concept of the Object. Hence, the concept of the purposiveness of nature in its products is necessary for human Judgement in respect of

nature, but has not to do with the determination of Objects. It is, therefore, a subjective principle of Reason for the Judgement, which as regulative (not constitutive) is just as necessarily valid for our *human Judgement* as if it were an objective principle.

§ 77. Of the peculiarity of the human Understanding, by means of which the concept of a natural purpose is possible

We have brought forward in the *Remark* peculiarities of our cognitive faculties (even the higher ones) which we are easily led to transfer as objective predicates to the things themselves. But they concern Ideas, no object adequate to which can be given in experience, and they could only serve as regulative principles in the pursuit of experience. This is the case with the concept of a natural purpose, which concerns the cause of the possibility of such a predicate, which cause can only lie in the Idea. But the result corresponding to it (i.e. the product) is given in nature; and the concept of a causality of nature as of a being acting according to purposes seems to make the Idea of a natural purpose into a constitutive principle, which Idea has thus something different from all other Ideas.

This difference consists, however, in the fact that the Idea in question is not a rational principle for the Understanding but for the Judgement. It is, therefore, merely the application of an Understanding in general to possible objects of experience, in cases where the judgement can only be reflective, not determinant, and where, consequently, the object, although given in experience, cannot be *determinately judged* in conformity with the Idea (not to say with complete adequacy), but can only be reflected on.

There emerges, therefore, a peculiarity of *our* (human) Understanding in respect of the Judgement in its reflection upon things of nature. But if this be so, the Idea of a possible Understanding different from the human must be fundamental here. (Just so in the Critique of Pure Reason we must have in our thoughts another possible [kind of] intuition, if ours is to be regarded as a particular species for which objects are only valid as phenomena.) And so we are able to say: Certain natural products, from the special constitution of our Understanding, *must be considered by us*, in regard to their possibility, as if produced designedly and as purposes. But we do not, therefore, demand that there should be actually given a particular cause which has the representation of a purpose as its determining ground; and we do not deny that an Understanding, different from (i.e. higher than) the human, might find the ground of the possibility of such products of nature in the mechanism of nature, i.e. in a causal combination for which an Understanding is not explicitly assumed as cause.

We have now to do with the relation of *our* Understanding to the Judgement; viz. we seek for a certain contingency in the constitution of our Understanding, to which we may point as a peculiarity distinguishing it from other possible Understandings.

This contingency is found, naturally enough, in the *particular*, which the Judgement is to bring under the *universal* of the concepts of Understanding. For the universal of *our* (human) Understanding does not determine the particular, and it is contingent in how many ways different things which agree in a common characteristic may come before our perception. Our Understanding is a faculty of concepts, i.e. a discursive Understanding, for which it obviously must be contingent of what kind and how very different the particular may be that can be given to it in nature and brought under its concepts. But now intuition also belongs to knowledge, and a faculty of a *complete spontaneity of intuition* would be a cognitive faculty distinct from sensibility, and quite independent of it, in other words, an Understanding in the most general sense. Thus we can think an *intuitive* Understanding [negatively, merely as not discursive[118*]], which does not proceed from the universal to the particular, and so to the individual (through concepts). For it that contingency of the accordance of nature in its products according to *particular* laws with the Understanding would not be met with; and it is this contingency that makes it so hard for our Understanding to reduce the manifold of nature to the unity of knowledge. This reduction our

Understanding can only accomplish by bringing natural characteristics into a very contingent correspondence with our faculty of concepts, of which an intuitive Understanding would have no need.

Our Understanding has then this peculiarity as concerns the Judgement, that in cognition by it the particular is not determined by the universal and cannot therefore be derived from it; but at the same time this particular in the manifold of nature must accord with the universal (by means of concepts and laws) so that it may be capable of being subsumed under it. This accordance under such circumstances must be very contingent and without definite principle as concerns the Judgement.

In order now to be able at least to think the possibility of such an accordance of things of nature with our Judgement (which accordance we represent as contingent and consequently as only possible by means of a purpose directed thereto), we must at the same time think of another Understanding, by reference to which and apart from any purpose ascribed to it, we may represent as *necessary* that accordance of natural laws with our Judgement, which for our Understanding is only thinkable through the medium of purposes.

In fact our Understanding has the property of proceeding in its cognition, e.g. *of the cause of a product, from the* analytical-universal (concepts) to the particular (the given empirical intuition). Thus as regards the manifold of the latter it determines nothing, but must await this determination by the Judgement, which subsumes the empirical intuition (if the object is a natural product) under the concept. We can however think an Understanding which, being, not like ours, discursive, but intuitive, proceeds from the synthetical-universal (the intuition of a whole as such) to the particular, i.e. from the whole to the parts. The *contingency* of the combination of the parts, in order that a definite form of the whole shall be possible, is not implied by such an Understanding and its representation of the whole. Our Understanding requires this because it must proceed from the parts as universally conceived grounds to different forms possible to be subsumed under them, as consequences. According to the constitution of our Understanding a real whole of nature is regarded only as the effect of the concurrent motive powers of the parts. Suppose then that we wish not to represent the possibility of the whole as dependent on that of the parts (after the manner of our discursive Understanding), but according to the standard of the intuitive (original) Understanding to represent the possibility of the parts (according to their constitution and combination) as dependent on that of the whole. In accordance with the above peculiarity of our Understanding it cannot happen that the whole shall contain the ground of the possibility of the connexion of the parts (which would be a contradiction in discursive cognition), but only that the *representation* of a whole may contain the ground of the possibility of its form and the connexion of the parts belonging to it. Now such a whole would be an effect (*product*) the *representation* of which is regarded as the *cause* of its possibility; but the product of a cause whose determining ground is merely the representation of its effect is called a purpose. Hence it is merely a consequence of the particular constitution of our Understanding, that it represents products of nature as possible, according to a different kind of causality from that of the natural laws of matter, namely, that of purposes and final causes. Hence also this principle has not to do with the possibility of such things themselves (even when considered as phenomena) according to the manner of their production, but merely with the judgement upon them which is possible to our Understanding. Here we see at once why it is that in natural science we are not long contented with an explanation of the products of nature by a causality according to purposes. For there we desire to judge of natural production merely in a manner conformable to our faculty of judging, i.e. to the reflective Judgement, and not in reference to things themselves on behalf of the determinant Judgement. It is here not at all requisite to prove that such an *intellectus archetypus* is possible, but only that we are led to the Idea of it, — which contains no contradiction, — in contrast to our discursive Understanding which has need of images (*intellectus ectypus*) and to the contingency of its constitution.

If we consider a material whole, according to its form, as a product of the parts with their powers and faculties of combining with one another (as well as of bringing in foreign materials), we represent to

ourselves a mechanical mode of producing it. But in this way no concept emerges of a whole as purpose, whose internal possibility presupposes throughout the Idea of a whole on which depend the constitution and mode of action of the parts, as we must represent to ourselves an organised body. It does not follow indeed, as has been shown, that the mechanical production of such a body is impossible; for to say so would be to say that it would be impossible (contradictory) for *any Understanding* to represent to itself such a unity in the connexion of the manifold, without the Idea of the unity being at the same time its producing cause, i.e. without designed production. This, however, would follow in fact if we were justified in regarding material beings as things in themselves. For then the unity that constitutes the ground of the possibility of natural formations would be simply the unity of space. But space is no real ground of the products, but only their formal condition, although it has this similarity to the real ground which we seek that in it no part can be determined except in relation to the whole (the representation of which therefore lies at the ground of the possibility of the parts). But now it is at least possible to consider the material world as mere phenomenon, and to think as its substrate something like a thing in itself (which is not phenomenon), and to attach to this a corresponding intellectual intuition (even though it is not ours). Thus there would be, although incognisable by us, a supersensible real ground for nature, to which we ourselves belong. In this we consider according to mechanical laws what is necessary in nature regarded as an object of Sense; but we consider according to teleological laws the agreement and unity of its particular laws and its forms — which in regard to mechanism we must judge contingent — regarded as objects of Reason (in fact the whole of nature as a system). Thus we should judge nature according to two different kinds of principles without the mechanical way of explanation being shut out by the teleological, as if they contradicted one another.

From this we are enabled to see what otherwise, though we could easily surmise it, could with difficulty be maintained with certainty and proved, viz. that the principle of a mechanical derivation of purposive natural products is consistent with the teleological, but in no way enables us to dispense with it. In a thing that we must judge as a natural purpose (an organised being) we can no doubt try all the known and yet to be discovered laws of mechanical production, and even hope to make good progress therewith; but we can never get rid of the call for a quite different ground of production for the possibility of such a product, viz. causality by means of purposes. Absolutely no human Reason (in fact no finite Reason like ours in quality, however much it may surpass it in degree) can hope to understand the production of even a blade of grass by mere mechanical causes. As regards the possibility of such an object, the teleological connexion of causes and effects is quite indispensable for the Judgement, even for studying it by the clue of experience. For external objects as phenomena an adequate ground related to purposes cannot be met with; this, although it lies in nature, must only be sought in the supersensible substrate of nature, from all possible insight into which we are cut off. Hence it is absolutely impossible for us to produce from nature itself grounds of explanation for purposive combinations; and it is necessary by the constitution of the human cognitive faculties to seek the supreme ground of these purposive combinations in an original Understanding as the cause of the world.

§ 78. Of the union of the principle of the universal mechanism of matter with the teleological principle in the Technic of nature

It is infinitely important for Reason not to let slip the mechanism of nature in its products, and in their explanation not to pass it by, because without it no insight into the nature of things can be attained. Suppose it admitted that a supreme Architect immediately created the forms of nature as they have been from the beginning, or that He predetermined those which in the course of nature continually form themselves on the same model. Our knowledge of nature is not thus in the least furthered, because we cannot know the mode of action of that Being and the Ideas which are to contain the principles of the

possibility of natural beings, and we cannot by them explain nature as from above downwards (*a priori*). And if, starting from the forms of the objects of experience, from below upwards (*a posteriori*), we wish to explain the purposiveness, which we believe is met with in experience, by appealing to a cause working in accordance with purposes, then is our explanation quite tautological and we are only mocking Reason with words. Indeed when we lose ourselves with this way of explanation in the transcendent, whither natural knowledge cannot follow, Reason is seduced into poetical extravagance, which it is its peculiar destination to avoid.

On the other hand, it is just as necessary a maxim of Reason not to pass by the principle of purposes in the products of nature. For, although it does not make their mode of origination any more comprehensible, yet it is a heuristic principle for investigating the particular laws of nature; supposing even that we wish to make no use of it for explaining nature itself, — in which we still always speak only of natural purposes, although it apparently exhibits a designed unity of purpose, — i.e. without seeking beyond nature the ground of the possibility of these particular laws. But since we must come in the end to this latter question, it is just as necessary to think for nature a particular kind of causality which does not present itself in it, as the mechanism of natural causes which does. To the receptivity of several forms, different from those of which matter is susceptible by mechanism, must be added a spontaneity of a cause (which therefore cannot be matter), without which no ground can be assigned for those forms. No doubt Reason, before it takes this step, must proceed with caution, and not try to explain teleologically every Technic of nature, i.e. every productive faculty of nature which displays in itself (as in regular bodies) purposiveness of figure to our mere apprehension; but must always regard such as so far mechanically possible. But on that account to wish entirely to exclude the teleological principle, and to follow simple mechanism only — in cases where, in the rational investigation of the possibility of natural forms through their causes, purposiveness shows itself quite undeniably as the reference to a different kind of causality — to do this must make Reason fantastic, and send it wandering among chimeras of unthinkable natural faculties; just as a mere teleological mode of explanation which takes no account of natural mechanism makes it visionary.

In the same natural thing both principles cannot be connected as fundamental propositions of explanation (deduction) of one by the other, i.e. they do not unite for the determinant Judgement as dogmatical and constitutive principles of insight into nature. If I choose, e.g. to regard a maggot as the product of the mere mechanism of nature (of the new formation that it produces of itself, when its elements are set free by corruption), I cannot derive the same product from the same matter as from a causality that acts according to purposes. Conversely, if I regard the same product as a natural purpose, I cannot count on any mechanical mode of its production and regard this as the constitutive principle of my judgement upon its possibility, and so unite both principles. One method of explanation excludes the other; even supposing that objectively both grounds of the possibility of such a product rested on a single ground, to which we did not pay attention. The principle which should render possible the compatibility of both in judging of nature must be placed in that which lies outside both (and consequently outside the possible empirical representation of nature), but yet contains their ground, i.e. in the supersensible; and each of the two methods of explanation must be referred thereto. Now of this we can have no concept but the indeterminate concept of a ground, which makes the judging of nature by empirical laws possible, but which we cannot determine more nearly by any predicate. Hence the union of both principles cannot rest upon a ground of *explanation* of the possibility of a product according to given laws, for the *determinant* Judgement, but only upon a ground of its *exposition* for the *reflective* Judgement. — To explain is to derive from a principle, which therefore we must clearly know and of which we can give an account. No doubt the principle of the mechanism of nature and that of its causality in one and the same natural product must coalesce in a single higher principle, which is their common source, because otherwise they could not subsist side by side in the observation of nature. But if this principle, objectively common to the two,

which therefore warrants the association of the maxims of natural investigation depending on both, be such that, though it can be pointed to, it cannot be determinately known nor clearly put forward for use in cases which arise, then from such a principle we can draw no explanation, i.e. no clear and determinate derivation of the possibility of a natural product in accordance with those two heterogeneous principles. But now the principle common to the mechanical and teleological derivations is the *supersensible*, which we must place at the basis of nature, regarded as phenomenon. And of this, in a theoretical point of view, we cannot form the smallest positive determinate concept. It cannot, therefore, in any way be explained how, according to it as principle, nature (in its particular laws) constitutes for us one system, which can be cognised as possible either by the principle of physical development or by that of final causes. If it happens that objects of nature present themselves which cannot be thought by us, as regards their possibility, according to the principle of mechanism (which always has a claim on a natural being), without relying on teleological propositions, we can only make an hypothesis. Namely, we suppose that we may hopefully investigate natural laws with reference to both (according as the possibility of its product is cognisable by our Understanding by one or the other principle), without stumbling at the apparent contradiction which comes into view between the principles by which they are judged. For at least the possibility is assured that both may be united objectively in one principle, since they concern phenomena that presuppose a supersensible ground.

Mechanism, then, and the teleological (designed) Technic of nature, in respect of the same product and its possibility, may stand under a common supreme principle of nature in particular laws. But since this principle is *transcendent* we cannot, because of the limitation of our Understanding, unite both principles *in the explanation* of the same production of nature even if the inner possibility of this product is only *intelligible* [verständlich] through a causality according to purposes (as is the case with organised matter). We revert then to the above fundamental proposition of Teleology. According to the constitution of the human Understanding, no other than designedly-working causes can be assumed for the possibility of organised beings in nature; and the mere mechanism of nature cannot be adequate to the explanation of these its products. But we do not attempt to decide anything by this fundamental proposition as to the possibility of such things themselves.

This is only a maxim of the reflective, not of the determinant Judgement; consequently only subjectively valid for us, not objectively for the possibility of things themselves of this kind (in which both kinds of production may well cohere in one and the same ground). Further, without any concept, — besides the teleologically conceived method of production, — of a simultaneously presented mechanism of nature, no judgement can be passed on this kind of production as a natural product. Hence the above maxim leads to the necessity of an unification of both principles in judging of things as natural purposes in themselves, but does not lead us to substitute one for the other either altogether or in certain parts. For in the place of what is thought (at least by us) as possible only by design we cannot set mechanism, and in the place of what is cognised as mechanically necessary we cannot set contingency, which would need a purpose as its determining ground; but we can only subordinate the one (Mechanism) to the other (designed Technic), which may quite well be the case according to the transcendental principle of the purposiveness of nature.

For where purposes are thought as grounds of the possibility of certain things, we must assume also means, whose law of working requires *for itself* nothing presupposing a purpose, — a mechanical law — and yet can be a subordinate cause of designed effects. Thus — in the organic products of nature, and specially when prompted by their infinite number, we assume (at least as a permissible hypothesis) design in the combination of natural causes by particular laws as a *universal principle* of the reflective Judgement for the whole of nature (the world), — we can think a great and indeed universal combination of mechanical with teleological laws in the productions of nature, without interchanging the principles by which they are judged or putting one in the place of the other. For, in a teleological judgement, the matter, even if the form that it assumes be judged possible only by design, can also, conformably to the

mechanical laws of its nature, be subordinated as a means to the represented purpose. But, since the ground of this compatibility lies in that which is neither one nor the other (neither mechanism nor purposive combination), but is the supersensible substrate of nature of which we know nothing, the two ways of representing the possibility of such Objects are not to be blended together by our (human) Reason. However, we cannot judge of their possibility otherwise than by judging them as ultimately resting on a supreme Understanding by the connexion of final causes; and thus the teleological method of explanation is not eliminated.

Now it is quite indeterminate, and for our Understanding always indeterminable, how much the mechanism of nature does as a means towards each final design in nature. However, on account of the above-mentioned intelligible principle of the possibility of a nature in general, it may be assumed that it is possible throughout according to the two kinds of universally accordant laws (the physical and those of final causes), although we cannot see into the way how this takes place. Hence we do not know how far the mechanical method of explanation which is possible for us may extend. So much only is certain that, so far as we can go in this direction, it must always be inadequate for things that we once recognise as natural purposes; and therefore we must, by the constitution of our Understanding, subordinate these grounds collectively to a teleological principle.

Hereon is based a privilege, and on account of the importance which the study of nature by the principle of mechanism has for the theoretical use of our Reason, also an appeal. We should explain all products and occurrences in nature, even the most purposive, by mechanism as far as is in our power (the limits of which we cannot specify in this kind of investigation). But at the same time we are not to lose sight of the fact that those things which we cannot even state for investigation except under the concept of a purpose of Reason, must, in conformity with the essential constitution of our Reason, mechanical causes notwithstanding, be subordinated by us finally to causality in accordance with purposes.

METHODOLOGY OF THE TELEOLOGICAL JUDGEMENT.[119*]

§ 79. Whether teleology must be treated as if it belonged to the doctrine of nature

Every science must have its definite position in the encyclopaedia of all the sciences. If it is a philosophical science its position must be either in the theoretical or practical part. If again it has its place in the former of these, it must be either in the doctrine of nature, so far as it concerns that which can be an object of experience (in the doctrine of bodies, the doctrine of the soul, or the universal science of the world), or in the doctrine of God (the original ground of the world as the complex of all objects of experience).

Now the question is, what place is due to Teleology? Does it belong to Natural Science (properly so called) or to Theology? One of the two it must be; for no science belongs to the transition from one to the other, because this transition only marks the articulation or organisation of the system, and not a place in it.

That it does not belong to Theology as a part thereof, although it may be made of the most important use therein, is self-evident. For it has as its objects, natural productions, and their cause, and although it refers at the same time to the latter as to a ground lying outside of and beyond nature (a Divine Author), yet it does not do this for the determinant but only for the reflective Judgement in the consideration of nature (in order to guide our judgement on things in the world by means of such an Idea as a regulative principle, in conformity with the human Understanding).

But it appears to belong just as little to Natural Science, which needs determinant and not merely reflective principles in order to supply objective grounds for natural effects. In fact, nothing is gained for the theory of nature or the mechanical explanation of its phenomena by means of its effective causes, by

considering them as connected according to the relation of purposes. The exhibition of the purposes of nature in its products, so far as they constitute a system according to teleological concepts, properly belongs only to a description of nature which is drawn up in accordance with a particular guiding thread. Here Reason, no doubt, accomplishes a noble work, instructive and practically purposive in many points of view; but it gives no information as to the origin and the inner possibility of these forms, which is the special business of theoretical Natural Science. Teleology, therefore, as science, belongs to no Doctrine, but only to Criticism; and to the criticism of a special cognitive faculty, viz. Judgement. But so far as it contains principles *a priori*, it can and must furnish the method by which nature must be judged according to the principle of final causes. Hence its Methodology has at least negative influence upon the procedure in theoretical Natural Science, and also upon the relation which this can have in Metaphysic to Theology as its propaedeutic.

§ 80. Of the necessary subordination of the mechanical to the teleological principle in the explanation of a thing as a natural purpose

The *privilege of aiming at* a merely mechanical method of explanation of all natural products is in itself quite unlimited; but the *faculty of attaining* thereto is by the constitution of our Understanding, so far as it has to do with things as natural purposes, not only very much limited but also clearly bounded. For, according to a principle of the Judgement, by this process alone nothing can be accomplished towards an explanation of these things; and consequently the judgement upon such products must always be at the same time subordinated by us to a teleological principle.

It is therefore rational, even meritorious, to pursue natural mechanism, in respect of the explanation of natural products, so far as can be done with probability; and if we give up the attempt it is not because it is impossible *in itself* to meet in this path with the purposiveness of nature, but only because it is impossible *for us* as men. For there would be required for that an intuition other than sensuous, and a determinate knowledge of the intelligible substrate of nature from which a ground could be assigned for the mechanism of phenomena according to particular laws, which quite surpasses our faculties.

Hence if the naturalist would not waste his labour he must in judging of things, the concept of any of which is indubitably established as a natural purpose (organised beings), always lay down as basis an original organisation, which uses that very mechanism in order to produce fresh organised forms or to develop the existing ones into new shapes (which, however, always result from that purpose and conformably to it).

It is praiseworthy by the aid of comparative anatomy to go through the great creation of organised natures, in order to see whether there may not be in it something similar to a system and also in accordance with the principle of production. For otherwise we should have to be content with the mere principle of judgement (which gives no insight into their production) and, discouraged, to give up all claim to *natural insight* in this field. The agreement of so many genera of animals in a certain common schema, which appears to be fundamental not only in the structure of their bones but also in the disposition of their remaining parts, — so that with an admirable simplicity of original outline, a great variety of species has been produced by the shortening of one member and the lengthening of another, the involution of this part and the evolution of that, — allows a ray of hope, however faint, to penetrate into our minds, that here something may be accomplished by the aid of the principle of the mechanism of nature (without which there can be no natural science in general). This analogy of forms, which with all their differences seem to have been produced according to a common original type, strengthens our suspicions of an actual relationship between them in their production from a common parent, through the gradual approximation of one animal-genus to another — from those in which the principle of purposes seems to be best authenticated, i.e. from man, down to the polype, and again from this down to mosses and

lichens, and finally to the lowest stage of nature noticeable by us, viz. to crude matter. And so the whole Technic of nature, which is so incomprehensible to us in organised beings that we believe ourselves compelled to think a different principle for it, seems to be derived from matter and its powers according to mechanical laws (like those by which it works in the formation of crystals).

Here it is permissible for the *archaeologist* of nature to derive from the surviving traces of its oldest revolutions, according to all its mechanism known or supposed by him, that great family of creatures (for so we must represent them if the said thoroughgoing relationship is to have any ground). He can suppose the bosom of mother earth, as she passed out of her chaotic state (like a great animal), to have given birth in the beginning to creatures of less purposive form, that these again gave birth to others which formed themselves with greater adaptation to their place of birth and their relations to each other; until this womb becoming torpid and ossified, limited its births to definite species not further modifiable, and the manifoldness remained as it was at the end of the operation of that fruitful formative power. — Only he must still in the end ascribe to this universal mother an organisation purposive in respect of all these creatures; otherwise it would not be possible to think the possibility of the purposive form of the products of the animal and vegetable kingdoms.[120*] He has then only pushed further back the ground of explanation and cannot pretend to have made the development of those two kingdoms independent of the condition of final causes.

Even as concerns the variation to which certain individuals of organised genera are accidentally subjected, if we find that the character so changed is hereditary and is taken up into the generative power, then we cannot pertinently judge the variation to be anything else than an occasional development of purposive capacities originally present in the species with a view to the preservation of the race. For in the complete inner purposiveness of an organised being, the generation of its like is closely bound up with the condition of taking nothing up into the generative power which does not belong, in such a system of purposes, to one of its undeveloped original capacities. Indeed, if we depart from this principle, we cannot know with certainty whether several parts of the form which is now apparent in a species have not a contingent and unpurposive origin; and the principle of Teleology, to judge nothing in an organised being as unpurposive which maintains it in its propagation, would be very unreliable in its application and would be valid solely for the original stock (of which we have no further knowledge).

Hume[121*] takes exception to those who find it requisite to assume for all such natural purposes a teleological principle of judgement, i.e. an architectonic Understanding. He says that it may fairly be asked: how is such an Understanding possible? How can the manifold faculties and properties that constitute the possibility of an Understanding, which has at the same time executive force, be found so purposively together in one Being? But this objection is without weight. For the whole difficulty which surrounds the question concerning the first production of a thing containing in itself purposes and only comprehensible by means of them, rests on the further question as to the unity of the ground of the combination in this product of the various elements [des Mannichfaltigen] which are *external to one another*. For if this ground be placed in the Understanding of a producing cause as simple substance, the question, so far as it is teleological, is sufficiently answered; but if the cause be sought merely in matter as an aggregate of many substances external to one another, the unity of the principle is quite wanting for the internally purposive form of its formation, and the *autocracy* of matter in productions which can only be conceived by our Understanding as purposes is a word without meaning.

Hence it comes to pass that those who seek a supreme ground of possibility for the objectively-purposive forms of matter, without attributing to it Understanding, either make the world-whole into a single all-embracing substance (Pantheism), or (which is only a more determinate explanation of the former) into a complex of many determinations inhering in a single *simple substance* (Spinozism); merely in order to satisfy that condition of all purposiveness — the *unity* of ground. Thus they do justice indeed to *one* condition of the problem, viz. the unity in the purposive combination, by means of the mere

ontological concept of a simple substance; but they adduce nothing for the *other* condition, viz. the relation of this substance to its result as *purpose*, through which relation that ontological ground is to be more closely determined in respect of the question at issue. Hence they answer *the whole* question in no way. It remains absolutely unanswerable (for our Reason) if we do not represent that original ground of things, as simple *substance*; its property which has reference to the specific constitution of the forms of nature grounded thereon, viz. its purposive unity, as the property of an intelligent substance; and the relation of these forms to this intelligence (on account of the contingency which we ascribe to everything that we think possible only as a purpose) as that of *causality*.

§ 81. Of the association of mechanism with the teleological principle in the explanation of a natural purpose as a natural product

According to the preceding paragraphs the mechanism of nature alone does not enable us to think the possibility of an organised being; but (at least according to the constitution of our cognitive faculty) it must be originally subordinated to a cause working designedly. But, just as little is the mere teleological ground of such a being sufficient for considering it and judging it as a product of nature, if the mechanism of the latter be not associated with the former, like the instrument of a cause working designedly, to whose purposes nature is subordinated in its mechanical laws. The possibility of such a unification of two quite different kinds of causality, — of nature in its universal conformity to law with an Idea which limits it to a particular form, for which it contains no ground in itself — is not comprehended by our Reason. It lies in the supersensible substrate of nature, of which we can determine nothing positively, except that it is the being in itself of which we merely know the phenomenon. But the principle, “all that we assume as belonging to this nature (*phenomenon*) and as its product, must be thought as connected therewith according to mechanical laws,” has none the less force, because without this kind of causality organised beings (as purposes of nature) would not be natural products.

Now if the teleological principle of the production of these beings be assumed (as is inevitable), we can place at the basis of the cause of their internally purposive form either *Occasionalism* or Pre-established Harmony. According to the former the Supreme Cause of the world would, conformably to its Idea, furnish immediately the organic formation on the occasion of every union of intermingling materials. According to the latter it would, in the original products of its wisdom, only have supplied the capacity by means of which an organic being produces another of like kind, and the species perpetually maintains itself; whilst the loss of individuals is continually replaced by that nature which at the same time works towards their destruction. If we assume the Occasionalism of the production of organised beings, all nature is quite lost, and with it all employment of Reason in judging of the possibility of such products; hence we may suppose that no one will adopt this system, who has anything to do with philosophy.

[The theory of] Pre-established Harmony may proceed in two different ways. It regards every organised being as generated by one of like kind, either as an *educt* or a *product*. The system which regards generations as mere educts is called the theory of *individual preformation* or the theory of *evolution*: that which regards them as products is entitled the system of *epigenesis*. This latter may also be entitled the system of *generic preformation*, because the productive faculty of the generator and consequently the specific form would be *virtually* performed according to the inner purposive capacities which are part of its stock. In correspondence with this the opposite theory of individual preformations would be better entitled the *theory of involution*.

The advocates of the *theory of evolution*, who remove every individual from the formative power of nature, in order to make it come immediately from the hand of the Creator, would, however, not venture to regard this as happening according to the hypothesis of Occasionalism. For according to this the copulation is a mere formality, *à propos* of which a supreme intelligent Cause of the world has concluded

to form a fruit immediately by his hand, and only to leave to the mother its development and nourishment. They declare themselves for preformation; as if it were not all the same, whether a supernatural origin is assigned to these forms in the beginning or in the course of the world. On the contrary, a great number of supernatural arrangements would be spared by occasional creation, which would be requisite, in order that the embryo formed in the beginning of the world might not be injured throughout the long period of its development by the destructive powers of nature, and might keep itself unharmed; and there would also be requisite an incalculably greater number of such preformed beings than would ever be developed, and with them many creations would be made without need and without purpose. They would, however, be willing to leave at least something to nature, so as not to fall into a complete Hyperphysic which can dispense with all natural explanations. It is true, they hold so fast by their Hyperphysic that they find even in abortions (which it is quite impossible to take for purposes of nature) an admirable purposiveness; though it be only directed to the fact that an anatomist would take exception to it as a purposeless purposiveness, and would feel a disheartened wonder thereat. But the production of hybrids could absolutely not be accommodated with the system of preformation; and to the seeds of the male creature, to which they had attributed nothing but the mechanical property of serving as the first means of nourishment for the embryo, they must attribute in addition a purposive formative power, which in the case of the product of two creatures of the same genus they would concede to neither parent.

On the other hand, even if we do not recognise the great superiority which the theory of *Epigenesis* has over the former as regards the empirical grounds of its proof, still prior to proof Reason views this way of explanation with peculiar favour. For in respect of the things which we can only represent as possible originally according to the causality of purposes, at least as concerns their propagation, this theory regards nature as self-producing, not merely as self-evolving: and so with the least expenditure of the supernatural leaves to nature all that follows after the first beginning (though without determining anything about this first beginning by which Physic generally is thwarted, however it may essay its explanation by a chain of causes).

As regards this theory of Epigenesis, no one has contributed more either to its proof or to the establishment of the legitimate principles of its application, — partly by the limitation of a too presumptuous employment of it, — than Herr Hofr. *Blumenbach*.[122][*] In all physical explanations of these formations he starts from organised matter. That crude matter should have originally formed itself according to mechanical laws, that life should have sprung from the nature of what is lifeless, that matter should have been able to dispose itself into the form of a self-maintaining purposiveness — this he rightly declares to be contradictory to Reason. But at the same time he leaves to natural mechanism under this to us indispensable *principle* of an original *organisation*, an undeterminable but yet unmistakeable element, in reference to which the faculty of matter in an organised body is called by him a *formative impulse* (in contrast to, and yet standing under the higher guidance and direction of, that merely mechanical *formative power* universally resident in matter).

§ 82. Of the teleological system in the external relations of organised beings

By external purposiveness I mean that by which one thing of nature serves another as means to a purpose. Now things which have no internal purposiveness and which presuppose none for their possibility, e.g. earth, air, water, etc., may at the same time be very purposive externally, i.e. in relation to other beings. But these latter must be organised beings, i.e. natural purposes, for otherwise the former could not be judged as means to them. Thus water, air, and earth cannot be regarded as means to the raising of mountains, because mountains contain nothing in themselves that requires a ground of their possibility according to purposes, in reference to which therefore their cause can never be represented under the predicate of a means (as useful therefor).

External purposiveness is a quite different concept from that of internal purposiveness, which is bound up with the possibility of an object irrespective of its actuality being itself a purpose. We can ask about an organised being the question: What is it for? But we cannot easily ask this about things in which we recognise merely the working of nature's mechanism. For in the former, as regards their internal possibility, we represent a causality according to purposes, a creative Understanding, and we refer this active faculty to its determining ground, viz. design. There is only one external purposiveness which is connected with the internal purposiveness of organisation, and yet serves in the external relation of a means to a purpose, without the question necessarily arising, as to what end this being so organised must have existed for. This is the organisation of both sexes in their mutual relation for the propagation of their kind; since here we can always ask, as in the case of an individual, why must such a pair exist? The answer is: This pair first constitutes an *organising* whole, though not an organised whole in a single body.

If we now ask, wherefore anything is, the answer is either: Its presence and its production have no reference at all to a cause working according to design, and so we always refer its origin to the mechanism of nature, or: There is somewhere a designed ground of its presence (as a contingent natural being). This thought we can hardly separate from the concept of an organised thing; for, since we must place at the basis of its internal possibility a causality of final causes and an Idea lying at the ground of this, we cannot think the existence of this product except as a purpose. For the represented effect, the representation of which is at the same time the determining ground of the intelligent cause working towards its production, is called a *purpose*. In this case therefore we can either say: The purpose of the existence of such a natural being is in itself; i.e. *it is not merely a purpose but a* final purpose, or: This is external to it in another natural being, i.e. it exists purposively not as a final purpose, but necessarily as a means.

But if we go through the whole of nature we find in it, as nature, no being which could make claim to the eminence of being the final purpose of creation; and we can even prove *a priori* that what might be for nature an *ultimate purpose*, according to all the thinkable determinations and properties wherewith one could endow it, could yet as a natural thing never be a *final purpose*.

If we consider the vegetable kingdom we might at first sight, on account of the immeasurable fertility with which it spreads itself almost on every soil, be led to take it for a mere product of that mechanism which nature displays in the formations of the mineral kingdom. But a more intimate knowledge of its indescribably wise organisation does not permit us to hold to this thought, but prompts the question: What are these things created for? If it is answered: For the animal kingdom, which is thereby nourished and has thus been able to spread over the earth in genera so various, then the further question comes: What are these plant-devouring animals for? The answer would be something like this: For beasts of prey, which can only be nourished by that which has life. Finally we have the question: What are these last, as well as the first-mentioned natural kingdoms, good for? For man, in reference to the manifold use which his Understanding teaches him to make of all these creatures. He is the ultimate purpose of creation here on earth, because he is the only being upon it who can form a concept of purposes, and who can by his Reason make out of an aggregate of purposively formed things a system of purposes.

We might also with the chevalier *Linnaeus*[123][*] go the apparently opposite way and say: The herbivorous animals are there to moderate the luxurious growth of the vegetable kingdom, by which many of its species are choked. The carnivora are to set bounds to the voracity of the herbivora. Finally man, by his pursuit of these and his diminution of their numbers, preserves a certain equilibrium between the producing and the destructive powers of nature. And so man, although in a certain reference he might be esteemed a purpose, yet in another has only the rank of a means.

If an objective purposiveness in the variety of the genera of creatures and their external relations to one another, as purposively constructed beings, be made a principle, then it is conformable to Reason to conceive in these relations a certain organisation and a system of all natural kingdoms according to final

causes. Only here experience seems flatly to contradict the maxims of Reason, especially as concerns an ultimate purpose of nature, which is indispensable for the possibility of such a system and which we can put nowhere else but in man. For regarding him as one of the many animal genera, nature has not in the least excepted him from its destructive or its productive powers, but has subjected everything to a mechanism thereof without any purpose.

The first thing that must be designedly prepared in an arrangement for a purposive complex of natural beings on the earth would be their place of habitation, the soil and the element on and in which they are to thrive. But a more exact knowledge of the constitution of this basis of all organic production indicates no other causes than those working quite undesignedly, causes which rather destroy than favour production, order, and purposes. Land and sea not only contain in themselves memorials of ancient mighty desolations which have confounded them and all creatures that are in them; but their whole structure, the strata of the one and the boundaries of the other, have quite the appearance of being the product of the wild and violent forces of a nature working in a state of chaos. Although the figure, the structure, and the slope of the land might seem to be purposively ordered for the reception of water from the air, for the welling up of streams between strata of different kinds (for many kinds of products), and for the course of rivers — yet a closer investigation shows that they are merely the effects of volcanic eruptions or of inundations of the ocean, as regards not only the first production of this figure, but, above all, its subsequent transformation, as well as the disappearance of its first organic productions.[124*] Now if the place of habitation of all these creatures, the soil (of the land) or the bosom (of the sea), indicates nothing but a quite undesigned mechanism of its production, how and with what right can we demand and maintain a different origin for these latter products? The closest examination, indeed (in Camper's[125*] judgement), of the remains of the aforesaid devastations of nature seems to show that man was not comprehended in these revolutions; but yet he is so dependent on the remaining creatures that, if a universally directing mechanism of nature be admitted in the case of the others, he must also be regarded as comprehended under it; even though his Understanding (for the most part at least) has been able to deliver him from these devastations.

But this argument seems to prove more than was intended by it. It seems to prove not merely that man cannot be the ultimate purpose of nature, and that on the same grounds the aggregate of the organised things of nature on the earth cannot be a system of purposes; but also that the natural products formerly held to be natural purposes have no other origin than the mechanism of nature.

But in the solution given above of the Antinomy of the principles of the mechanical and teleological methods of production of organic beings of nature, we have seen that they are merely principles of the reflective Judgement in respect of nature as it produces forms in accordance with particular laws (for the systematic connexion of which we have no key). They do not determine the origin of these beings in themselves; but only say that we, by the constitution of our Understanding and our Reason, cannot conceive it in this kind of being except according to final causes. The greatest possible effort, even audacity, in the attempt to explain them mechanically is not only permitted, but we are invited to it by Reason; notwithstanding that we know from the subjective grounds of the particular species and limitations of our Understanding (not e.g. because the mechanism of production would contradict in itself an origin according to purposes) that we can never attain thereto. Finally, the compatibility of both ways of representing the possibility of nature may lie in the supersensible principle of nature (external to us, as well as in us); whilst the method of representation according to final causes may be only a subjective condition of the use of our Reason, when it not merely wishes to form a judgement upon objects as phenomena, but desires to refer these phenomena together with their principles to their supersensible substrate, in order to find certain laws of their unity possible, which it cannot represent to itself except through purposes (of which the Reason also has such as are supersensible).

§ 83. Of the ultimate purpose of nature as a teleological system

We have shown in the preceding that, though not for the determinant but for the reflective Judgement, we have sufficient cause for judging man to be, not merely like all organised beings a *natural purpose*, but also the *ultimate purpose* of nature here on earth; in reference to whom all other natural things constitute a system of purposes according to fundamental propositions of Reason. If now that must be found in man himself, which is to be furthered as a purpose by means of his connexion with nature, this purpose must either be of a kind that can be satisfied by nature in its beneficence; or it is the aptitude and skill for all kinds of purposes for which nature (external and internal) can be used by him. The first purpose of nature would be man's *happiness,* the second his *culture*.

The concept of happiness is not one that man derives by abstraction from his instincts and so deduces from his animal nature; but it is a mere *Idea* of a state, that he wishes to make adequate to the Idea under merely empirical conditions (which is impossible). This Idea he projects in such different ways on account of the complication of his Understanding with Imagination and Sense, and changes so often, that nature, even if it were entirely subjected to his elective will, could receive absolutely no determinate, universal and fixed law, so as to harmonise with this vacillating concept and thus with the purpose which each man arbitrarily sets before himself. And even if we reduce this to the true natural wants as to which our race is thoroughly agreed, or on the other hand, raise ever so high man's skill to accomplish his imagined purposes; yet, even thus, what man understands by happiness, and what is in fact his proper, ultimate, natural purpose (not purpose of freedom), would never be attained by him. For it is not his nature to rest and be contented with the possession and enjoyment of anything whatever. On the other side, too, there is something wanting. Nature has not taken him for her special darling and favoured him with benefit above all animals. Rather, in her destructive operations, — plague, hunger, perils of waters, frost, assaults of other animals great and small, etc., — in these things has she spared him as little as any other animal. Further, the inconsistency of his own *natural dispositions* drives him into self-devised torments, and also reduces others of his own race to misery, by the oppression of lordship, the barbarism of war, and so forth; he, himself, as far as in him lies, works for the destruction of his own race; so that even with the most beneficent external nature, its purpose, if it were directed to the happiness of our species, would not be attained in an earthly system, because our nature is not susceptible of it. Man is then always only a link in the chain of natural purposes; a principle certainly in respect of many purposes, for which nature seems to have destined him in her disposition, and towards which he sets himself, but also a means for the maintenance of purposiveness in the mechanism of the remaining links. As the only being on earth which has an Understanding and, consequently, a faculty of setting arbitrary purposes before itself, he is certainly entitled to be the lord of nature; and if it be regarded as a teleological system he is, by his destination, the ultimate purpose of nature. But this is subject to the condition of his having an Understanding and the Will to give to it and to himself such a reference to purposes, as can be self-sufficient independently of nature, and, consequently, can be a final purpose; which, however, must not be sought in nature itself.

But in order to find out where in man we have to place that *ultimate purpose* of nature, we must seek out what nature can supply to prepare him for what he must do himself in order to be a final purpose, and we must separate it from all those purposes whose possibility depends upon things that one can expect only from nature. Of the latter kind is earthly happiness, by which is understood the complex of all man's purposes possible through nature, whether external nature or man's nature; i.e. the matter of all his earthly purposes, which, if he makes it his whole purpose, renders him incapable of positing his own existence as a final purpose, and being in harmony therewith. There remains therefore of all his purposes in nature only the formal subjective condition; viz. the aptitude of setting purposes in general before himself, and (independent of nature in his purposive determination) of using nature, conformably to the maxims of his free purposes in general, as a means. This nature can do in regard to the final purpose that lies outside it,

and it therefore may be regarded as its ultimate purpose. The production of the aptitude of a rational being for arbitrary purposes in general (consequently in his freedom) is *culture*. Therefore, culture alone can be the ultimate purpose which we have cause for ascribing to nature in respect to the human race (not man's earthly happiness or the fact that he is the chief instrument of instituting order and harmony in irrational nature external to himself).

But all culture is not adequate to this ultimate purpose of nature. The culture of *skill* is indeed the chief subjective condition of aptitude for furthering one's purposes in general; but it is not adequate to furthering the *will*[126*] in the determination and choice of purposes, which yet essentially belongs to the whole extent of an aptitude for purposes. The latter condition of aptitude, which we might call the culture of training (discipline), is negative, and consists in the freeing of the will from the despotism of desires. By these, tied as we are to certain natural things, we are rendered incapable even of choosing, while we allow those impulses to serve as fetters, which Nature has given us as guiding threads that we should not neglect or violate the destination of our animal nature — we being all the time free enough to strain or relax, to extend or diminish them, according as the purposes of Reason require.

Skill cannot be developed in the human race except by means of inequality among men; for the great majority provide the necessities of life, as it were, mechanically, without requiring any art in particular, for the convenience and leisure of others who work at the less necessary elements of culture, science and art. In an oppressed condition they have hard work and little enjoyment, although much of the culture of the higher classes gradually spreads to them. Yet with the progress of this culture (the height of which is called luxury, reached when the propensity to what can be done without begins to be injurious to what is indispensable), their calamities increase equally in two directions, on the one hand through violence from without, on the other hand through internal discontent; but still this splendid misery is bound up with the development of the natural capacities of the human race, and the purpose of nature itself, although not our purpose, is thus attained. The formal condition under which nature can alone attain this its final design, is that arrangement of men's relations to one another, by which lawful authority in a whole, which we call a *civil community*, is opposed to the abuse of their conflicting freedoms; only in this can the greatest development of natural capacities take place. For this also there would be requisite, — if men were clever enough to find it out and wise enough to submit themselves voluntarily to its constraint, — a *cosmopolitan* whole, i.e. a system of all states that are in danger of acting injuriously upon each other.[127*] Failing this, and with the obstacles which ambition, lust of dominion, and avarice, especially in those who have the authority in their hands, oppose even to the possibility of such a scheme, there is, inevitably, *war* (by which sometimes states subdivide and resolve themselves into smaller states, sometimes a state annexes other smaller states and strives to form a greater whole). Though war is an undesigned enterprise of men (stirred up by their unbridled passions), yet is it [perhaps][128*] a deep-hidden and designed enterprise of supreme wisdom for preparing, if not for establishing, conformity to law amid the freedom of states, and with this a unity of a morally grounded system of those states. In spite of the dreadful afflictions with which it visits the human race, and the perhaps greater afflictions with which the constant preparation for it in time of peace oppresses them, yet is it (although the hope for a restful state of popular happiness is ever further off) a motive for developing all talents serviceable for culture, to the highest possible pitch.[129*]

As concerns the discipline of the inclinations, — for which our natural capacity in regard of our destination as an animal race is quite purposive, but which render the development of humanity very difficult, — there is manifest in respect of this second requirement for culture a purposive striving of nature to a cultivation which makes us receptive of higher purposes than nature itself can supply. We cannot strive against the preponderance of evil, which is poured out upon us by the refinement of taste pushed to idealisation, and even by the luxury of science as affording food for pride, through the insatiable number of inclinations thus aroused. But yet we cannot mistake the purpose of nature — ever

aiming to win us away from the rudeness and violence of those inclinations (inclinations to enjoyment) which belong rather to our animality, and for the most part are opposed to the cultivation of our higher destiny, and to make way for the development of our humanity. The beautiful arts and the sciences which, by their universally-communicable pleasure, and by the polish and refinement of society, make man more civilised, if not morally better, win us in large measure from the tyranny of sense-propensions, and thus prepare men for a lordship, in which Reason alone shall have authority; whilst the evils with which we are visited, partly by nature, partly by the intolerant selfishness of men, summon, strengthen, and harden the powers of the soul not to submit to them, and so make us feel an aptitude for higher purposes, which lies hidden in us.[130*]

§ 84. Of the final purpose of the existence of a world, i.e. of creation itself

A *final purpose* is that purpose which needs no other as condition of its possibility.

If the mere mechanism of nature be assumed as the ground of explanation of its purposiveness, we cannot ask: what are things in the world there for? For according to such an idealistic system it is only the physical possibility of things (to think which as purposes would be mere subtlety without any Object) that is under discussion; whether we refer this form of things to chance or to blind necessity, in either case the question would be vain. If, however, we assume the purposive combination in the world to be real and to be [brought about] by a particular kind of causality, viz. that of a designedly-working cause, we cannot stop at the question: why have things of the world (organised beings) this or that form? why are they placed by nature in this or that relation to one another? But once an Understanding is thought that must be regarded as the cause of the possibility of such forms as are actually found in things, it must be also asked on objective grounds: Who could have determined this productive Understanding to an operation of this kind? This being is then the final purpose in reference to which such things are there.

I have said above that the final purpose is not a purpose which nature would be competent to bring about and to produce in conformity with its Idea, because it is unconditioned. For there is nothing in nature (regarded as a sensible being) for which the determining ground present in itself would not be always conditioned; and this holds not merely of external (material) nature, but also of internal (thinking) nature — it being of course understood that I only am considering that in myself which is nature. But a thing that is to exist necessarily, on account of its objective constitution, as the final purpose of an intelligent cause, must be of the kind that in the order of purposes it is dependent on no further condition than merely its Idea.

Now we have in the world only one kind of beings whose causality is teleological, i.e. is directed to purposes and is at the same time so constituted that the law according to which they have to determine purposes for themselves is represented as unconditioned and independent of natural conditions, and yet as in itself necessary. The being of this kind is man, but man considered as noumenon; the only natural being in which we can recognise, on the side of its peculiar constitution, a supersensible faculty (*freedom*) and also the law of causality, together with its Object, which this faculty may propose to itself as highest purpose (the highest good in the world).

Now of man (and so of every rational creature in the World) as a moral being it can no longer be asked: why (*quem in finem*) he exists? His existence involves the highest purpose to which, as far as is in his power, he can subject the whole of nature; contrary to which at least he cannot regard himself as subject to any influence of nature. — If now things of the world, as beings dependent in their existence, need a supreme cause acting according to purposes, man is the final purpose of creation; since without him the chain of mutually subordinated purposes would not be complete as regards its ground. Only in man, and only in him as subject of morality, do we meet with unconditioned legislation in respect of purposes, which therefore alone renders him capable of being a final purpose, to which the whole of nature is

teleologically subordinated.[131*]

§ 85. *Of Physico-theology*

Physico-theology *is the endeavour of Reason to infer the Supreme Cause of nature and its properties from the* purposes of nature (which can only be empirically known). *Moral theology* (ethico-theology) would be the endeavour to infer that Cause and its properties from the moral purpose of rational beings in nature (which can be known *a priori*).

The former naturally precedes the latter. For if we wish to infer a World Cause *teleologically* from the things in the world, purposes of nature must first be given, for which we afterwards have to seek a final purpose, and for this the principle of the causality of this Supreme Cause.

Many investigations of nature can and must be conducted according to the teleological principle, without our having cause to inquire into the ground of the possibility of purposive working with which we meet in various products of nature. But if we wish to have a concept of this we have absolutely no further insight into it than the maxim of the reflective Judgement affords: viz. if only a single organic product of nature were given to us, by the constitution of our cognitive faculty we could think no other ground for it than that of a cause of nature itself (whether the whole of nature or only this bit of it) which contains the causality for it through Understanding. This principle of judging, though it does not bring us any further in the explanation of natural things and their origin, yet discloses to us an outlook over nature, by which perhaps we may be able to determine more closely the concept, otherwise so unfruitful, of an Original Being.

Now I say that Physico-theology, however far it may be pursued, can disclose to us nothing of a *final purpose* of creation; for it does not even extend to the question as to this. It can, it is true, justify the concept of an intelligent World Cause, as a subjective concept (only available for the constitution of our cognitive faculty) of the possibility of things that we can make intelligible to ourselves according to purposes; but it cannot determine this concept further, either in a theoretical or a practical point of view. Its endeavour does not come up to its design of being the basis of a Theology, but it always remains only a physical Teleology; because the purposive reference therein is and must be always considered only as conditioned in nature, and it consequently cannot inquire into the purpose for which nature itself exists (for which the ground must be sought outside nature), — notwithstanding that it is upon the determinate Idea of this that the determinate concept of that Supreme Intelligent World Cause, and the consequent possibility of a Theology, depend.

What the things in the world are mutually useful for; what good the manifold in a thing does for the thing; how we have ground to assume that nothing in the world is in vain, but that everything *in nature* is good for something, — the condition being granted that certain things are to exist (as purposes), whence our Reason has in its power for the Judgement no other principle of the possibility of the Object, which it inevitably judges teleologically, than that of subordinating the mechanism of nature to the Architectonic of an intelligent Author of the world — all this the teleological consideration of the world supplies us with excellently and to our extreme admiration. But because the data, and so the principles, for *determining* that concept of an intelligent World Cause (as highest artist) are merely empirical, they do not enable us to infer any of its properties beyond those which experience reveals in its effects. Now experience, since it can never embrace collective nature as a system, must often (apparently) happen upon this concept (and by mutually conflicting grounds of proof); but it can never, even if we had the power of surveying empirically the whole system as far as it concerns mere nature, raise us above nature to the purpose of its existence, and so to the determinate concept of that supreme Intelligence.

If we lessen the problem with the solution of which Physico-theology has to do, its solution appears easy. If we reduce the concept of a *Deity* to that of an intelligent being thought by us, of which there may

be one or more, which possesses many and very great properties, but not all the properties which are requisite for the foundation of a nature in harmony with the greatest possible purpose; or if we do not scruple in a theory to supply by arbitrary additions what is deficient in the grounds of proof, and so, where we have only ground for assuming *much* perfection (and what is “much” for us?), consider ourselves entitled to presuppose *all possible* perfection; thus indeed physical Teleology may make weighty claims to the distinction of being the basis of a Theology. But if we are desired to point out what impels and moreover authorises us to add these supplements, then we shall seek in vain for a ground of justification in the principles of the theoretical use of Reason, which is ever desirous in the explanation of an Object of experience to ascribe to it no more properties than those for which empirical data of possibility are to be found. On closer examination we should see that properly speaking an Idea of a Supreme Being, which rests on a quite different use of Reason (the practical use), lies in us fundamentally *a priori*, impelling us to supplement, by the concept of a Deity, the defective representation, supplied by a physical Teleology, of the original ground of the purposes in nature; and we should not falsely imagine that we had worked out this Idea, and with it a Theology by means of the theoretical use of Reason in the physical cognition of the world — much less that we had proved its reality.

One cannot blame the ancients much, if they thought of their gods as differing much from each other both as regards their faculties and as regards their designs and volitions, but yet thought of all of them, the Supreme One not excepted, as always limited after human fashion. For if they considered the arrangement and the course of things in nature, they certainly found ground enough for assuming something more than mechanism as its cause, and for conjecturing behind the machinery of this world designs of certain higher causes, which they could not think otherwise than superhuman. But because they met with good and evil, the purposive and the unpurposive, mingled together (at least as far as our insight goes), and could not permit themselves to assume nevertheless that wise and benevolent purposes of which they saw no proof lay hidden at bottom, on behalf of the arbitrary Idea of a supremely perfect original Author, their judgement upon the supreme World Cause could hardly have been other than it was, so long as they proceeded consistently according to maxims of the mere theoretical use of Reason. Others, who wished to be theologians as well as physicists, thought to find contentment for the Reason by providing for the absolute unity of the principle of natural things which Reason demands, the Idea of a Being of which as sole Substance the things would be all only inherent determinations. This Substance would not be Cause of the World by means of intelligence, but in it all the intelligences of the beings in the world would be comprised. This Being consequently would produce nothing according to purposes; but in it all things, on account of the unity of the subject of which they are mere determinations, must necessarily relate themselves purposively to one another, though without purpose and design. Thus they introduced the Idealism of final causes, by changing the unity (so difficult to explain) of a number of purposively combined substances, from being the unity of causal dependence *on one* Substance to be the unity of inherence *in one*. This system — which in the sequel, considered on the side of the inherent world beings, becomes *Pantheism*, and (later) on the side of the Subject subsisting by itself as Original Being, becomes *Spinozism*, — does not so much resolve as explain away into nothing the question of the first ground of the purposiveness of nature; because this latter concept, bereft of all reality, must be taken for a mere misinterpretation of a universal ontological concept of a thing in general.

Hence the concept of a Deity, which would be adequate for our teleological judging of nature, can never be derived from mere theoretical principles of the use of Reason (on which Physico-theology alone is based). For as one alternative we may explain all Teleology as a mere deception of the Judgement in its judging of the causal combination of things, and fly to the sole principle of a mere mechanism of nature, which merely seems to us, on account of the unity of the Substance of whose determinations nature is but the manifold, to contain a universal reference to purposes. Or if, instead of this Idealism of final causes, we wish to remain attached to the principle of the Realism of this particular kind of causality, we may set

beneath natural purposes many intelligent original beings or only a single one. But so far as we have for the basis of this concept [of Realism] only empirical principles derived from the actual purposive combination in the world, we cannot on the one hand find any remedy for the discordance that nature presents in many examples in respect of unity of purpose; and on the other hand, as to the concept of a single intelligent Cause, so far as we are authorised by mere experience, we can never draw it therefrom in a manner sufficiently determined for any serviceable Theology whatever (whether theoretical or practical).

Physical Teleology impels us, it is true, to seek a Theology; but it cannot produce one, however far we may investigate nature by means of experience and, in reference to the purposive combination apparent in it, call in Ideas of Reason (which must be theoretical for physical problems). What is the use, one might well complain, of placing at the basis of all these arrangements a great Understanding incommensurable by us, and supposing it to govern the world according to design, if nature does not and cannot tell us anything of the final design? For without this we cannot refer all these natural purposes to any common point, nor can we form any teleological principle, sufficient either for cognising the purposes collected in a system, or for forming a concept of the Supreme Understanding, as Cause of such a nature, that could serve as a standard for our Judgement reflecting teleologically thereon. I should thus have an *artistic Understanding* for scattered purposes, but no *Wisdom* for a final purpose, in which final purpose nevertheless must be contained the determining ground of the said Understanding. But in the absence of a final purpose which pure Reason alone can supply (because all purposes in the world are empirically conditioned, and can contain nothing absolutely good but only what is good for this or that regarded as a contingent design), and which alone would teach me what properties, what degree, and what relation of the Supreme Cause to nature I have to think in order to judge of nature as a teleological system; how and with what right do I dare to extend at pleasure my very limited concept of that original Understanding (which I can base on my limited knowledge of the world), of the Might of that original Being in actualising its Ideas, and of its Will to do so, and complete this into the Idea of an Allwise, Infinite Being? If this is to be done theoretically, it would presuppose omniscience in me, in order to see into the purposes of nature in their whole connexion, and in addition the power of conceiving all possible plans, in comparison with which the present plan would be judged on [sufficient] grounds as the best. For without this complete knowledge of the effect I can arrive at no determinate concept of the Supreme Cause, which can only be found in the concept of an Intelligence infinite in every respect, i.e. the concept of a Deity, and so I can supply no foundation for Theology.

Hence, with every possible extension of physical Teleology, according to the propositions above laid down we may say: By the constitution and the principles of our cognitive faculty we can think of nature, in its purposive arrangements which have become known to us, in no other way than as the product of an Understanding to which it is subject. But the theoretical investigation of nature can never reveal to us whether this Understanding may not also, with the whole of nature and its production, have had a final design (which would not lie in the nature of the sensible world). On the contrary, with all our knowledge of nature it remains undecided whether that Supreme Cause is its original ground according to a final purpose, or not rather by means of an Understanding determined by the mere necessity of its nature to produce certain forms (according to the analogy of what we call the art-instinct in animals); without it being necessary to ascribe to it even wisdom, much less the highest wisdom combined with all other properties requisite for the perfection of its product.

Hence Physico-theology is a misunderstood physical Teleology, only serviceable as a preparation (propaedeutic) for Theology; and it is only adequate to this design by the aid of a foreign principle on which it can rely, and not in itself, as its name would intimate.

§ 86. Of Ethico-theology

The commonest Understanding, if it thinks over the presence of things in the world, and the existence of the world itself, cannot forbear from the judgement that all the various creatures, no matter how great the art displayed in their arrangement, and how various their purposive mutual connexion, — even the complex of their numerous systems (which we incorrectly call worlds), — would be for nothing, if there were not also men (rational beings in general). Without men the whole creation would be a mere waste, in vain, and without final purpose. But it is not in reference to man's cognitive faculty (theoretical Reason) that the being of everything else in the world gets its worth; he is not there merely that there may be some one to *contemplate* the world. For if the contemplation of the world only afforded a representation of things without any final purpose, no worth could accrue to its being from the mere fact that it is known; we must presuppose for it a final purpose, in reference to which its contemplation itself has worth. Again it is not in reference to the feeling of pleasure, or to the sum of pleasures, that we think a final purpose of creation as given; i.e. we do not estimate that absolute worth by well-being or by enjoyment (whether bodily or mental), or in a word, by happiness. For the fact that man, if he exists, takes this for his final design, gives us no concept as to why in general he should exist, and as to what worth he has in himself to make his existence pleasant. He must, therefore, be supposed to be the final purpose of creation, in order to have a rational ground for holding that nature must harmonise with his happiness, if it is considered as an absolute whole according to principles of purposes. — Hence there remains only the faculty of desire; not, however, that which makes man dependent (through sensuous impulses) upon nature, nor that in respect of which the worth of his being depends upon what he receives and enjoys. But the worth which he alone can give to himself, and which consists in what he does, how and according to what principles he acts, and that not as a link in nature's chain but in the *freedom* of his faculty of desire — i.e. a good will — is that whereby alone his being can have an absolute worth, and in reference to which the being of the world can have a *final purpose*.

The commonest judgement of healthy human Reason completely accords with this, that it is only as a moral being that man can be a final purpose of creation; if we but direct men's attention to the question and incite them to investigate it. What does it avail, one will say, that this man has so much talent, that he is so active therewith, and that he exerts thereby a useful influence over the community, thus having a great worth both in relation to his own happy condition and to the benefit of others, if he does not possess a good will? He is a contemptible Object considered in respect of his inner self; and if the creation is not to be without any final purpose at all, he, who as man belongs to it, must, in a world under moral laws, inasmuch as he is a bad man, forfeit his subjective purpose (happiness). This is the only condition under which his existence can accord with the final purpose.

If now we meet with purposive arrangements in the world and, as Reason inevitably requires, subordinate the purposes that are only conditioned to an unconditioned, supreme, i.e. final, purpose; then we easily see in the first place that we are thus concerned not with a purpose of nature (internal to itself), so far as it exists, but with the purpose of its existence along with all its ordinances, and, consequently, with the ultimate *purpose of creation*, and specially with the supreme condition under which can be posited a final purpose (i.e. the ground which determines a supreme Understanding to produce the beings of the world).

Since now it is only as a moral being that we recognise man as the purpose of creation, we have in the first place a ground (at least, the chief condition) for regarding the world as a whole connected according to purposes, and as a *system* of final causes. And, more especially, as regards the reference (necessary for us by the constitution of our Reason) of natural purposes to an intelligent World Cause, we have *one principle* enabling us to think the nature and properties of this First Cause as supreme ground in the kingdom of purposes, and to determine its concept. This physical Teleology could not do; it could only lead to indeterminate concepts thereof, unserviceable alike in theoretical and in practical use.

From the principle, thus determined, of the causality of the Original Being we must not think Him merely as Intelligence and as legislative for nature, but also as legislating supremely in a moral kingdom of purposes. In reference to the *highest good*, alone possible under His sovereignty, viz. the existence of rational beings under moral laws, we shall think this Original Being as all-knowing: thus our inmost dispositions (which constitute the proper moral worth of the actions of rational beings of the world) will not be hid from Him. We shall think Him as all-mighty: thus He will be able to make the whole of nature accord with this highest purpose. We shall think Him as all-good, *and at the same time as* just: because these two properties (which when united constitute *Wisdom*) are the conditions of the causality of a supreme Cause of the world, as highest good, under moral laws. So also all the other transcendental properties, such as *Eternity*, *Omnipresence*, etc. [for goodness and justice are moral properties[132*]], which are presupposed in reference to such a final purpose, must be thought in Him. — In this way *moral Teleology* supplies the deficiency in *physical Teleology*, and first establishes a *Theology*; because the latter, if it did not borrow from the former without being observed, but were to proceed consistently, could only found a *Demonology*, which is incapable of any definite concept.

But the principle of the reference of the world to a supreme Cause, as Deity, on account of the moral purposive destination of certain beings in it, does not accomplish this by completing the physico-teleological ground of proof and so taking this necessarily as its basis. It is sufficient *in itself* and directs attention to the purposes of nature and the investigation of that incomprehensible great art lying hidden behind its forms, in order to confirm incidentally by means of natural purposes the Ideas that pure practical Reason furnishes. For the concept of beings of the world under moral laws is a principle (*a priori*) according to which man must of necessity judge himself. Further, if there is in general a World Cause acting designedly and directed towards a purpose, this moral relation must be just as necessarily the condition of the possibility of a creation, as that in accordance with physical laws (if, that is, this intelligent Cause has also a final purpose). This is regarded *a priori* by Reason as a necessary fundamental proposition for it in its teleological judging of the existence of things. It now only comes to this, whether we have sufficient ground for Reason (either speculative or practical) to ascribe to the supreme Cause, acting in accordance with purposes, a *final purpose*. For it may *a priori* be taken by us as certain that this, by the subjective constitution of our Reason and even of the Reason of other beings as far as we can think it, can be nothing else than *man under moral laws*: since otherwise the purposes of nature in the physical order could not be known *a priori*, especially as it can in no way be seen that nature could not exist without such purposes.

Remark

Suppose the case of a man at the moment when his mind is disposed to a moral sensation. If surrounded by the beauties of nature, he is in a state of restful, serene enjoyment of his being, he feels a want, viz. to be grateful for this to some being or other. Or if another time he finds himself in the same state of mind when pressed by duties that he can and will only adequately discharge by a voluntary sacrifice, he again feels in himself a want, viz. to have thus executed a command and obeyed a Supreme Lord. Or, again; if he has in some heedless way transgressed his duty, but without becoming answerable to men, his severe self-reproach will speak to him with the voice of a judge to whom he has to give account. In a word, he needs a moral Intelligence, in order to have a Being for the purpose of his existence, which may be, conformably to this purpose, the cause of himself and of the world. It is vain to assign motives behind these feelings, for they are immediately connected with the purest moral sentiment, because *gratitude*, *obedience*, and *humiliation* (submission to deserved chastisement) are mental dispositions that make for duty; and the mind which is inclined towards a widening of its moral sentiment here only voluntarily conceives an object that is not in the world in order where possible to render its duty before such an one. It is therefore at least possible and grounded too in our moral disposition to represent a pure moral need of the existence of a Being, by which our morality gains strength or even (at least according to our representation) more

scope, viz. a new object for its exercise. That is, [there is a need] to assume a morally-legislating Being outside the world, without any reference to theoretical proofs, still less to self-interest, from pure moral grounds free from all foreign influence (and consequently only subjective), on the mere recommendation of a pure practical Reason legislating by itself alone. And although such a mental disposition might seldom occur or might not last long, but be transient and without permanent effect, or might even pass away without any meditation on the object represented in such shadowy outline, or without care to bring it under clear concepts — there is yet here unmistakably the ground why our moral capacity, as a subjective principle, should not be contented in its contemplation of the world with its purposiveness by means of natural causes, but should ascribe to it a supreme Cause governing nature according to moral principles. — In addition, we feel ourselves constrained by the moral law to strive for a universal highest purpose which yet we, in common with the rest of nature, are incapable of attaining; and it is only so far as we strive for it that we can judge ourselves to be in harmony with the final purpose of an intelligent World Cause (if such there be). Thus is found a pure moral ground of practical Reason for assuming this Cause (since it can be done without contradiction), in order that we may no more regard that effort of Reason as quite idle, and so run the risk of abandoning it from weariness.

With all this, so much only is to be said, that though *fear* first produces *gods* (demons), it is *Reason* by means of its moral principles that can first produce the concept of *God* (even when, as commonly is the case, one is unskilled in the Teleology of nature, or is very doubtful on account of the difficulty of adjusting by a sufficiently established principle its mutually contradictory phenomena). Also, the inner *moral* purposive destination of man's being supplies that in which natural knowledge is deficient, by directing us to think, for the final purpose of the being of all things (for which no other principle than an *ethical* one is satisfactory to Reason), the supreme Cause [as endowed] with properties, whereby it is able to subject the whole of nature to that single design (for which nature is merely the instrument), — i.e. *to think it as a* Deity.

§ 87. Of the moral proof of the Being of God

There is a *physical Teleology*, which gives sufficient ground of proof to our theoretical reflective Judgement to assume the being of an intelligent World-Cause. But we find also in ourselves and still more in the concept of a rational being in general endowed with freedom (of his causality) a *moral Teleology*. However, as the purposive reference, together with its law, is determined *a priori* in ourselves and therefore can be cognised as necessary, this internal conformity to law requires no intelligent cause external to us; any more than we need look to a highest Understanding as the source of the purposiveness (for every possible exercise of art) that we find in the geometrical properties of figures. But this moral Teleology concerns us as beings of the world, and therefore as beings bound up with other things in the world; upon which latter, whether as purposes or as objects in respect of which we ourselves are final purpose, the same moral laws require us to pass judgement. This moral Teleology, then, has to do with the reference of our own causality to purposes and even to a final purpose that we must aim at in the world, as well as with the reciprocal reference of the world to that moral purpose, and the external possibility of its accomplishment (to which no physical Teleology can lead us). Hence the question necessarily arises, whether it compels our rational judgement to go beyond the world and seek an intelligent supreme principle for that reference of nature to the moral in us; in order to represent nature as purposive even in reference to our inner moral legislation and its possible accomplishment. There is therefore certainly a moral Teleology, which is connected on the one hand with the *nomothetic* of freedom and on the other with that of nature; just as necessarily as civil legislation is connected with the question where the executive authority is to be sought, and in general in every case [with the question] wherein Reason is to furnish a principle of the actuality of a certain regular order of things only possible according to Ideas. —

We shall first set forth the progress of Reason from that moral Teleology and its reference to physical, to *Theology*; and then make some observations upon the possibility and the validity of this way of reasoning.

If we assume the being of certain things (or even only certain forms of things) to be contingent and so to be possible only through something else which is their cause, we may seek for the unconditioned ground of this causality of the supreme (and so of the conditioned) either in the physical or the teleological order (either according to the *nexus effectivus* or the *nexus finalis*). That is, we may either ask, what is the supreme productive cause of these things; or what is their supreme (absolutely unconditioned) purpose, i.e. the final purpose of that cause in its production of this or all its products generally? In the second case it is plainly presupposed that this cause is capable of representing purposes to itself, and consequently is an intelligent Being; at least it must be thought as acting in accordance with the laws of such a being.

If we follow the latter order, it is a FUNDAMENTAL PROPOSITION to which even the commonest human Reason is compelled to give immediate assent, that if there is to be in general a *final purpose* furnished *a priori* by Reason, this can be no other than *man* (every rational being of the world) *under moral laws*.[133][*] For (and so every one judges) if the world consisted of mere lifeless, or even in part of living but irrational, beings, its existence would have no worth because in it there would be no being who would have the least concept of what worth is. Again, if there were intelligent beings, whose Reason were only able to place the worth of the existence of things in the relation of nature to themselves (their well-being), but not to furnish of itself an original worth (in freedom), then there would certainly be (relative) purposes in the world, but no (absolute) final purpose, because the existence of such rational beings would be always purposeless. But the moral laws have this peculiar characteristic that they prescribe to Reason something as a purpose without any condition, and consequently exactly as the concept of a final purpose requires. The existence of a Reason that can be for itself the supreme law in the purposive reference, in other words the existence of rational beings under moral laws, can therefore alone be thought as the final purpose of the being of a world. If on the contrary this be not so, there would be either no purpose at all in the cause of its being, or there would be purposes, but no final purpose.

The moral law as the formal rational condition of the use of our freedom obliges us by itself alone, without depending on any purpose as material condition; but it nevertheless determines for us, and indeed *a priori*, a final purpose towards which it obliges us to strive; and this purpose is the *highest good in the world* possible through freedom.

The subjective condition under which man (and, according to all our concepts, every rational finite being) can set a final purpose before himself under the above law is happiness. Consequently, the highest physical good possible in the world, to be furthered as a final purpose as far as in us lies, is *happiness*, under the objective condition of the harmony of man with the law of *morality* as worthiness to be happy.

But it is impossible for us in accordance with all our rational faculties to represent these two requirements of the final purpose proposed to us by the moral law, as *connected* by merely natural causes, and yet as conformable to the Idea of that final purpose. Hence the concept of the *practical necessity* of such a purpose through the application of our powers does not harmonise with the theoretical concept of the *physical possibility* of working it out, if we connect with our freedom no other causality (as a means) than that of nature.

Consequently, we must assume a moral World-Cause (an Author of the world), in order to set before ourselves a final purpose consistently with the moral law; and in so far as the latter is necessary, so far (i.e. in the same degree and on the same ground) the former also must be necessarily assumed; i.e. we must admit that there is a God.[134][*]

This proof, to which we can easily give the form of logical precision, does not say: it is as necessary to assume the Being of God as to recognise the validity of the moral law; and consequently he who cannot convince himself of the first, can judge himself free from the obligations of the second. No! there must in such case only be given up the *aiming at* the final purpose in the world, to be brought about by the pursuit

of the second (viz. a happiness of rational beings in harmony with the pursuit of moral laws, regarded as the highest good). Every rational being would yet have to cognise himself as straitly bound by the precepts of morality, for its laws are formal and command unconditionally without respect to purposes (as the matter of volition). But the one requisite of the final purpose, as practical Reason prescribes it to beings of the world, is an irresistible purpose imposed on them by their nature (as finite beings), which Reason wishes to know as subject only to the moral law as inviolable *condition*, or even as universally set up in accordance with it. Thus Reason takes for final purpose the furthering of happiness in harmony with morality. To further this so far as is in our power (i.e. in respect of happiness) is commanded us by the moral law; be the issue of this endeavour what it may. The fulfilling of duty consists in the form of the earnest will, not in the intermediate causes of success.

Suppose then that partly through the weakness of all the speculative arguments so highly extolled, and partly through many irregularities in nature and the world of sense which come before him, a man is persuaded of the proposition, There is no God; he would nevertheless be contemptible in his own eyes if on that account he were to imagine the laws of duty as empty, invalid and inobligatory, and wished to resolve to transgress them boldly. Such an one, even if he could be convinced in the sequel of that which he had doubted at the first, would always be contemptible while having such a disposition, although he should fulfil his duty as regards its [external] effect as punctiliously as could be desired, for [he would be acting] from fear or from the aim at recompense, without the sentiment of reverence for duty. If, conversely, as a believer [in God] he performs his duty according to his conscience, uprightly and disinterestedly, and nevertheless believes that he is free from all moral obligation so soon as he is convinced that there is no God, this could accord but badly with an inner moral disposition.

We may then suppose the case of a righteous man [e.g. Spinoza],[135*] who holds himself firmly persuaded that there is no God, and also (because in respect of the Object of morality a similar consequence results) no future life; how is he to judge of his own inner purposive destination, by means of the moral law, which he reveres in practice? He desires no advantage to himself from following it, either in this or another world; he wishes, rather, disinterestedly to establish the good to which that holy law directs all his powers. But his effort is bounded; and from nature, although he may expect here and there a contingent accordance, he can never expect a regular harmony agreeing according to constant rules (such as his maxims are and must be, internally), with the purpose that he yet feels himself obliged and impelled to accomplish. Deceit, violence, and envy will always surround him, although he himself be honest, peaceable, and kindly; and the righteous men with whom he meets will, notwithstanding all their worthiness of happiness, be yet subjected by nature which regards not this, to all the evils of want, disease, and untimely death, just like the beasts of the earth. So it will be until one wide grave engulfs them together (honest or not, it makes no difference), and throws them back — who were able to believe themselves the final purpose of creation — into the abyss of the purposeless chaos of matter from which they were drawn. — The purpose, then, which this well-intentioned person had and ought to have before him in his pursuit of moral laws, he must certainly give up as impossible. Or else, if he wishes to remain dependent upon the call of his moral internal destination, and not to weaken the respect with which the moral law immediately inspires him, by assuming the nothingness of the single, ideal, final purpose adequate to its high demand (which cannot be brought about without a violation of moral sentiment), he must, as he well can — since there is at least no contradiction from a practical point of view in forming a concept of the possibility of a morally prescribed final purpose — assume the being of a *moral* author of the world, that is, a God.

§ 88. Limitation of the validity of the moral proof

Pure Reason, as a practical faculty, i.e. as the faculty of determining the free use of our causality by Ideas

(pure rational concepts), not only comprises in the moral law a regulative principle of our actions, but supplies us at the same time with a subjective constitutive principle in the concept of an Object which Reason alone can think, and which is to be actualised by our actions in the world according to that law. The Idea of a final purpose in the employment of freedom according to moral laws has therefore subjective *practical* reality. We are *a priori* determined by Reason to promote with all our powers the *summum bonum* [Weltbeste] which consists in the combination of the greatest welfare of rational beings with the highest condition of the good in itself, i.e. in universal happiness conjoined with morality most accordant to law. In this final purpose the possibility of one part, happiness, is empirically conditioned, i.e. dependent on the constitution of nature (which may or may not agree with this purpose) and is in a theoretical aspect problematical; whilst the other part, morality, in respect of which we are free from the effects of nature, stands fast *a priori* as to its possibility, and is dogmatically certain. It is then requisite for the objective theoretical reality of the concept of the final purpose of rational beings, that we should not only have *a priori* presupposed a final purpose for ourselves, but also that the creation, i.e. *the world itself, should have as regards its existence a final purpose, which if it could be proved* a priori would add objectivity to the subjective reality of the final purpose [of rational beings]. For if the creation has on the whole a final purpose, we cannot think it otherwise than as harmonising with the moral purpose (which alone makes the concept of a purpose possible). Now we find without doubt purposes in the world, and physical Teleology exhibits them in such abundance, that if we judge in accordance with Reason, we have ground for assuming as a principle in the investigation of nature that nothing in nature is without a purpose; but the final purpose of nature we seek there in vain. This can and must therefore, as its Idea only lies in Reason, be sought as regards its objective possibility only in rational beings. And the practical Reason of these latter not only supplies this final purpose; it also determines this concept in respect of the conditions under which alone a final purpose of creation can be thought by us.

The question is now, whether the objective reality of the concept of a final purpose of creation cannot be exhibited adequately to the theoretical requirements of pure Reason — if not apodictically for the determinant Judgement yet adequately for the maxims of the theoretical reflective Judgement? This is the least one could expect from theoretical philosophy, which undertakes to combine the moral purpose with natural purposes by means of the Idea of one single purpose; but yet this little is far more than it can accomplish.

According to the principle of the theoretical reflective Judgement we should say: if we have ground for assuming for the purposive products of nature a supreme Cause of nature — whose causality in respect of the actuality of creation is of a different kind from that required for the mechanism of nature, i.e. must be thought as the causality of an Understanding — we have also sufficient ground for thinking in this original Being not merely the purposes everywhere in nature but also a final purpose. This is not indeed a final purpose by which we can explain the presence of such a Being, but one of which we may at least convince ourselves (as was the case in physical Teleology) that we can make the possibility of such a world conceivable, not merely according to purposes, but only through the fact that we ascribe to its existence a final purpose.

But a final purpose is merely a concept of our practical Reason, and can be inferred from no data of experience for the theoretical judging of nature, nor can it be applied to the cognition of nature. No use of this concept is possible except its use for practical Reason according to moral laws; and the final purpose of creation is that constitution of the world which harmonises with that which alone we can put forward definitely according to laws, viz. the final purpose of our pure practical Reason, in so far as it is to be practical. — Now we have in the moral law, which enjoins on us in a practical point of view the application of our powers to the accomplishment of this final purpose, a ground for assuming its possibility and practicability, and consequently too (because without the concurrence of nature with a condition not in our power, its accomplishment would be impossible) a nature of things harmonious with

it. Hence we have a moral ground for thinking in a world also a final purpose of creation.

We have not yet advanced from moral Teleology to a Theology, i.e. to the being of a moral Author of the world, but only to a final purpose of creation which is determined in this way. But in order to account for this creation, i.e. *the existence of things, in accordance with a* final purpose, we must assume not only first an intelligent Being (for the possibility of things of nature which we are compelled to judge of as *purposes*), but also a *moral* Being, as author of the world, i.e. *a* God. This second conclusion is of such a character that we see it holds merely for the Judgement according to concepts of practical Reason, and as such for the reflective and not the determinant Judgement. It is true that in us morally practical Reason is essentially different in its principles from technically practical Reason. But we cannot assume that it must be so likewise in the supreme World-Cause, regarded as Intelligence, and that a peculiar mode of its causality is requisite for the final purpose, different from that which is requisite merely for purposes of nature. We cannot therefore assume that in our final purpose we have not merely a *moral ground* for admitting a final purpose of creation (as an effect), but also for admitting a *moral Being* as the original ground of creation. But we may well say, that, *according to the constitution of our rational faculty*, we cannot comprehend the possibility of such a purposiveness *in respect of the moral law*, and its Object, as there is in this final purpose, apart from an Author and Governor of the world, who is at the same time its moral Lawgiver.

The actuality of a highest morally-legislating Author is therefore sufficiently established merely *for the practical use* of our Reason, without determining anything theoretically as regards its being. For Reason requires, in respect of the possibility of its purpose, which is given to us independently by its own legislation, an Idea through which the inability to follow up this purpose, according to the mere natural concepts of the world, is removed (sufficiently for the reflective Judgement). Thus this Idea gains practical reality, although all means of creating such for it in a theoretical point of view, for the explanation of nature and determination of the supreme Cause, are entirely wanting for speculative cognition. For the theoretical reflective Judgement physical Teleology sufficiently proves from the purposes of nature an intelligent World-Cause; for the practical Judgement moral Teleology establishes it by the concept of a final purpose, which it is forced to ascribe to creation in a practical point of view. The objective reality of the Idea of God, as moral Author of the world, cannot, it is true, be established by physical purposes *alone*. But nevertheless, if the cognition of these purposes is combined with that of the moral purpose, they are, by virtue of the maxim of pure Reason which bids us seek unity of principles so far as is possible, of great importance for the practical reality of that Idea, by bringing in the reality which it has for the Judgement in a theoretical point of view.

To prevent a misunderstanding which may easily arise, it is in the highest degree needful to remark that, in the first place, we can *think* these properties of the highest Being only according to analogy. How indeed could we explore the nature of that, to which experience can show us nothing similar? Secondly, in this way we only think the supreme Being; we cannot thereby *cognise* Him and ascribe anything theoretically to Him. It would be needful for the determinant Judgement in the speculative aspect of our Reason, to consider what the supreme World-Cause is in Himself. But here we are only concerned with the question what concept we can form of Him, according to the constitution of our cognitive faculties; and whether we have to assume His existence in order merely to furnish practical reality to a purpose, which pure Reason without any such presupposition enjoins upon us *a priori* to bring about with all our powers, i.e. in order to be able to think as possible a designed effect. Although that concept may be transcendent for the speculative Reason, and the properties which we ascribe to the Being thereby thought may, objectively used, conceal an anthropomorphism in themselves; yet the design of its use is not to determine the nature of that Being which is unattainable by us, but to determine ourselves and our will accordingly. We may call a cause after the concept which we have of its effect (though only in reference to this relation), without thereby meaning to determine internally its inner constitution, by means of the

properties which can be made known to us solely by similar causes and must be given in experience. For example, amongst other properties we ascribe to the soul a *vis locomotiva* because bodily movements actually arise whose cause lies in the representation of them; without therefore meaning to ascribe to it the only mode [of action] that we know in moving forces (viz. by attraction, pressure, impulse, and consequently motion, which always presuppose an extended being). Just so we must assume *something*, which contains the ground of the possibility and practical reality, i.e. the practicability, of a necessary moral final purpose; but we can think of this, in accordance with the character of the effect expected of it, as a wise Being governing the world according to moral laws, and, conformably to the constitution of our cognitive faculties, as a cause of things distinct from nature, only in order to express the *relation* of this Being (which transcends all our cognitive faculties) to the Objects of *our* practical Reason. We do not pretend thus to ascribe to it theoretically the only causality of this kind known to us, viz. an Understanding and a Will: we do not even pretend to distinguish objectively the causality thought in this Being, as regards what is *for us* final purpose, from the causality thought in it as regards nature (and its purposive determinations in general). We can only assume this distinction as subjectively necessary by the constitution of our cognitive faculties, and as valid for the reflective, not for the objectively determinant Judgement. But if we come to practice, then such a *regulative* principle (of prudence or wisdom) [commanding us] to act conformably to that as purpose, which by the constitution of our cognitive faculties can only be thought as possible in a certain way, is at the same *constitutive*, i.e. practically determinant. Nevertheless, as a principle for judging of the objective possibility of things, it is no way theoretically determinant (i.e. it does not say that the only kind of possibility which belongs to the Object is that which belongs to our thinking faculty), but is a mere *regulative* principle for the reflective Judgement.

Remark

This moral proof is not one newly discovered, although perhaps its basis is newly set forth; since it has lain in man's rational faculty from its earliest germ, and is only continually developed with its advancing cultivation. So soon as men begin to reflect upon right and wrong — at a time when, quite indifferent as to the purposiveness of nature, they avail themselves of it without thinking anything more of it than that it is the accustomed course of nature — this judgement is inevitable, viz. that the issue cannot be the same, whether a man has behaved candidly or falsely, fairly or violently, even though up to his life's end, as far as can be seen, he has met with no happiness for his virtues, no punishment for his vices. It is as if they perceived a voice within [saying] that the issue must be different. And so there must lie hidden in them a representation, however obscure, of something after which they feel themselves bound to strive; with which such a result would not agree, — with which, if they looked upon the course of the world as the only order of things, they could not harmonise that inner purposive determination of their minds. Now they might represent in various rude fashions the way in which such an irregularity could be adjusted (an irregularity which must be far more revolting to the human mind than the blind chance that we are sometimes willing to use as a principle for judging of nature). But they could never think any other principle of the possibility of the unification of nature with its inner ethical laws, than a supreme Cause governing the world according to moral laws; because a final purpose in them proposed as duty, and a nature without any final purpose beyond them in which that purpose might be actualised, would involve a contradiction. As to the [inner][136*] constitution of that World-Cause they could contrive much nonsense. But that moral relation in the government of the world would remain always the same, which by the uncultivated Reason, considered as practical, is universally comprehensible, but with which the speculative Reason can make far from the like advance. — And in all probability attention would be directed first by this moral interest to the beauty and the purposes in nature, which would serve excellently to strengthen this Idea though they could not be the foundation of it. Still less could that moral interest be dispensed with, because it is only in reference to the final purpose that the investigation of the

purposes of nature acquires that immediate interest which displays itself in such a great degree in the admiration of them without any reference to the advantage to be derived from them.

§ 89. Of the use of the moral argument

The limitation of Reason in respect of all our Ideas of the supersensible to the conditions of its practical employment has, as far as the Idea of God is concerned, undeniable uses. For it prevents *Theology* from rising into THEOSOPHY (into transcendent concepts which confound Reason), or from sinking into DEMONOLOGY (an anthropomorphic way of representing the highest Being). And it also prevents *Religion* from turning into *Theurgy* (a fanatical belief that we can have a feeling of other supersensible beings and can reciprocally influence them), or into *Idolatry* (a superstitious belief that we can please the Supreme Being by other means than by a moral sentiment).[137][*]

For if we permit the vanity or the presumption of sophistry to determine the least thing theoretically (in a way that extends our knowledge) in respect of what lies beyond the world of sense, or if we allow any pretence to be made of insight into the being and constitution of the nature of God, of His Understanding and Will, of the laws of both and of His properties which thus affect the world, I should like to know where and at what point we will bound these assumptions of Reason. For wherever such insight can be derived, there may yet more be expected (if we only strain our reflection, as we have a mind to do). Bounds must then be put to such claims according to a certain principle, and not merely because we find that all attempts of the sort have hitherto failed, for that proves nothing against the possibility of a better result. But here no principle is possible, except either to assume that in respect of the supersensible absolutely nothing can be theoretically determined (except mere negations); or else that our Reason contains in itself a yet unused mine of cognitions, reaching no one knows how far, stored up for ourselves and our posterity. — But as concerns Religion, i.e. morals in reference to God as legislator, if the theoretical cognition of Him is to come first, morals must be adjusted in accordance with Theology; and not only is an external arbitrary legislation of a Supreme Being introduced in place of an internal necessary legislation of Reason, but also whatever is defective in our insight into the nature of this Being must extend to ethical precepts, and thus make Religion immoral and perverted.

As regards the hope of a future life, if instead of the final purpose we have to accomplish in conformity with the precept of the moral law, we ask of our theoretical faculty of cognition a clue for the judgement of Reason upon our destination (which clue is only considered as necessary or worthy of acceptance in a practical reference), then in this aspect Psychology, like Theology, gives no more than a negative concept of our thinking being. That is, none of its actions or of the phenomena of the internal sense can be explained materialistically; and hence of its separate nature and of the continuance or non-continuance of its personality after death absolutely no ampliative determinant judgement is possible on speculative grounds by means of our whole theoretical cognitive faculty. Here then everything is handed over to the teleological judging of our existence in a practically necessary aspect, and to the assumption of our continuance as a condition requisite for the final purpose absolutely furnished by Reason. And so this advantage (which indeed at first glance seems to be a loss) is apparent; that, as Theology for us can never be Theosophy, or rational *Psychology* become *Pneumatology* — an ampliative science — so on the other hand this latter is assured of never falling into *Materialism*. Psychology, rather, is a mere anthropology of the internal sense, i.e. *is the knowledge of our thinking self* in life; and, as theoretical cognition, remains merely empirical. On the other hand, rational Psychology, as far as it is concerned with questions as to our eternal existence, is not a theoretical science at all, but rests on a single conclusion of moral Teleology; as also its whole use is necessary merely on account of the latter, i.e. on account of our practical destination.

§ 90. Of the kind of belief in a teleological proof of the Being of God

The first requisite for every proof, whether it be derived from the immediate empirical presentation (as in the proof from observation of the object or from experiment) of that which is to be proved, or by Reason *a priori* from principles, is this. It should not *persuade*, but *convince*,[138*] or at least should tend to conviction. I.e. the ground of proof or the conclusion should not be merely a subjective (aesthetical) determining ground of assent (mere illusion), but objectively valid and a logical ground of cognition; for otherwise the Understanding is ensnared, but not convinced. Such an illusory proof is that which, perhaps with good intent but yet with wilful concealment of its weaknesses, is adduced in Natural Theology. In this we bring in the great number of indications of the origin of natural things according to the principle of purposes, and take advantage of the merely subjective basis of human Reason, viz. its special propensity to think only one principle instead of several, whenever this can be done without contradiction; and, when in this principle only one or more requisites for determining a concept are furnished, to add in our thought these additional [features] so as to complete the concept of the thing by arbitrarily supplementing it. For, in truth, when we meet with so many products in nature which are to us marks of an intelligent cause, why should we not think One cause rather than many; and in this One, not merely great intelligence, power, etc., but rather Omniscience, and Omnipotence — in a word, think it as a Cause that contains the sufficient ground of such properties in all possible things? Further, why should we not ascribe to this unique, all-powerful, original Being not only intelligence for natural laws and products, but also, as to a moral Cause of the world, supreme, ethical, practical Reason? For by this completion of the concept a sufficient principle is furnished both for insight into nature and for moral wisdom; and no objection grounded in any way can be made against the possibility of such an Idea. If now at the same time the moral motives of the mind are aroused, and a lively interest in the latter is added by the force of eloquence (of which they are indeed very worthy), then there arises therefrom a persuasion of the objective adequacy of the proof; and also (in most cases of its use) a wholesome illusion which quite dispenses with all examination of its logical strictness, and even on the contrary regards this with abhorrence and dislike as if an impious doubt lay at its basis. — Now against this there is indeed nothing to say, so long as we only have regard to its popular usefulness. But then the division of the proof into the two dissimilar parts involved in the argument — belonging to physical and moral Teleology respectively — cannot and must not be prevented. For the blending of these makes it impossible to discern where the proper force of the proof lies, and in what part and how it must be elaborated in order that its validity may be able to stand the strictest examination (even if we should be compelled to admit in one part the weakness of our rational insight). Thus it is the duty of the philosopher (supposing even that he counts as nothing the claims of sincerity) to expose the above illusion, however wholesome it is, which such a confusion can produce; and to distinguish what merely belongs to persuasion from that which leads to conviction (for these are determinations of assent which differ not merely in degree but in kind), in order to present plainly the state of the mind in this proof in its whole clearness, and to be able to subject it frankly to the closest examination.

But a proof which is intended to convince, can again be of two kinds; either deciding what the object is *in itself*, or what it is *for us* (for men in general) according to our necessary rational principles of judgement (proof κατ' ἀλήθειαν or κατ' ἄνθρωπον, the last word being taken in its universal signification of man in general). In the first case it is based on adequate principles for the determinant Judgement, in the second for the reflective Judgement. In the latter case it can never, when resting on merely theoretical principles, tend to conviction; but if a practical principle of Reason (which is therefore universally and necessarily valid) lies at its basis, it may certainly lay claim to conviction adequate in a pure practical point of view, i.e. to moral conviction. But a proof *tends to conviction*, though without convincing, if it is [merely][139*] brought on the way thereto; i.e. if it contains in itself only objective grounds, which although

not attaining to certainty are yet of such a kind that they do not serve merely for persuasion as subjective grounds of the judgement.[140*]

All theoretical grounds of proof resolve themselves either into: (1) Proofs by logically strict *Syllogisms of Reason*; or where this is not the case, (2) *Conclusions* according to *analogy*; or where this also has no place, (3) *Probable opinion*; or finally, which has the least weight, (4) Assumption of a merely possible ground of explanation, i.e. Hypothesis. — Now I say that all grounds of proof in general, which aim at theoretical conviction, can bring about no belief of this kind from the highest to the lowest degree, if there is to be proved the proposition of the *existence* of an original Being, as a God, in the signification adequate to the whole content of this concept; viz. a *moral* Author of the world, by whom the final purpose of creation is at the same time supplied.

(1.) As to the *logically accurate* proof proceeding from universal to particular, we have sufficiently established in the Critique the following: Since no intuition possible for us corresponds to the concept of a Being that is to be sought beyond nature — whose concept therefore, so far as it is to be theoretically determined by synthetical predicates, remains always problematical for us — there is absolutely no cognition of it to be had (by which the extent of our theoretical knowledge is in the least enlarged). The particular concept of a supersensible Being cannot be subsumed under the universal principles of the nature of things, in order to conclude from them to it, because those principles are valid simply for nature, as an object of sense.

(2.) We can indeed *think* one of two dissimilar things, even in the very point of their dissimilarity, in accordance with the *analogy*[141*] of the other; but we cannot, from that wherein they are dissimilar, *conclude* from the one to the other by analogy, i.e. transfer from the one to the other this sign of specific distinction. Thus I can, according to the analogy of the law of the equality of action and reaction in the mutual attraction and repulsion of bodies, also conceive of the association of the members of a commonwealth according to rules of right; but I cannot transfer to it those specific determinations (material attraction or repulsion), and ascribe them to the citizens in order to constitute a system called a state. — Just so we can indeed conceive of the causality of the original Being in respect of the things of the world, as natural purposes, according to the analogy of an Understanding, as ground of the forms of certain products which we call works of art (for this only takes place on behalf of the theoretical or practical use that we have to make by our cognitive faculty of this concept in respect of the natural things in the world according to a certain principle). But we can in no way conclude according to analogy, because in the case of beings of the world Understanding must be ascribed to the cause of an effect which is judged artificial, that in respect of nature the same causality which we perceive in men attaches also to the Being which is quite distinct from nature. For this concerns the very point of dissimilarity which is thought between a cause sensibly conditioned in respect of its effects and the supersensible original Being itself in our concept of it, and which therefore cannot be transferred from one to the other. — In the very fact that I must conceive the divine causality only according to the analogy of an Understanding (which faculty we know in no other being than in sensibly-conditioned man) lies the prohibition to ascribe to it this Understanding in its peculiar signification.[142*]

(3.) *Opinion* finds in *a priori* judgements no place whatever, for by them we either cognise something as quite certain or else cognise nothing at all. But if the given grounds of proof from which we start (as here from the purposes in the world) are empirical, then we cannot even with their aid form any opinion as to anything beyond the world of sense, nor can we concede to such venturesome judgements the smallest claim to probability. For probability is part of a certainty possible in a certain series of grounds (its grounds compare with the sufficient ground as parts with a whole), the insufficient ground of which must be susceptible of completion. But since, as determining grounds of one and the same judgement, they must be of the same kind, for otherwise they would not together constitute a whole (such as certainty is), one part of them cannot lie within the bounds of possible experience and another outside all possible

experience. Consequently, since merely empirical grounds of proof lead to nothing supersensible, and since what is lacking in the series of them cannot in any way be completed, we do not approach in the least nearer in our attempt to attain by their means to the supersensible and to a cognition thereof. Thus in any judgement about the latter by means of arguments derived from experience, probability has no place.

(4.) If an *hypothesis* is to serve for the explanation of the possibility of a given phenomenon, at least its possibility must be completely certain.[143*] It is sufficient that in an hypothesis I disclaim any cognition of actuality (which is claimed in an opinion given out as probable); more than this I cannot give up. The possibility of that which I place at the basis of my explanation, must at least be exposed to no doubt; otherwise there would be no end of empty chimeras. But to assume the possibility of a supersensible Being determined according to certain concepts would be a completely groundless supposition. For here none of the conditions requisite for cognition, as regards that in it which rests upon intuition, is given, and so the sole criterion of possibility remaining is the mere principle of Contradiction (which can only prove the possibility of the thought, not of the object thought).

The result then is this. For the existence [Dasein] of the original Being, as a Godhead, or of the soul as an immortal spirit, absolutely no proof in a theoretical point of view is possible for the human Reason, which can bring about even the least degree of belief. The ground of this is quite easy to comprehend. For determining our Ideas of the supersensible we have no material whatever, and we must derive this latter from things in the world of sense, which is absolutely inadequate for such an Object. Thus, in the absence of all determination of it, nothing remains but the concept of a non-sensible something which contains the ultimate ground of the world of sense, but which does not furnish any knowledge (any amplification of the concept) of its inner constitution.

§ 91. Of the kind of belief produced by a practical faith

If we look merely to the way in which anything can be *for us* (according to the subjective constitution of our representative powers) an Object of knowledge (*res cognoscibilis*), then our concepts will not cohere with Objects, but merely with our cognitive faculties and the use which they can make of a given representation (in a theoretical or practical point of view). Thus the question whether anything is or is not a cognisable being is not a question concerning the possibility of things but of our knowledge of them.

Cognisable things are of three kinds: *things of opinion* (*opinabile*); *things of fact* (*scibile*); and *things of faith* (*mere credibile*).

(1.) Objects of mere rational Ideas, which for theoretical knowledge cannot be presented in any possible experience, are so far not *cognisable* things, and consequently in respect of them we can form no *opinion*; for to form an opinion *a priori* is absurd in itself and the straight road to mere chimeras. Either then our proposition is certain *a priori* or it contains nothing for belief. Therefore *things of opinion* are always Objects of an empirical cognition at least possible in itself (objects of the world of sense); but, which, on account merely of the [low] degree of this faculty that we possess, is *for us* impossible. Thus the ether of the new physicists,[144*] an elastic fluid pervading all other matter (mingled intimately with it) is a mere thing of opinion, yet is such that, if our external senses were sharpened to the highest degree, it could be perceived; though it can never be presented in any observation or experiment. To assume [the existence of] rational inhabitants of other planets is a thing of opinion; for if we could come closer to them, which is in itself possible, we should decide by experience whether they did or did not exist; but as we shall never come so near, it remains in the region of opinion. But to hold the opinion that there are in the material universe pure thinking spirits without bodies (viz. if we dismiss as unworthy of our notice certain phenomena which have been published as actual[145*]) is to be called poetic fiction. This is no thing of opinion, but a mere Idea which remains over, when we remove from a thinking being everything material, and only leave thought to it. Whether then the latter (which we know only in man, that is, in

combination with a body) does survive, we cannot decide. Such a thing is a *sophistical being* (*ens rationis ratiocinantis*), not a *rational being* (*ens rationis ratiocinatae*)[146*]; of which latter it is possible to show conclusively, the objective reality of its concept; at least for the practical use of Reason, because this which has its peculiar and apodictically certain principles *a priori*, demands (postulates) it.

(2.) Objects for concepts, whose objective reality can be proved (whether through pure Reason or through experience, and, in the first case, from its theoretical or practical data, in all cases by means of a corresponding intuition) are *things of fact* (*res facti*).[147*] Of this kind are the mathematical properties of magnitudes (in geometry), because they are susceptible of a *presentation a priori* for the theoretical use of Reason. Further, things or their characteristics, which can be exhibited in experience (either our own or that of others through the medium of testimony) are likewise things of fact. — And, what is very remarkable, there is one rational Idea (susceptible in itself of no presentation in intuition, and consequently, of no theoretical proof of its possibility) which also comes under things of fact. This is the Idea of *freedom*, whose reality, regarded as that of a particular kind of causality (of which the concept, theoretically considered, would be transcendent), may be exhibited by means of practical laws of pure Reason, and conformably to this, in actual actions, and, consequently, in experience. — This is the only one of all the Ideas of pure Reason, whose object is a thing of fact, and to be reckoned under the *scibilia*.

(3.) Objects, which in reference to the use of pure practical Reason that is in conformity with duty must be thought *a priori* (whether as consequences or as grounds), but which are transcendent for its theoretical use, are mere *things of faith*. Of this kind is the *highest good* in the world, to be brought about by freedom.[148*] The concept of this cannot be established as regards its objective reality in any experience possible for us and thus adequately for the theoretical use of Reason; but its use is commanded by practical pure Reason [in reference to the best possible working out of that purpose],[149*] and it consequently must be assumed possible. This commanded effect, *together with the only conditions of its possibility thinkable by us*, viz. the Being of God and the immortality of the soul, are *things of faith* (*res fidei*), and of all objects are the only ones which can be so called.[150*] For though what we learn by *testimony* from the experience of others must be believed by us, yet it is not therefore a thing of faith; for it was the proper experience of some *one* witness and so a thing of fact, or is presupposed as such. Again it must be possible by this path (that of historical faith) to arrive at knowledge; and the Objects of history and geography, like everything in general which it is at least possible to know by the constitution of our cognitive faculties, belong not to things of faith but to things of fact. It is only objects of pure Reason which can be things of faith at all, though not as objects of the mere pure speculative Reason: for then they could not be reckoned with certainty among things, i.e. Objects of that cognition which is possible for us. They are Ideas, i.e. concepts of the objective reality of which we cannot theoretically be certain. On the other hand, the highest final purpose to be worked out by us, by which alone we can become worthy of being ourselves the final purpose of creation, is an Idea which has in a practical reference objective reality for us, and is also a thing. But because we cannot furnish such reality to this concept in a theoretical point of view, it is a mere thing of faith of the pure Reason, along with God and Immortality, as the conditions under which alone we, in accordance with the constitution of our (human) Reason, can conceive the possibility of that effect of the use of our freedom in conformity with law. But belief in things of faith is a belief in a pure practical point of view, i.e. a moral faith, which proves nothing for theoretical pure rational cognition, but only for that which is practical and directed to the fulfilment of its duties; it in no way extends speculation or the practical rules of prudence in accordance with the principle of self-love. If the supreme principle of all moral laws is a postulate, so is also the possibility of its highest Object; and consequently, too, the condition under which we can think this possibility is postulated along with it and by it. Thus the cognition of the latter is neither knowledge nor opinion of the being and character of these conditions, regarded as theoretical cognition; but is a mere assumption in a reference which is practical and commanded for the moral use of our Reason.

If we were able also plausibly to base upon the purposes of nature, which physical Teleology presents to us in such rich abundance, a *determinate* concept of an intelligent World-Cause, then the existence [Dasein] of this Being would not be a thing of faith. For since this would not be assumed on behalf of the performance of my duty, but only in reference to the explanation of nature, it would be merely the opinion and hypothesis most conformable to our Reason. Now such Teleology leads in no way to a determinate concept of God; on the contrary, this can only be found in the concept of a moral Author of the World, because this alone furnishes the final purpose to which we can only reckon ourselves [as attached] if we behave conformably to what the moral law prescribes as final purpose and consequently obliges us [to do]. Hence it is only by its reference to the Object of our duty, as the condition of the possibility of attaining the final purpose of the same, that the concept of God attains the privilege of counting as a thing of faith, in our belief; but on the other hand, this same concept cannot make its Object valid as a thing of fact. For, although the necessity of duty is very plain for practical Reason, yet the attainment of its final purpose, so far as it is not altogether in our own power, is only assumed on behalf of the practical use of Reason, and therefore is not so practically necessary as duty itself.[151]*

Faith (as *habitus*, not as *actus*) is the moral attitude of Reason as to belief in that which is unattainable by theoretical cognition. It is therefore the constant principle of the mind, to assume as true, on account of the obligation in reference to it, that which it is necessary to presuppose as condition of the possibility of the highest moral final purpose[152]*; although its possibility or impossibility be alike impossible for us to see into. Faith (absolutely so called) is trust in the attainment of a design, the promotion of which is a duty, but the possibility of the fulfilment of which (and consequently also that of the only conditions of it thinkable by us) is not to be *comprehended* by us. Faith, then, that refers to particular objects, which are not objects of possible knowledge or opinion (in which latter case it ought to be called, especially in historical matters, credulity and not faith), is quite moral. It is a free belief, not in that for which dogmatical proofs for the theoretically determinant Judgement are to be found, or in that to which we hold ourselves bound, but in that which we assume on behalf of a design in accordance with laws of freedom. This, however, is not, like opinion, without any adequate ground; but, is grounded as in Reason (although only in respect of its practical employment), and *adequately for its design*. For without this, the moral attitude of thought in its repudiation of the claim of the theoretical Reason for proofs (of the possibility of the Objects of morality) has no permanence; but wavers between practical commands and theoretical doubts. To be *incredulous* means to cling to maxims, and not to believe testimony in general; but he is *unbelieving*, who denies all validity to rational Ideas, because there is wanting a *theoretical* ground of their reality.[154]* He judges therefore dogmatically. A dogmatical *unbelief* cannot subsist together with a moral maxim dominant in the mental attitude (for Reason cannot command one to follow a purpose, which is cognised as nothing more than a chimera); but a *doubtful faith* can. To this the absence of conviction by grounds of speculative Reason is only a hindrance, the influence of which upon conduct a critical insight into the limits of this faculty can remove, while it substitutes by way of compensation a paramount practical belief.

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If, in place of certain mistaken attempts, we wish to introduce a different principle into philosophy and to promote its influence, it makes us highly contented to see how and why those attempts must have disappointed us.

God, *freedom*, and *immortality*, are the problems at the solution of which all the equipments of Metaphysic aim, as their ultimate and unique purpose. Now it was believed that the doctrine of freedom is needed for practical philosophy only as its negative condition; but that on the other hand the doctrine of God and of the constitution of the soul, as belonging to theoretical philosophy, must be established for

themselves and separately, in order afterwards to unite both with that which the moral law (possible only under the condition of freedom) commands, and so to constitute a religion. But we can easily see that these attempts must fail. For from mere ontological concepts of things in general, or of the existence of a necessary Being, it is possible to form absolutely no determinate concept of an original Being by means of predicates which can be given in experience and can therefore serve for cognition. Again a concept based on experience of the physical purposiveness of nature could furnish no adequate proof for morality, or consequently for cognition of a Deity. Just as little could the cognition of the soul by means of experience (which we only apply in this life) supply us with a concept of its spiritual immortal nature, a concept which would be adequate for morality. *Theology* and *Pneumatology*, regarded as problems of the sciences of a speculative Reason, can be established by no empirical data and predicates, because the concept of them is transcendent for our whole cognitive faculty. — The determination of both concepts, God and the soul (in respect of its immortality) alike, can only take place by means of predicates, which, although they are only possible from a supersensible ground, must yet prove their reality in experience; for thus alone can they make possible a cognition of a quite supersensible Being. — The only concept of this kind to be met with in human Reason is that of the freedom of men under moral laws, along with the final purpose which Reason prescribes by these laws. Of these two [the moral laws and the final purpose] the first are useful for ascribing to the Author of Nature, the second for ascribing to man, those properties which contain the necessary condition of the possibility of both [God and the soul]; so that from this Idea a conclusion can be drawn as to the existence and constitution of these beings which are otherwise quite hidden from us.

Thus the ground of the failure of the attempt to prove God and immortality by the merely theoretical path lies in this, that no cognition whatever is possible of the supersensible in this way (of natural concepts). The ground of its success by the moral way (of the concept of freedom) is as follows. Here the supersensible (freedom), which in this case is fundamental, by a determinate law of causality that springs from it, not only supplies material for cognition of other supersensibles (the moral final purpose and the conditions of its attainability), but also establishes its reality in actions as a fact; though at the same time it can furnish a valid ground of proof in no other than a practical point of view (the only one, however, of which Religion has need).

It is thus very remarkable that of the three pure rational Ideas, *God*, *freedom*, and *immortality*, that of freedom is the only concept of the supersensible which (by means of the causality that is thought in it) proves its objective reality in nature by means of the effects it can produce there; and thus renders possible the connexion of both the others with nature, and of all three together with Religion. We have therefore in us a principle capable of determining the Idea of the supersensible within us, and thus also that of the supersensible without us, for knowledge, although only in a practical point of view; a principle this of which mere speculative philosophy (which could give a merely negative concept of freedom) must despair. Consequently the concept of freedom (as fundamental concept of all unconditioned practical laws) can extend Reason beyond those bounds, within which every natural (theoretical) concept must remain hopelessly limited.

General remark on Teleology

If the question is, what rank the moral argument, which proves the Being of God only as a thing of faith for the practical pure Reason, maintains among the other arguments in philosophy, it is easy to set aside the whole achievement of this last; by which it appears that there is no choice, but that our theoretical faculty must give up all its pretensions before an impartial criticism.

All belief must in the first place be grounded upon facts, if it is not to be completely groundless; and therefore the only distinction in proofs that there can be is that belief in the consequence derived therefrom can either be grounded on this fact as *knowledge* for theoretical cognition, or merely as *faith* for practical. All facts belong either to the *natural concept* which proves its reality in the objects of

sense, given (or which may possibly be given) before all natural concepts; or to the *concept of freedom*, which sufficiently establishes its reality through the causality of Reason in regard of certain effects in the world of sense, possible through it, which it incontrovertibly postulates in the moral law. The natural concept (merely belonging to theoretical cognition) is now either metaphysical and thinkable completely *a priori*, or physical, i.e. *thinkable* a posteriori and as necessary only through determinate experience. The metaphysical natural concept (which presupposes no determinate experience) is therefore ontological.

The *ontological* proof of the being of God from the concept of an original Being is either that which from ontological predicates, by which alone it can be thought as completely determined, infers absolutely necessary being; or that which, from the absolute necessity of the being somewhere of some thing, whatever it be, infers the predicates of the original Being. For there belongs to the concept of an original Being, inasmuch as it is not derived from anything, the unconditioned necessity of its presence, and (in order to represent this) its complete determination by its [mere][155*] concept. It was believed that both requirements were found in the concept of the ontological Idea of a *Being the most real of all*; and thus two metaphysical proofs originated.

The proof (properly called ontological) resting upon a merely metaphysical natural concept concludes from the concept of the Being the most real of all, its absolutely necessary existence; for (it is said), if it did not exist, a reality would be wanting to it, viz. existence. — The other (which is also called the metaphysico-*cosmological* proof) concludes from the necessity of the existence somewhere of a thing (which must be conceded, for a being is given to us in self-consciousness), its complete determination as that of a Being the most real of all; for everything existing must be completely determined, but the absolutely necessary (i.e. *that which* we *ought to cognise as such and consequently* a priori) must be completely determined *by means of its own concept*. But this is only the case with the concept of a thing the most real of all. It is not needful to expose here the sophistry in both arguments, which has been already done elsewhere;[156*] it is only needful to remark that neither proof, even if they could be defended by all manner of dialectical subtlety, could ever pass from the schools into the world, or have the slightest influence on the mere sound Understanding.

The proof, which rests on a natural concept that can only be empirical and yet is to lead us beyond the bounds of nature regarded as the complex of the objects of sense, can be no other than that derived from the *purposes* of nature. The concept of these cannot, it is true, be given *a priori* but only through experience; but yet it promises such a concept of the original ground of nature as alone, among all those which we can conceive, is suited to the supersensible, viz. that of a highest Understanding as Cause of the world. This, in fact, it completely performs in accordance with principles of the reflective Judgement, i.e. in accordance with the constitution of our (human) faculty of cognition. — But whether or not it is in a position to supply from the same data this concept of a *supreme*, i.e. independent intelligent Being, in short of a God or Author of a world under moral laws, and consequently as sufficiently determined for the Idea of a final purpose of the being of the world — this is the question upon which everything depends, whether we desire a theoretically adequate concept of the Original Being on behalf of our whole knowledge of nature, or a practical concept for religion.

This argument derived from physical Teleology is worthy of respect. It produces a similar effect in the way of conviction upon the common Understanding as upon the subtlest thinker; and a *Reimarus*[157*] has acquired immortal honour in his work (not yet superseded), in which he abundantly develops this ground of proof with his peculiar thoroughness and lucidity. — But how does this proof acquire such mighty influence upon the mind? How does a judgement by cold reason (for we might refer to persuasion the emotion and elevation of reason produced by the wonders of nature) issue thus in a calm and unreserved assent? It is not the physical purposes, which all indicate in the World Cause an unfathomable intelligence; these are inadequate thereto, because they do not satisfy the need of the inquiring Reason. For, wherefore (it asks) are all those natural things that exhibit art? Wherefore is man himself, whom we

must regard as the ultimate purpose of nature thinkable by us? Wherefore is this collective Nature here, and what is the final purpose of such great and manifold art? Reason cannot be contented with enjoyment or with contemplation, observation, and admiration (which, if it stops there, is only enjoyment of a particular kind) as the ultimate final purpose for the creation of the world and of man himself; for this presupposes a personal worth, which man alone can give himself, as the condition under which alone he and his being can be the final purpose. Failing this (which alone is susceptible of a definite concept), the purposes of nature do not satisfactorily answer our questions; especially because they cannot furnish any *determinate* concept of the highest Being as an all-sufficient (and therefore unique and so properly called *highest*) being, and of the laws according to which an Understanding is Cause of the world.

Hence that the physico-teleological proof convinces, just as if it were a theological proof, does not arise from our availing ourselves of the Ideas of purposes of nature as so many empirical grounds of proof of a *highest* Understanding. But it mingles itself unnoticed with that moral ground of proof, which dwells in every man and influences him secretly, in the conclusion by which we ascribe to the Being, which manifests itself with such incomprehensible art in the purposes of nature, a final purpose and consequently wisdom (without however being justified in doing so by the perception of the former); and by which therefore we arbitrarily fill up the lacunas of the [design] argument. In fact it is only the moral ground of proof which produces conviction, and that only in a moral reference with which every man feels inwardly his agreement. But the physico-teleological proof has only the merit of leading the mind, in its consideration of the world, by the way of purposes and through them to an *intelligent* Author of the world. The moral reference to purposes and the Idea of a moral legislator and Author of the world, as a theological concept, seem to be developed of themselves out of that ground of proof, although they are in truth pure additions.

Henceforward we may allow the customary statement to stand. For it is generally difficult (if the distinction requires much reflection) for ordinary sound Understanding to distinguish from one another as heterogeneous the different principles which it confuses, and from one of which alone it actually draws conclusions with correctness. The moral ground of proof of the Being of God, properly speaking, does not merely *complete* and render perfect the physico-teleological proof; but it is a special proof that *supplies* the conviction which is wanting in the latter. This latter in fact can do nothing more than guide Reason, in its judgements upon the ground of nature and that contingent but admirable order of nature only known to us by experience, to the causality of a Cause containing the ground of the same in accordance with purposes (which we by the constitution of our cognitive faculties must think as an intelligent cause); and thus by arresting the attention of Reason it makes it more susceptible of the moral proof. For what is requisite to the latter concept is so essentially different from everything which natural concepts contain and can teach, that there is need of a particular ground of proof quite independent of the former, in order to supply the concept of the original Being adequately for Theology and to infer its existence. — The moral proof (which it is true only proves the Being of God in a practical though indispensable aspect of Reason) would preserve all its force, if we found in the world no material, or only that which is doubtful, for physical Teleology. It is possible to conceive rational beings surrounded by a nature which displayed no clear trace of organisation but only the effects of a mere mechanism of crude matter; on behalf of which and amid the changeability of some merely contingent purposive forms and relations there would appear to be no ground for inferring an intelligent Author. In such case there would be no occasion for a physical Teleology; and yet Reason, which here gets no guidance from natural concepts, would find in the concept of freedom and in the moral Ideas founded thereon a practically sufficient ground for postulating the concept of the original Being in conformity with these, i.e. as a Deity, and for postulating nature (even the nature of our own being) as a final purpose in accordance with freedom and its laws — and all this in reference to the indispensable command of practical Reason. — However the fact that there is in the actual world for the rational beings in it abundant material for physical Teleology (even though this is not

necessary) serves as a desirable confirmation of the moral argument, as far as nature can exhibit anything analogous to the (moral) rational Ideas. For the concept of a supreme Cause possessing intelligence (though not reaching far enough for a Theology) thus acquires sufficient reality for the reflective Judgement, but it is not required as the basis of the moral proof; nor does this latter serve to complete as a proof the former, which does not by itself point to morality at all, by means of an argument developed according to a single principle. Two such heterogeneous principles as nature and freedom can only furnish two different kinds of proof; and the attempt to derive one from the other is found unavailing as regards that which is to be proved.

If the physico-teleological ground of proof sufficed for the proof which is sought, it would be very satisfactory for the speculative Reason; for it would furnish the hope of founding a Theosophy (for so we must call the theoretical cognition of the divine nature and its existence which would suffice at once for the explanation of the constitution of the world and for the determination of moral laws). In the same way if Psychology enabled us to arrive at a cognition of the immortality of the soul it would make Pneumatology possible, which would be just as welcome to the speculative Reason. But neither, agreeable as they would be to the arrogance of our curiosity, would satisfy the wish of Reason in respect of a theory which must be based on a cognition of the nature of things. Whether the first, as Theology, and the second, as Anthropology, when founded on the moral principle, i.e. the principle of freedom, and consequently in accordance with the practical use [of Reason] do not better fulfil their objective final design, is another question which we need not here pursue.

The physico-teleological ground of proof does not reach to Theology, because it does not and cannot give any determinate concept, sufficient for this design, of the original Being; but we must derive this from quite another quarter, or must supply its lacuna by an arbitrary addition. You infer, from the great purposiveness of natural forms and their relations, a world-cause endowed with Understanding; but what is the degree of this Understanding? Without doubt you cannot assume that it is the highest possible Understanding; because for that it would be requisite that you should see that a greater Understanding than that of which you perceive proofs in the world, is not thinkable; and this would be to ascribe Omniscience to yourself.[158]* In the same way, if you infer from the magnitude of the world the very great might of its Author, you must be content with this having only a comparative significance for your faculty of comprehension; for since you do not know all that is possible, so as to compare it with the magnitude of the world as far as you know it, you cannot infer the Almightiness of its Author from so small a standard, and so on. Now you arrive in this way at no definite concept of an original Being available for a Theology; for this can only be found in the concept of the totality of perfections compatible with intelligence, and you cannot help yourself to this by merely *empirical* data. But without such a definite concept you cannot infer a *unique* intelligent original Being; you can only assume it (with whatever motive). — Now it may certainly be conceded that you should arbitrarily add (for Reason has nothing fundamental to say to the contrary): Where so much perfection is found, we may well assume that all perfection is united in a unique Cause of the world, because Reason succeeds better both theoretically and practically with a principle thus definite. But then you cannot regard this concept of the original Being as proved by you, for you have only assumed it on behalf of a better employment of Reason. Hence all lamentation or impotent anger on account of the alleged mischief of rendering doubtful the coherency of your chain of reasoning, is vain pretentiousness, which would fain have us believe that the doubt here freely expressed as to your argument is a doubting of sacred truth, in order that under this cover the shallowness of your argument may pass unnoticed.

Moral Teleology, on the other hand, which is not less firmly based than physical, — which, indeed, rather deserves the preference because it rests *a priori* on principles inseparable from our Reason — leads to that which is requisite for the possibility of a Theology, viz. to a determinate *concept* of the supreme Cause, as Cause of the world according to moral laws, and, consequently, to the concept of such

a cause as satisfies our moral final purpose. For this are required, as natural properties belonging to it, nothing less than Omniscience, Omnipotence, Omnipresence, and the like, which must be thought as bound up with the moral final purpose which is infinite and thus as adequate to it. Hence moral Teleology alone can furnish the concept of a *unique* Author of the world, which is available for a Theology.

In this way Theology leads immediately to *Religion*, i.e. the recognition of our duties as divine commands[159]*; because it is only the recognition of our duty and of the final purpose enjoined upon us by Reason which brings out with definiteness the concept of God. This concept, therefore, is inseparable in its origin from obligation to that Being. On the other hand, even if the concept of the original Being could be also found determinately by the merely theoretical path (viz. the concept of it as mere Cause of nature), it would afterwards be very difficult — perhaps impossible without arbitrary interpolation [of elements] — to ascribe to this Being by well-grounded proofs a causality in accordance with moral laws; and yet without this that quasi-theological concept could furnish no foundation for religion. Even if a religion could be established by this theoretical path, it would actually, as regards sentiment (wherein its essence lies) be different from that in which the concept of God and the (practical) conviction of His Being originate from the fundamental Ideas of morality. For if we must suppose the Omnipotence, Omniscience, etc., of an Author of the world as concepts given to us from another quarter, in order afterwards only to apply our concepts of duties to our relation to Him, then these latter concepts must bear very markedly the appearance of compulsion and forced submission. If, instead of this, the respect for the moral law, quite freely, in virtue of the precept of our own Reason, represents to us the final purpose of our destination, we admit among our moral views a Cause harmonising with this and with its accomplishment, with the sincerest reverence, which is quite distinct from pathological fear; and we willingly submit ourselves thereto.[160]*

If it be asked why it is incumbent upon us to have any Theology at all, it appears clear that it is not needed for the extension or correction of our cognition of nature or in general for any theory, but simply in a subjective point of view for Religion, i.e. the practical or moral use of our Reason. If it is found that the only argument which leads to a definite concept of the object of Theology is itself moral, it is not only not strange, but we miss nothing in respect of its final purpose as regards the sufficiency of belief from this ground of proof, provided that it be admitted that such an argument only establishes the Being of God sufficiently for our moral destination, i.e. in a practical point of view, and that here speculation neither shows its strength in any way, nor extends by means of it the sphere of its domain. Our surprise and the alleged contradiction between the possibility of a Theology asserted here and that which the Critique of speculative Reason said of the Categories — viz. that they can only produce knowledge when applied to objects of sense, but in no way when applied to the supersensible — vanish, if we see that they are here used for a cognition of God not in a theoretical point of view (in accordance with what His own nature, inscrutable to us, may be) but simply in a practical. — In order then at this opportunity to make an end of the misinterpretation of that very necessary doctrine of the Critique, which, to the chagrin of the blind dogmatist, refers Reason to its bounds, I add here the following elucidation.

If I ascribe to a body *motive force* and thus think it by means of the category of *causality*, then I at the same time *cognise* it by that [category]; i.e. I determine the concept of it, as of an Object in general, by means of what belongs to it by itself (as the condition of the possibility of that relation) as an object of sense. If the motive force ascribed to it is repulsive, then there belongs to it (although I do not place near it any other body upon which it may exert force) a place in space, and moreover extension, i.e. space in itself, besides the filling up of this by means of the repulsive forces of its parts. In addition there is the law of this filling up (that the ground of the repulsion of the parts must decrease in the same proportion as the extension of the body increases, and as the space, which it fills with the same parts by means of this force, is augmented). — On the contrary, if I think a supersensible Being as the first *mover*, and thus by the category of causality as regards its determination of the world (motion of matter), I must not think it as existing in any place in space nor as extended; I must not even think it as existing in time or simultaneously with other beings. Hence I have no determinations whatever, which could make intelligible to me the condition of the possibility of motion by means of this Being as its ground. Consequently, I do not in the very least cognise it by means of the predicate of Cause (as first mover), for itself; but I have only the representation of a something containing the ground of the motions in the world; and the relation of the latter to it as their cause, since it does not besides furnish me with anything belonging to the constitution of the thing which is cause, leaves its concept quite empty. The reason of this is, that by predicates which only find their Object in the world of sense I can indeed proceed to the being of something which must contain their ground, but not to the determination of its concept as a supersensible being, which excludes all these predicates. By the category of causality, then, if I determine it by the concept of a *first mover*, I do not in the very least cognise what God is. Perhaps, however, I shall have better success if I start from the order of the world, not merely to *think* its causality as that of a supreme *Understanding*, but to *cognise* it by means of this determination of the said concept; because here the troublesome condition of space and of extension disappears. — At all events the great purposiveness in the world compels us to *think* a supreme cause of it, and to *think* its causality as that of an Understanding; but we are not therefore entitled to *ascribe* this to it. (E.g. *we think of the eternity of God as presence in all time, because we can form no other concept of mere being as a quantum,* i.e. as duration; or we think of the divine Omnipresence as presence in all places in order to make comprehensible to ourselves His immediate presence in things which are external to one another; without daring to ascribe to God any of these determinations, as something cognised in Him.) If I determine the causality of a man, in respect of certain products which are only explicable by designed purposiveness, by thinking it as that of Understanding, I need not stop here, but I can ascribe to him this predicate as a well-known property and cognise him accordingly. For I know that intuitions are given to the senses of men and are brought by the Understanding under a concept and thus under a rule; that this concept only contains the common characteristic (with omission of the particular ones) and is thus discursive; and that the rules for bringing given representations under a consciousness in general are given by Understanding before those intuitions, etc. I therefore ascribe this property to man as a property by means of which I *cognise* him. However, if I wish to *think* a supersensible Being (God) as an intelligence, this is not only permissible in a certain aspect of my employment of Reason — it is unavoidable; but to ascribe to Him Understanding and to flatter ourselves that we can *cognise* Him by means of it as a property of His, is in no way permissible. For I must omit all those conditions under which alone I know an Understanding, and thus the predicate which only serves for determining man cannot be applied at all to a supersensible Object; and therefore by a causality thus determined, I cannot cognise what God is. And so it is with all Categories, which can have no significance for cognition in a theoretical aspect, if they are not applied to objects of possible experience. — However, according to the analogy of an Understanding I can in a certain other aspect think a supersensible being, without at the same time meaning thereby to cognise it theoretically; viz. if this determination of its causality concerns an effect in the world, which contains a

design morally necessary but unattainable by a sensible being. For then a cognition of God and of His Being (Theology) is possible by means of properties and determinations of His causality merely thought in Him according to analogy, which has all requisite reality in a practical reference though *only in respect of this* (as moral). — An Ethical Theology is therefore possible; for though morality can subsist without theology as regards its rule, it cannot do so as regards the final design which this proposes, unless Reason in respect of it is to be renounced. But a Theological Ethic (of pure Reason) is impossible; for laws which Reason itself does not give and whose observance it does not bring about as a pure practical faculty, can not be moral. In the same way a Theological Physic would be a nonentity, for it would propose no laws of nature but ordinances of a Highest Will; while on the other hand a physical (properly speaking a physico-teleological) Theology can serve at least as a propaedeutic to Theology proper, by giving occasion for the Idea of a final purpose which nature cannot present by the observation of natural purposes of which it offers abundant material. It thus makes felt the need of a Theology which shall determine the concept of God adequately for the highest practical use of Reason, but it cannot develop this and base it satisfactorily on its proofs.

THE END

ENDNOTES

[1] Dr. Caird (*Critical Philosophy of Kant*, vol. ii.) has given an instructive account of the gradual development in Kant's mind of the main idea of the Critique of Judgement.

[2] *Natural Theology and Modern Thought*, .

[3] I reproduce here in part a paper read before the Victoria Institute in April 1892.

[4] Critique of Pure Reason. Dialectic, Bk. ii. chap. i. near the end.

[5] Cf. Kuno Fischer, *A Critique of Kant*, .

[6] Quoted by Caird, *Critical Philosophy of Kant*, vol. ii. , who reiterates this criticism all through his account of Kant's teaching.

[7] *Natural Theology and Modern Thought*, .

[8] [Reading, with Windelband, *in sicheren alleinigen Besitz*.]

[9] If we have cause for supposing that concepts which we use as empirical principles stand in relationship with the pure cognitive faculty *a priori*, it is profitable, because of this reference, to seek for them a transcendental definition; i.e. a definition through pure categories, so far as these by themselves adequately furnish the distinction of the concept in question from others. We here follow the example of the mathematician who leaves undetermined the empirical data of his problem, and only brings their relation in their pure synthesis under the concepts of pure Arithmetic, and thus generalises the solution. Objection has been brought against a similar procedure of mine (cf. the Preface to the Critique of Practical Reason, Abbott's Translation,), and my definition of the faculty of desire has been found fault with, viz. that it is [the being's] *faculty of becoming by means of its representations the cause of the actuality of the objects of these representations*; for the desires might be mere *cravings*, and by means of these alone every one is convinced the Object cannot be produced. — But this proves nothing more than that there are desires in man, by which he is in contradiction with himself. For here he strives for the production of the Object by means of the representation *alone*, from which he can expect no result, because he is conscious that his mechanical powers (if I may so call those which are not psychological) which must be determined by that representation to bring about the Object (mediately) are either not competent, or even tend towards what is impossible; e.g. to reverse the past (*O mihi praeteritos* ... etc.), or to annihilate in the impatience of expectation the interval before the wished for moment. — Although in

such fantastic desires we are conscious of the inadequacy (or even the unsuitability) of our representations for being *causes* of their objects, yet their reference as causes, and consequently the representation of their *causality*, is contained in every *wish*; and this is specially evident if the wish is an affection or *longing*. For these [longings] by their dilatation and contraction of the heart and consequent exhaustion of its powers, prove that these powers are continually kept on the stretch by representations, but that they perpetually let the mind, having regard to the impossibility [of the desire], fall back in exhaustion. Even prayers for the aversion of great and (as far as one can see) unavoidable evils, and many superstitious means for attaining in a natural way impossible purposes, point to the causal reference of representations to their Objects; a reference which cannot at all be checked by the consciousness of the inadequacy of the effort to produce the effect. — As to why there should be in our nature this propensity to desires which are consciously vain, that is an anthropologico-teleological problem. It seems that if we were not determined to the application of our powers before we were assured of the adequacy of our faculties to produce an Object, these powers would remain in great part unused. For we commonly learn to know our powers only by first making trial of them. This deception in the case of vain wishes is then only the consequence of a benevolent ordinance in our nature. [This note was added by Kant in the Second Edition.]

[10] One of the various pretended contradictions in this whole distinction of the causality of nature from that of freedom is this. It is objected that if I speak of *obstacles* which nature opposes to causality according to (moral) laws of freedom or of the *assistance* it affords, I am admitting an *influence* of the former upon the latter. But if we try to understand what has been said, this misinterpretation is very easy to avoid. The opposition or assistance is not between nature and freedom, but between the former as phenomenon and the *effects* of the latter as phenomena in the world of sense. The causality of freedom itself (of pure and practical Reason) is the causality of a natural cause subordinated to freedom (i.e. of the subject considered as man and therefore as phenomenon). The intelligible, which is thought under freedom, contains the ground of the *determination* of this [natural cause] in a way not explicable any further (just as that intelligible does which constitutes the supersensible substrate of nature).

[11] It has been thought a doubtful point that my divisions in pure Philosophy should always be threefold. But that lies in the nature of the thing. If there is to be an *a priori* division it must be either *analytical*, according to the law of contradiction, which is always twofold (*quodlibet ens est aut A aut non A*); or it is *synthetical*. And if in this latter case it is to be derived from *a priori concepts* (not as in Mathematic from the intuition corresponding to the concept), the division must necessarily be trichotomy. For according to what is requisite for synthetical unity in general there must be (1) a condition, (2) a conditioned, and (3) the concept which arises from the union of the conditioned with its condition.

[12] The definition of taste which is laid down here is that it is the faculty of judging of the beautiful. But the analysis of judgements of taste must show what is required in order to call an object beautiful. The moments, to which this Judgement has regard in its reflection, I have sought in accordance with the guidance of the logical functions of judgement (for in a judgement of taste a reference to the Understanding is always involved). I have considered the moment of quality first, because the aesthetical judgement upon the beautiful first pays attention to it.

[13] A judgement upon an object of satisfaction may be quite *disinterested*, but yet very *interesting*, i.e. not

based upon an interest, but bringing an interest with it; of this kind are all pure moral judgements. Judgements of taste, however, do not in themselves establish any interest. Only in society is it *interesting* to have taste: the reason of this will be shown in the sequel.

[14] [Second Edition.]

[15] An obligation to enjoyment is a manifest absurdity. Thus the obligation to all actions which have merely enjoyment for their aim can only be a pretended one; however spiritually it may be conceived (or decked out), even if it is a mystical, or so-called heavenly, enjoyment.

[16] [Second Edition.]

[17] [Second Edition.]

[18] [Ueberweg points out (Hist. of Phil., ii. 528, Eng. Trans.) that Mendelssohn had already called attention to the disinterestedness of our satisfaction in the Beautiful. "It appears," says Mendelssohn, "to be a particular mark of the beautiful, that it is contemplated with quiet satisfaction, that it pleases, even though it be not in our possession, and even though we be never so far removed from the desire to put it to our use." But, of course, as Ueberweg remarks, Kant's conception of disinterestedness extends far beyond the absence of a desire to possess the object.]

[19] [Reading *besondere* with Windelband; Hartenstein reads *bestimmte*.]

[20] [I.e. The Critique of Pure Reason, Analytic, bk. ii. c. i.]

[21] [Second Edition. Spencer expresses much more concisely what Kant has in his mind here. "Pleasure ... is a feeling which we seek to bring into consciousness and retain there; pain is ... a feeling which we seek to get out of consciousness and to keep out." *Principles of Psychology*, *§ 125.]*

[22] [The editions of Hartenstein and Kirchmann omit *ohne* before *zweck*, which makes havoc of the sentence. It is correctly printed by Rosenkranz and Windelband.]

[23] [First Edition.]

[24] [Cf. *Metaphysic of Morals*, Introd. I. "The pleasure which is necessarily bound up with the desire (of the object whose representation affects feeling) may be called *practical* pleasure, whether it be cause or effect of the desire. On the contrary, the pleasure which is not necessarily bound up with the desire of the object, and which, therefore, is at bottom not a pleasure in the existence of the Object of the representation, but clings to the representation only, may be called mere contemplative pleasure or

passive satisfaction. The feeling of the latter kind of pleasure we call *taste*."]

25 [Second Edition.]

26 [First Edition has *gleiche*; Second Edition has *solche*.]

27 [First and Second Editions have *sehr zweifle*; but this was corrected to *nicht zweifle* in the Third Edition of 1799.]

28 [*Belebt machen*; First Edition had *beliebt*.]

29 [Second Edition.]

30 [Kant probably alludes here to Baumgarten (1714-1762), who was the first writer to give the name of Aesthetics to the Philosophy of Taste. He defined beauty as "perfection apprehended through the senses." Kant is said to have used as a text-book at lectures a work by Meier, a pupil of Baumgarten's, on this subject.]

31 [Cf. Preface to the *Metaphysical Elements of Ethics*, v.: "The word *perfection* is liable to many misconceptions. It is sometimes understood as a concept belonging to Transcendental Philosophy; viz. the concept of the *totality* of the manifold, which, taken together, constitutes a Thing; sometimes, again, it is understood as belonging to *Teleology*, so that it signifies the agreement of the characteristics of a thing with a *purpose*. Perfection in the former sense might be called *quantitative* (material), in the latter *qualitative* (formal) perfection."]

32 [The words even if ... general were added in the Second Edition.]

33 [Second Edition.]

34 Models of taste as regards the arts of speech must be composed in a dead and learned language. The first, in order that they may not suffer that change which inevitably comes over living languages, in which noble expressions become flat, common ones antiquated, and newly created ones have only a short currency. The second, because learned languages have a grammar which is subject to no wanton change of fashion, but the rules of which are preserved unchanged.

35 [This distinction between an *Idea* and an *Ideal*, as also the further contrast between Ideals of the Reason and Ideals of the Imagination, had already been given by Kant in the *Critique of Pure Reason*, Dialectic, bk. ii. c. iii. *§ 1.]*

[36] [Polycletus of Argos flourished about 430 B.C. His statue of the *Spearbearer* (*Doryphorus*), afterwards became known as the *Canon*; because in it the artist was supposed to have embodied a perfect representation of the ideal of the human figure.]

[37] [This was a celebrated statue executed by Myron, a Greek sculptor, contemporary with Polycletus. It is frequently mentioned in the Greek Anthology.]

[38] It will be found that a perfectly regular countenance, such as a painter might wish to have for a model, ordinarily tells us nothing; because it contains nothing characteristic, and therefore rather expresses the Idea of the race than the specific [traits] of a person. The exaggeration of a characteristic of this kind, i.e. such as does violence to the normal Idea (the purposiveness of the race) is called *caricature*. Experience also shows that these quite regular countenances commonly indicate internally only a mediocre man; presumably (if it may be assumed that external nature expresses the proportions of internal) because, if no mental disposition exceeds that proportion which is requisite in order to constitute a man free from faults, nothing can be expected of what is called *genius*, in which nature seems to depart from the ordinary relations of the mental powers on behalf of some special one.

[39] It might be objected to this explanation that there are things, in which we see a purposive form without cognising any [definite] purpose in them, like the stone implements often got from old sepulchral tumuli with a hole in them as if for a handle. These, although they plainly indicate by their shape a purposiveness of which we do not know the purpose, are nevertheless not described as beautiful. But if we regard a thing as a work of art, that is enough to make us admit that its shape has reference to some design and definite purpose. And hence there is no immediate satisfaction in the contemplation of it. On the other hand a flower, e.g. a tulip, is regarded as beautiful; because in perceiving it we find a certain purposiveness which, in our judgement, is referred to no purpose at all.

[40] [Cp. , *infra*.]

[41] [See *The History of Sumatra*, by W. Marsden (London, 1783), .]

[42] [Cf. *§ 42*, *infra.]*

[43] [Second Edition.]

[44] [Second Edition.]

[45] [Lettres sur l'Égypte, par M. Savary, Amsterdam, 1787.]

[46] [Second Edition.]

[47] [With this should be compared the similar discussion in the *Critique of Pure Reason*, Dialectic, bk. ii. c. ii. *§ 1, On the System of Cosmological Ideas.]*

[48] [Second Edition.]

[49] [Cf. *§ 83, infra.]*

[50] [In the *Philosophical Theory of Religion*, pt. i. sub fin. (Abbott's Translation,), Kant, as here, divides "all religions into two classes — favour-seeking religion (mere worship) and *moral* religion, that is, the religion *of a good life*;" and he concludes that "amongst all the public religions that have ever existed the Christian alone is moral."]

[51] [*Voyages dans les Alpes*, par H. B. de Saussure; vol. i. was published at Neuchatel in 1779; vol. ii. at Geneva in 1786.]

[52] [Second Edition.]

[53] [*Als Vermögen der Independenz der absoluten Totalität*, a curious phrase.]

[54] [Second Edition.]

[55] *Affections* are specifically different from *passions*. The former are related merely to feeling; the latter belong to the faculty of desire, and are inclinations which render difficult or impossible all determination of the [elective] will by principles. The former are stormy and unpremeditated; the latter are steady and deliberate; thus indignation in the form of wrath is an affection, but in the form of hatred (revenge) is a passion. The latter can never and in no reference be called sublime; because while in an affection the freedom of the mind is *hindered*, in a passion it is abolished. [Cf. Preface to the *Metaphysical Elements of Ethics, § xvi., where this distinction is more fully drawn out. Affection is described as hasty; and passion is defined as the sensible appetite grown into a permanent inclination.]*

[56] [In the Preface to the *Metaphysical Elements of Ethics, § xvii., Kant gives the term moral apathy to that freedom from the sway of the affections, which is distinguished from indifference to them.]*

[57] [Reading *weiche* with Rosenkranz and Windelband; Hartenstein and Kirchmann have *weise*, which yields no sense.]

[58] [Cf. , *supra*.]

[59] [Kirchmann has *positiv*; but this is probably a mere misprint.]

[60] [L.c. vol. ii. .]

[61] [See Burke, *On the Sublime and Beautiful*, Part IV., Sect. vii. “If the pain and terror are so modified as not to be actually noxious; if the pain is not carried to violence, and the terror is not conversant about the present destruction of the person, as these emotions clear the parts, whether fine or gross, of a dangerous and troublesome incumbrance, they are capable of producing delight; not pleasure, but a sort of delightful horror, a sort of tranquillity tinged with terror; which, as it belongs to self-preservation, is one of the strongest of all the passions.” Kant quotes from the German version published at Riga in 1773. This was a free translation made from Burke’s fifth edition.]

[62] [See Burke, l.c., Part IV., Sect. xix. “Beauty acts by relaxing the solids of the whole system. There are all the appearances of such a relaxation; and a relaxation somewhat below the natural tone seems to me to be the cause of all positive pleasure. Who is a stranger to that manner of expression so common in all times and in all countries, of being softened, relaxed, enervated, dissolved, melted away by pleasure?”]

[63] [Reading *Gebot*; Kirchmann has *Gesetz*.]

[64] [Second Edition.]

[65] [Second Edition.]

[66] [Cf. *Critique of Pure Reason*, Methodology, c. 1, *§ 1. “The construction of a concept is the a priori presentation of the corresponding intuition.”]*

[67] [Charles Batteux (1713-1780), author of *Les Beaux Arts reduits à un même principe*.]

[68] [Essay XVIII, *The Sceptic*. “Critics can reason and dispute more plausibly than cooks or perfumers. We may observe, however, that this uniformity among human kind, hinders not, but that there is a considerable diversity in the sentiments of beauty and worth, and that education, custom, prejudice, caprice, and humour, frequently vary our taste of this kind.... Beauty and worth are merely of a relative nature, and consist in an agreeable sentiment, produced by an object in a particular mind, according to the peculiar structure and constitution of that mind.”]

[69] [For the distinction, an important one in Kant, between judgements of experience and judgements of perception, see his *Prolegomena*, *§ 18. Cf. Kant’s Critical Philosophy for English Readers, vol. i. .]*

[70] [First Edition has "limited."]

[71] In order to be justified in claiming universal assent for an aesthetical judgement that rests merely on subjective grounds, it is sufficient to assume, (1) that the subjective conditions of the Judgement, as regards the relation of the cognitive powers thus put into activity to a cognition in general, are the same in all men. This must be true, because otherwise men would not be able to communicate their representations or even their knowledge. (2) The judgement must merely have reference to this relation (consequently to the *formal condition* of the Judgement) and be pure, i.e. not mingled either with concepts of the Object or with sensations, as determining grounds. If there has been any mistake as regards this latter condition, then there is only an inaccurate application of the privilege, which a law gives us, to a particular case; but that does not destroy the privilege itself in general.

[72] [Kant lays down these three maxims in his *Introduction to Logic, § vii., as "general rules and conditions of the avoidance of error."]*

[73] We soon see that although enlightenment is easy *in thesi*, yet *in hypothesi* it is difficult and slow of accomplishment. For not to be passive as regards Reason, but to be always self-legislative, is indeed quite easy for the man who wishes only to be in accordance with his essential purpose, and does not desire to know what is beyond his Understanding. But since we can hardly avoid seeking this, and there are never wanting others who promise with much confidence that they are able to satisfy our curiosity, it must be very hard to maintain in or restore to the mind (especially the mind of the public) that bare negative which properly constitutes enlightenment.

[74] We may designate Taste as *sensus communis aestheticus*, common Understanding as *sensus communis logicus*.

[75] [Peter Camper (1722-1789), a celebrated naturalist and comparative anatomist; for some years professor at Groningen.]

[76] In my country a common man, if you propose to him such a problem as that of Columbus with his egg, says, *that is not art*, *it is only science*. I.e. *if we* know *how*, *we can* do it; and he says the same of all the pretended arts of jugglers. On the other hand, he will not refuse to apply the term art to the performance of a rope-dancer.

[77] [Kant was accustomed to say that the talk at a dinner table should always pass through these three stages — narrative, discussion, and jest; and punctilious in this, as in all else, he is said to have directed the conversation at his own table accordingly (Wallace's *Kant*,).]

[78] [Second Edition.]

[79] [Cf. Aristotle's *Poetics*, c. iv. b: ἃ γὰρ αὐτὰ λυπηρῶς ὁρῶμεν, τούτων τὰς εἰκόνας τὰς μάλιστα ἠκριβωμένας χαίρομεν θεωροῦντες οἷον θηρίων τε μορφὰς τῶν ἀτιμοτάτων καὶ νεκρῶν. Cf. also *Rhetoric*, I. 11, b; and Burke on the *Sublime and Beautiful*, Part I. *§ 16. Boileau (L'art poétique, chant 3), makes a similar observation:*

"Il n'est point de serpent ni de monstre odieux
Qui, par l'art imité, ne puisse plaire aux yeux.
D'un pinceau délicat l'artifice agréable
Du plus affreux objet fait un objet aimable."]

[80] [Second Edition.]

[81] [Cf. , *infra*.]

[82] [In English we would rather say "without *soul*"; but I prefer to translate *Geist* consistently by *spirit*, to avoid the confusion of it with *Seele*.]

[83] [These lines occur in one of Frederick the Great's French poems: Épître au maréchal Keith XVIII., "sur les vaines terreurs de la mort et les frayeurs d'une autre vie." Kant here translates them into German.]

[84] [Withof, whose "Moral Poems" appeared in 1755. This reference was supplied by H. Krebs in *Notes and Queries* 5th January 1895.]

[85] Perhaps nothing more sublime was ever said and no sublimer thought ever expressed than the famous inscription on the Temple of *Isis* (Mother *Nature*): "I am all that is and that was and that shall be, and no mortal hath lifted my veil." *Segner* availed himself of this Idea in a *suggestive* vignette prefixed to his Natural Philosophy, in order to inspire beforehand the pupil whom he was about to lead into that temple with a holy awe, which should dispose his mind to serious attention. [J. A. de Segner (1704-1777) was Professor of Natural Philosophy at Göttingen, and the author of several scientific works of repute.]

[86] [Second Edition.]

[87] The three former faculties are *united* in the first instance by means of the fourth. Hume gives us to understand in his *History of England* that although the English are inferior in their productions to no people in the world as regards the evidences they display of the three former properties, *separately* considered, yet they must be put after their neighbours the French as regards that which unites these properties. [In his *Observations on the Beautiful and Sublime*, *§ iv. sub init., Kant remarks that the English have the keener sense of the sublime, the French of the beautiful.]*

[88] The reader is not to judge this scheme for a possible division of the beautiful arts as a deliberate theory. It is only one of various attempts which we may and ought to devise.

[89] [Second Edition.]

[90] [I.e. the case of Plastic art, with its subdivisions of Architecture and Sculpture, as is explained in the next paragraph.]

[91] That landscape gardening may be regarded as a species of the art of painting, although it presents its forms corporeally, seems strange. But since it actually takes its forms from nature (trees, shrubs, grasses, and flowers from forest and field — at least in the first instance), and so far is not an art like Plastic; and since it also has no concept of the object and its purpose (as in Architecture) conditioning its arrangements, but involves merely the free play of the Imagination in contemplation, it so far agrees with mere aesthetical painting which has no definite theme (which arranges sky, land, and water, so as to entertain us by means of light and shade only). — In general the reader is only to judge of this as an attempt to combine the beautiful arts under one principle, viz. that of the expression of aesthetical Ideas (according to the analogy of speech), and not to regard it as a definitive analysis of them.

[92] I must admit that a beautiful poem has always given me a pure gratification; whilst the reading of the best discourse, whether of a Roman orator or of a modern parliamentary speaker or of a preacher, has always been mingled with an unpleasant feeling of disapprobation of a treacherous art, which means to move men in important matters like machines to a judgement that must lose all weight for them on quiet reflection. Readiness and accuracy in speaking (which taken together constitute Rhetoric) belong to beautiful art; but the art of the orator (*ars oratoria*), the art of availing oneself of the weaknesses of men for one's own designs (whether these be well meant or even actually good does not matter) is worthy of no *respect*. Again, this art only reached its highest point, both at Athens and at Rome, at a time when the state was hastening to its ruin and true patriotic sentiment had disappeared. The man who along with a clear insight into things has in his power a wealth of pure speech, and who with a fruitful Imagination capable of presenting his Ideas unites a lively sympathy with what is truly good, is the *vir bonus discendi peritus*, the orator without art but of great impressiveness, as *Cicero* has it; though he may not always remain true to this ideal.

[93] [From this to the end of the paragraph, and the next note, were added in the Second Edition.]

[94] Those who recommend the singing of spiritual songs at family prayers do not consider that they inflict a great hardship upon the public by such *noisy* (and therefore in general pharisaical) devotions; for they force the neighbours either to sing with them or to abandon their meditations. [Kant suffered himself from such annoyances, which may account for the asperity of this note. At one period he was disturbed by the devotional exercises of the prisoners in the adjoining jail. In a letter to the burgomaster "he suggested the advantage of closing the windows during these hymn-singings, and added that the warders of the prison might probably be directed to accept less sonorous and neighbour-annoying chants as evidence of the penitent spirit of their captives" (Wallace's *Kant*,).]

[95] [Cf. “Parturiunt montes, nascitur *ridiculus* mus.”]

[96] [The First Edition adds “as in the case of a man who gets the news of a great commercial success.”]

[97] [The jest may have been taken from Steele’s play, “The Funeral or Grief *à la mode*,” where it occurs verbatim. This play was published in 1702.]

[98] [*Henriade*, Chant 7, sub init.

“Du Dieu qui nous créa la clémence infinie,
Pour adoucir les maux de cette courte vie,
A placé parmi nous deux êtres bienfaisants,
De la terre à jamais aimables habitants,
Soutiens dans les travaux, trésors dans l’indigence:
L’un est le doux sommeil, et l’autre est l’espérance.”]

[99] We may describe as a rationalising judgement (*judicium ratiocinans*) one which proclaims itself as universal, for as such it can serve as the major premise of a syllogism. On the other hand, we can only speak of a judgement as rational (*judicium ratiocinatum*) which is thought as the conclusion of a syllogism, and consequently as grounded *a priori*.

[100] [Cf. , *infra*.]

[101] [Second Edition.]

[102] [Antiparos is a small island in the Cyclades, remarkable for a splendid stalactite cavern near the southern coast.]

[103] The intuitive in cognition must be opposed to the discursive (not to the symbolical). The former is either *schematical*, by *demonstration*; or *symbolical* as a representation in accordance with a mere *analogy*.

[104] [I read *Geselligkeit* with Rosenkranz and Windelband; Hartenstein and Kirchmann have *Glückseligkeit*.]

[105] As in pure mathematics we can never talk of the existence, but only of the possibility of things, viz. of an intuition corresponding to a concept, and so never of cause and effect, it follows that all purposiveness

observed there must be considered merely as formal and never as a natural purpose.

[106] [The allusion is to *Vitruvius de Architectura*, Bk. vi. Praef. "Aristippus philosophus Socraticus, naufragio cum eiectus ad Rhodiensium litus animadvertisset geometrica schemata descripta, exclamavisse ad comites ita dicitur, Bene speremus, hominum enim vestigia video."]

[107] [Second Edition.]

[108] We can conversely throw light upon a certain combination, much more often met with in Idea than in actuality, by means of an analogy to the so-called immediate natural purposes. In a recent complete transformation of a great people into a state the word *organisation* for the regulation of magistracies, etc., and even of the whole body politic, has often been fitly used. For in such a whole every member should surely be purpose as well as means, and, whilst all work together towards the possibility of the whole, each should be determined as regards place and function by means of the Idea of the whole. [Kant probably alludes here to the organisation of the United States of America.]

[109] [These words are inserted by Rosenkranz and Windelband, but omitted by Hartenstein and Kirchmann.]

[110] In the aesthetical part [*§ 58,] it was said: We view beautiful nature with favour, whilst we have a quite free (disinterested) satisfaction in its form. For in this mere judgement of taste no consideration is given to the purpose for which these natural beauties exist; whether to excite pleasure in us, or as purposes without any reference to us at all. But in a teleological judgement we pay attention to this reference, and here we can regard it as a favour of nature that it has been willing to minister to our culture by the exhibition of so many beautiful figures.*

[111] The German word *vermessen* is a good word and full of meaning. A judgement in which we forget to consider the extent of our powers (our Understanding) may sometimes sound very humble, and yet make great pretensions, and so be very presumptuous. Of this kind are most of those by which we pretend to extol the divine wisdom by ascribing to it designs in the works of creation and preservation which are really meant to do honour to the private wisdom of the reasoner.

[112] We thus see that in most speculative things of pure Reason, as regards dogmatic assertions, the philosophical schools have commonly tried all possible solutions of a given question. To explain the purposiveness of nature men have tried either *lifeless matter* or a *lifeless God*, or again, *living matter* or a *living God*. It only remains for us, if the need should arise, to abandon all these objective *assertions* and to examine critically our judgement merely in reference to our cognitive faculties, in order to supply to their principle a validity which, if not dogmatic, shall at least be that of a maxim sufficient for the sure employment of Reason.

[113] [That is, the wider concept serves as a universal, under which the particular may be brought; cognition

from principles, in Kant's phrase, is the process of knowing the particular in the universal by means of concepts.]

[114] [This distinction will be familiar to the student of the *Critique of Pure Reason*. See Dialectic, bk. i., *Of the Concepts of Pure Reason*.]

[115] [Second Edition.]

[116] [This principle, that for our intellect, the conception of an organised body is impossible except by the aid of the Idea of design, is frequently insisted on by Kant. Professor Wallace points out (*Kant*,) that as far back as 1755, in his *General Physiogony and Theory of the Heavens*, Kant classed the origin of animals and plants with the secrets of Providence and the mystical number 666 "as one of the topics on which ingenuity and thought are occasionally wasted."]

[117] [Second Edition.]

[118] [Second Edition.]

[119] [This is marked as an *Appendix* in the Second Edition.]

[120] We may call a hypothesis of this kind a daring venture of reason, and there may be few even of the most acute naturalists through whose head it has not sometimes passed. For it is not absurd, like that *generatio aequivoca* by which is understood the production of an organised being through the mechanics of crude unorganised matter. It would always remain *generatio univoca* in the most universal sense of the word, for it only considers one organic being as derived from another organic being, although from one which is specifically different; e.g. certain water-animals transform themselves gradually into marsh-animals and from these, after some generations, into land-animals. *A priori*, in the judgement of Reason alone, there is no contradiction here. Only experience gives no example of it; according to experience all generation that we know is *generatio homonyma*. This is not merely *univoca* in contrast to the generation out of unorganised material, but in the organisation the product is of like kind to that which produced it; and *generation heteronyma*, so far as our empirical knowledge of nature extends, is nowhere found.

[121] [It is probable that Kant alludes here to Hume's Essay *On a Providence and a Future State*, *§ xi of the Inquiry. Hume argues that though the inference from an effect to an intelligent cause may be valid in the case of human contrivance, it is not legitimate to rise by a like argument to Supreme Intelligence. "In human nature there is a certain experienced coherence of designs and inclinations; so that when from any fact we have discovered one intention of any man, it may often be reasonable from experience to infer another, and draw a long chain of conclusions concerning his past or future conduct. But this method of reasoning can never have place with regard to a being so remote and incomprehensible, who bears much less analogy to any other being in the universe than the sun to a waxen taper, and who discovers himself only by some faint traces or outlines, beyond which we have*

no authority to ascribe to him any attribute or perfection."]

[122] [J. F. Blumenbach (1752-1840), a German naturalist and professor at Göttingen; the author of *Institutiones Physiologicae* (1787) and other works. An interesting account of him is given in Lever's novel Adventures of Arthur O'Leary, ch. xix.]

[123] [Carl von Linné (1707-1778), Knight of the Polar Star, the celebrated Swedish botanist.]

[124] If the once adopted name *Natural history* is to continue for the description of nature, we may in contrast with art, give the title of *Archaeology of nature* to that which the former literally indicates, viz. a representation of the *old* condition of the earth, about which, although we cannot hope for certainty, we have good ground for conjecture. As sculptured stones, etc., belong to the province of art, so petrefactions belong to the archaeology of nature. And since work is actually being done in this [science] (under the name of the Theory of the Earth), constantly, although of course slowly, this name is not given to a merely imaginary investigation of nature, but to one to which nature itself leads and invites us.

[125] [See above.]

[126] [First Edition has *freedom*.]

[127] [These views are set forth by Kant more fully in the essay *Zum ewigen Frieden* (1795).]

[128] [Second Edition.]

[129] [Cf. *The Philosophical Theory of Religion*, Part i., *On the bad principle in Human Nature*, III., where Kant remarks that although war "is not so incurably bad as the deadness of a universal monarchy ... yet, as an ancient observed, it makes more bad men than it takes away."]

[130] The value of life for us, if it is estimated by that *which we enjoy* (by the natural purpose of the sum of all inclinations, i.e. happiness), is easy to decide. It sinks below zero; for who would be willing to enter upon life anew under the same conditions? who would do so even according to a new, self-chosen plan (yet in conformity with the course of nature), if it were merely directed to enjoyment? We have shown above what value life has in virtue of what it contains in itself, when lived in accordance with the purpose that nature has along with us, and which consists in what we do (not merely what we enjoy), in which, however, we are always but means towards an undetermined final purpose. There remains then nothing but the value which we ourselves give our life, through what we can not only do, but do purposively in such independence of nature that the existence of nature itself can only be a purpose under this condition.

[131] It would be possible that the happiness of rational beings in the world should be a purpose of nature, and then also this would be its *ultimate* purpose. At least we cannot see *a priori* why nature should not be so ordered, because by means of its mechanism this effect would be certainly possible, at least so far as we see. But morality, with a causality according to purposes subordinated thereto, is absolutely impossible by means of natural causes; for the principle by which it determines to action is supersensible, and is therefore the only possible principle in the order of purposes that in respect of nature is absolutely unconditioned. Its subject consequently alone is qualified to be the *final purpose* of creation to which the whole of nature is subordinated. — *Happiness*, on the contrary, as has been shown in the preceding paragraphs by the testimony of experience, is not even a *purpose of nature* in respect of man in preference to other creatures; much less a *final purpose of creation*. Men may of course make it their ultimate subjective purpose. But if I ask, in reference to the final purpose of creation, why must men exist? then we are speaking of an objective supreme purpose, such as the highest Reason would require for creation. If we answer: These beings exist to afford objects for the benevolence of that Supreme Cause; then we contradict the condition to which the Reason of man subjects even his inmost wish for happiness (viz. the harmony with his own internal moral legislation). This proves that happiness can only be a conditioned purpose, and that it is only as a moral being that man can be the final purpose of creation; but that as concerns his state happiness is only connected with it as a consequence, according to the measure of his harmony with that purpose regarded as the purpose of his being.

[132] [Second Edition.]

[133] I say deliberately under moral laws. It is not man *in accordance with* moral laws, i.e. a being who behaves himself in conformity with them, who is the final purpose of creation. For by using the latter expression we should be asserting more than we know; viz. that it is in the power of an Author of the world to cause man always to behave himself in accordance with moral laws. But this presupposes a concept of freedom and of nature (of which latter we can only think an external author), which would imply an insight into the supersensible substrate of nature and its identity with that which causality through freedom makes possible in the world. And this far surpasses the insight of our Reason. Only of *man under moral laws* can we say, without transgressing the limits of our insight: his being constitutes the final purpose of the world. This harmonises completely with the judgement of human Reason reflecting morally upon the course of the world. We believe that we perceive in the case of the wicked the traces of a wise purposive reference, if we only see that the wanton criminal does not die before he has undergone the deserved punishment of his misdeeds. According to our concepts of free causality, our good or bad behaviour depends on ourselves; we regard it the highest wisdom in the government of the world to ordain for the first, opportunity, and for both, their consequence, in accordance with moral laws. In the latter properly consists the glory of God, which is hence not unsuitably described by theologians as the ultimate purpose of creation. — It is further to be remarked that when we use the word creation, we understand nothing more than we have said here, viz. the cause of the *being* of the world or of the things in it (substances). This is what the concept properly belonging to this word involves (*actuatio substantiae est creatio*); and consequently there is not implied in it the supposition of a freely working, and therefore intelligent, cause (whose being we first of all want to prove).

[134] [Note added in Second Edition.] This moral argument does not supply any objectively-valid proof of the Being of God; it does not prove to the sceptic that there is a God, but proves that if he wishes to think in a way consonant with morality, he must admit the *assumption* of this proposition under the maxims of

his practical Reason. — We should therefore not say: it is necessary *for morals* [Sittlichkeit], to assume the happiness of all rational beings of the world in proportion to their morality [Moralität]; but rather, this is necessitated *by* morality. Accordingly, this is a *subjective* argument sufficient for moral beings.

135 [Second Edition.]

136 [Second Edition.]

137 In a practical sense that religion is always idolatry which conceives the Supreme Being with properties, according to which something else besides morality can be a fit condition for that which man can do being in accordance with His Will. For however pure and free from sensible images the concept that we have formed may be in a theoretical point of view, yet it will be in a practical point of view still represented as an *idol*, i.e. in regard to the character of His Will, anthropomorphically.

138 [Cf. Introd. to Logic, ix. , "Conviction is opposed to Persuasion, which is a belief from inadequate reasons, of which we do not know whether they are only subjective or are also objective."]

139 [Second Edition.]

140 [I.e. Urtheils. First Edition had *Urtheilens*, the judging subject.]

141 *Analogy* (in a qualitative signification) is the identity of the relation between reasons and consequences (causes and effects), so far as it is to be found, notwithstanding the specific difference of the things or those properties in them which contain the reason for like consequences (i.e. considered apart from this relation). Thus we conceive of the artificial constructions of beasts by comparing them with those of men; by comparing the ground of those effects brought about by the former, which we do not know, with the ground of similar effects brought about by men (reason), which we do know; i.e. we regard the ground of the former as an analogon of reason. We then try at the same time to show that the ground of the artisan faculty of beasts, which we call instinct, specifically different as it is in fact from reason, has yet a similar relation to its effect (the buildings of the beaver as compared with those of men). — But then I cannot therefore conclude that because man uses *reason* for his building, the beaver must have the like, and call this a *conclusion* according to analogy. But from the similarity of the mode of operation of beasts (of which we cannot immediately perceive the ground) to that of men (of which we are immediately conscious), we can quite rightly conclude *according to analogy*, that beasts too act in accordance with *representations* (not as *Descartes* has it, that they are machines), and that despite their specific distinction they are yet (as living beings) of the same genus as man. The principle of our right so to conclude consists in the sameness of the ground for reckoning beasts in respect of the said determination in the same genus with men, regarded as men, so far as we can externally compare them with one another in accordance with their actions. There is *par ratio*. Just so I can conceive, according to the analogy of an Understanding, the causality of the supreme World-Cause, by comparing its purposive products in the world with the artificial works of men; but I cannot conclude according to analogy to those properties in it [which are in man], because here the principle of the possibility of such a method of

reasoning entirely fails, viz. the *paritas rationis* for counting the Supreme Being in one and the same genus with man (in respect of the causality of both). The causality of the beings of the world, which is always sensibly conditioned (as is causality through Understanding) cannot be transferred to a Being which has in common with them no generic concept save that of Thing in general.

142 We thus miss nothing in the representation of the relations of this Being to the world, as far as the consequences, theoretical or practical, of this concept are concerned. To wish to investigate what it is in itself, is a curiosity as purposeless as it is vain.

143 [Cf. Introd. to Logic, , where the conditions of a legitimate hypothesis are laid down. See also *Critique of Pure Reason*, Methodology, c. i. *§ 3.]*

144 [This illustration is also given in the *Logic* (); where the three *modi* of belief, Opinion, Faith, and Knowledge, are distinguished from each other. Cf. *Critique of Pure Reason*, Methodology, c. ii. *§ 3.]*

145 [The speculations of Swedenborg seem to have always had a strange fascination for Kant. He says of two reported cases of Swedenborg's clairvoyance that he knows not how to disprove them (Rosenkranz vii. 5); but in his *Anthropology §§ 35, 37, he attacks Swedenborgianism as folly. So in an early essay, Dreams of a Visionary explained by Dreams of Metaphysics, he avows his scepticism as to the value of the information which "psychical research" can supply about the spirit-world, though he is careful not to commit himself to any dogmatic statement on the subject of ghosts. In the Critique of Pure Reason (when discussing the Postulates of Empirical Thought) he gives, as an instance of a concept inconsistent with the canons of possibility, "a power of being in a community of thought with other men, however distant from us."]*

146 [Cf. *supra*, .]

147 I here extend, correctly as it seems to me, the concept of a thing of fact beyond the usual signification of this word. For it is not needful, not even feasible, to limit this expression merely to actual experience, if we are talking of the relation of things to our cognitive faculties; for an experience merely possible is quite sufficient in order that we may speak of them merely as objects of a definite kind of cognition.

148 [Cf. *introduction to Logic*, note.]

149 [Second Edition.]

150 Things of faith are not therefore *articles of faith*; if we understand by the latter things of faith to the *confession* of which (internal or external) we can be bound. Natural theology contains nothing like this. For since they, as things of faith (like things of fact) cannot be based on theoretical proofs, [they are accepted by] a belief which is free and which only as such is compatible with the morality of the subject.

[151] The final purpose which the moral law enjoins upon us to further, is not the ground of duty; since this lies in the moral law, which, as formal practical principle, leads categorically, independently of the Objects of the faculty of desire (the material of the will) and consequently of any purpose whatever. This formal characteristic of my actions (their subordination under the principle of universal validity), wherein alone consists their inner moral worth, is quite in our power; and I can quite well abstract from the possibility or the unattainableness of purposes which I am obliged to promote in conformity with that law (because in them consists only the external worth of my actions) as something which is never completely in my power, in order only to look to that which is of my doing. But then the design of promoting the final purpose of all rational beings (happiness so far as it is possible for it to be accordant with duty) is even yet prescribed by the law of duty. The speculative Reason, however, does not see at all the attainableness of this (neither on the side of our own physical faculty nor on that of the co-operation of nature). It must rather, so far as we can judge in a rational way, hold the derivation, by the aid of such causes, of such a consequence of our good conduct from mere nature (internal and external) without God and immortality, to be an ungrounded and vain, though well-meant, expectation; and if it could have complete certainty of this judgement, it would regard the moral law itself as the mere deception of our Reason in a practical aspect. But since the speculative Reason fully convinces itself that the latter can never take place, but that on the other hand those Ideas whose object lies outside nature can be thought without contradiction, it must for its own practical law and the problem prescribed thereby, and therefore in a moral aspect, recognise those Ideas as real in order not to come into contradiction with itself.

[152] It is a trust in the promise of the moral law; [not however such as is contained in it, but such as I put into it and that on morally adequate grounds.[153] For a final purpose cannot be commanded by any law of Reason without this latter at the same time promising, however uncertainly, its attainableness; and thus justifying our belief in the special conditions under which alone our Reason can think it as attainable. The word *fides* expresses this; and it can only appear doubtful, how this expression and this particular Idea came into moral philosophy, since it first was introduced with Christianity, and the adoption of it perhaps might seem to be only a flattering imitation of Christian terminology. But this is not the only case in which this wonderful religion with its great simplicity of statement has enriched philosophy with far more definite and purer concepts of morality, than it had been able to furnish before; but which, once they are there, are *freely* assented to by Reason and are assumed as concepts to which it could well have come of itself and which it could and should have introduced.]

[153] [Second Edition.]

[154] [Cf. Introd. to Logic, ix. , “That man is morally *unbelieving* who does not accept that which though *impossible* to know is *morally necessary* to suppose.”]

[155] [First Edition.]

[156] [In the *Critique of Pure Reason*, Dialectic, bk. II. c. iii. *§§ 4, 5.]*

[157] [H. S. Reimarus (1694-1768), the author of the famous *Wolfenbüttel Fragments*, published after the death of Reimarus by Lessing. The book alluded to by Kant is probably the *Abhandlungen von den vornehmsten Wahrheiten der natürlichen Religion* (1754), which had great popularity in its day.]

[158] [These arguments are advanced by Hume, *Inquiry, § vii. Cf. also Pure Reason, Dialectic, bk. II. c. iii. § 6, and Practical Reason, Dialectic, c. ii. § vii.]*

[159] [Cf. *Practical Reason*, Dialectic, c. ii. *§ v.]*

[160] The admiration for beauty, and also the emotion aroused by the manifold purposes of nature, which a reflective mind is able to feel even prior to a clear representation of a rational Author of the world, have something in themselves like *religious* feeling. They seem in the first place by a method of judging analogous to moral to produce an effect upon the moral feeling (gratitude to, and veneration for, the unknown cause); and thus by exciting moral Ideas to produce an effect upon the mind, when they inspire that admiration which is bound up with far more interest than mere theoretical observation can bring about.

Transcriber's Notes

Punctuation, hyphenation, and spelling were made consistent when a predominant preference was found in this book; otherwise they were not changed.

Simple typographical errors were corrected.

Ambiguous hyphens at the ends of lines were retained.

Text has three occcurrences of “casuality”, which have been retained, but which may be misprints for “causality”.

These are transliterations of the Greek text for use on devices that cannot display such text:

Page xvii: kosmos.

Page xxii: kalo.

Page xxiv: sôphrosynê.

Page xxxiii: nous.

Page 397: kat’ alêtheian (or) kat’ anthrôpon.

Footnote 79 (originally on page 195): ha gar auta lypêrôs horômen, toutôn tas eikonas tas malista êkribômenas chairomen theôrountes hoion thêriôn te morphas tôn atimotatôn kai nekrôn.

RELIGION WITHIN THE BOUNDS OF BARE REASON

Translated by Thomas Kingsmill Abbott

CONTENTS

FIRST PART of THE PHILOSOPHICAL THEORY OF RELIGION.
OF THE INDWELLING of the BAD PRINCIPLE ALONG WITH THE GOOD; or, ON THE RADICAL EVIL IN HUMAN NATURE.
REMARK.
I.: OF THE ORIGINAL INCAPACITY FOR GOOD IN HUMAN NATURE.
II.: OF THE PROPENSITY TO EVIL IN HUMAN NATURE.
III.: MAN IS BY NATURE BAD.
IV.: ON THE ORIGIN OF THE EVIL IN HUMAN NATURE.
GENERAL REMARK. ON THE RESTORATION OF THE ORIGINAL CAPACITY FOR GOOD TO ITS FULL POWER.
APPENDIX.
I.: — ON A SUPPOSED RIGHT TO TELL LIES FROM BENEVOLENT MOTIVES.
II.: — ON THE SAYING “NECESSITY HAS NO LAW”.

Please note: Abbot only translated the first part of this work.

Die

Religion

innerhalb der Grenzen

der bloßen Vernunft.

Vorgestellt

von

Immanuel Kant.

Königsberg,

bey Friedrich Nicolovius.

1793.

The first edition’s title page

FIRST PART of THE PHILOSOPHICAL THEORY OF RELIGION.

OF THE INDWELLING of the BAD PRINCIPLE ALONG WITH THE GOOD; or, ON THE RADICAL EVIL IN HUMAN NATURE.

THAT the world lieth in wickedness is a complaint as old as history, even as what is still older, poetry; indeed, as old as the oldest of all poems, sacerdotal religion. All alike, nevertheless, make the world begin from good; with the golden age, with life in paradise, or one still more happy in communion with heavenly beings. But they represent this happy state as soon vanishing like a dream, and then they fall into badness (moral badness, which is always accompanied by physical), as hastening to worse and worse with accelerated steps; so that we are now living (this now being however as old as history) in the last times, the last day and the destruction of the world are at the door; and in some parts of Hindostan the judge and destroyer of the world, Rudra (otherwise called Siva), is already worshipped as the God that is at present in power; the preserver of the world, namely, Vishnu, having centuries ago laid down his office, of which he was weary, and which he had received from the creator of the world, Brahma.

Later, but much less general, is the opposite heroic opinion, which has perhaps obtained currency only amongst philosophers, and in our times chiefly amongst instructors of youth; that the world is constantly advancing in precisely the reverse direction, namely, from worse to better (though almost insensibly): at least, that the capacity for such advance exists in human nature. This opinion, however, is certainly not founded on experience, if what is meant is moral good or evil (not civilization), for the history of all times speaks too powerfully against it, but it is probably a good-natured hypothesis of moralists from Seneca to Rousseau, so as to urge man to the unwearied cultivation of the germ of good that perhaps lies in us, if one can reckon on such a natural foundation in man. There is also the consideration that as we must assume that man is by nature (that is, as he is usually born) sound in body, there is thought to be no reason why we should not assume that he is also by nature sound in soul, so that nature itself helps us to develop this moral capacity for good within us. “Sanabilibus ægrotamus malis, nosque in rectum genitos natura, si sanari velimus, adjuvat,” says Seneca.

But since it may well be that there is error in the supposed experience on both sides, the question is, whether a mean is not at least possible, namely, that man as a species may be neither good nor bad, or at all events that he is as much one as the other, partly good, partly bad? We call a man bad, however, not because he performs actions that are bad (violating law), but because these are of such a kind that we may infer from them bad maxims in him. Now although we can in experience observe that actions violate laws, and even (at least in ourselves) that they do so consciously; yet we cannot observe the maxims themselves, not even always in ourselves: consequently, the judgment that the doer of them is a bad man cannot with certainty be founded on experience. In order then to call a man bad, it should be possible to argue à priori from some actions, or from a single consciously bad action, to a bad maxim as its foundation, and from this to a general source in the actor of all particular morally bad maxims, this source again being itself a maxim.

Lest any difficulty should be found in the expression nature, which, if it meant (as usual) the opposite of the source of actions from freedom, would be directly contradictory to the predicates morally good or evil, it is to be observed, that by the nature of man we mean here only the subjective ground of the use of his freedom in general (under objective moral laws) which precedes every act that falls under the senses, wherever this ground lies. This subjective ground, however, must itself again be always an act of freedom (else the use or abuse of man’s elective will in respect of the moral law could not be imputed to him nor the good or bad in him be called moral). Consequently, the source of the bad cannot lie in any object that determines the elective will through inclination, or in any natural impulse, but only in a rule that the

elective will makes for itself for the use of its freedom, that is, in a maxim. Now we cannot go on to ask concerning this, What is the subjective ground why it is adopted, and not the opposite maxim? For if this ground were ultimately not now a maxim but a mere natural impulse, then the use of freedom would be reduced to determination by natural causes, which is contradictory to its conception. When we say then, man is by nature good, or, he is by nature bad, this only means that he contains a primary source (to us inscrutable) of the adoption of good or of the adoption of bad (law violating) maxims: and this generally as man, and consequently so that by this he expresses the character of his species.

We shall say then of one of these characters (which distinguishes man from other possible rational beings, it is innate, and yet we must always remember that Nature is not to bear the blame of it (if it is bad), or the credit (if it is good), but that the man himself is the author of it. But since the primary source of the adoption of our maxims, which itself must again always lie in the free elective will, cannot be a fact of experience, hence the good or bad in man (as the subjective primary source of the adoption of this or that maxim in respect of the moral law) is innate merely in this sense, that it is in force before any use of freedom is experienced (in the earliest childhood back to birth) so that it is conceived as being present in man at birth, not that birth is the cause of it.

REMARK.

The conflict between the two above-mentioned hypotheses rests on a disjunctive proposition; man is (by nature) either morally good or morally bad. But it readily occurs to every one to ask whether this disjunction is correct, and whether one might not affirm that man is by nature neither, or another that he is both at once, namely, in some parts good, in others bad. Experience seems even to confirm this mean between the two extremes.

It is in general, however, important for Ethics to admit, as far as possible, no intermediates, either in actions (adiaphora) or in human characters; since with such ambiguity all maxims would run the risk of losing all definiteness and firmness. Those who are attached to this strict view are commonly called rigourists (a name that is meant as a reproach, but which is really praise): and their antipodes may be called latitudinarians. The latter are either latitudinarians of neutrality, who may be called indifferentists, or of compromise, who may be called syncretists.

The answer given to the above question by the rigourists is founded on the important consideration: That freedom of elective will has the peculiar characteristic that it cannot be determined to action by any spring except only so far as the man has taken it up into his maxim (has made it the universal rule of his conduct); only in his way can a spring, whatever it may be, co-exist with the absolute spontaneity of the elective will (freedom). Only the moral law is of itself in the judgment of reason a spring, and whoever makes it his maxim is morally good. Now if the law does not determine a man's elective will in respect of an action which has reference to it, an opposite spring must have influence on his elective will; and since by hypothesis this can only occur by the man taking it (and consequently deviation from the moral law) into his maxim (in which case he is a bad man), it follows that his disposition in respect of the moral law is never indifferent (is always one of the two, good or bad.)

Nor can he be partly good and partly bad at the same time. For if he is in part good, he has taken the moral law into his maxim; if then he were at the same time in another part bad, then, since the moral law of obedience to duty is one and universal, the maxim referring to it would be universal, and at the same time only particular, which is a contradiction.

When it is said that a man has the one or the other disposition as an innate natural quality, it is not meant that it is not acquired by him, that is, that he is not the author of it, but only that it is not acquired in time (that from youth up he has been always the one or the other). The disposition, that is, the primary subjective source of the adoption of maxims can be but one, and applies generally to the whole use of freedom. But it must have been itself adopted by free elective will, for otherwise it could not be imputed. Now the subjective ground or cause of its adoption cannot be further known (although we cannot help asking for it); since otherwise another maxim would have to be adduced, into which this disposition has been adopted, and this again must have its reason. Since, then, we cannot deduce this disposition, or rather its ultimate source, from any first act of the elective will in time, we call it a characteristic of the elective will, attaching to it by nature (although in fact it is founded in freedom). Now that when we say of a man that he is by nature good or bad, we are justified in applying this not to the individual (in which case one might be assumed to be by nature good, another bad), but to the whole race, this can only be proved when it has been shown in the anthropological inquiry that the reasons which justify us in ascribing one of the two characters to a man as innate are such that there is no reason to except any man from them, and that therefore it holds of the race.

I.: OF THE ORIGINAL INCAPACITY FOR GOOD IN HUMAN NATURE.

We may conveniently regard this capacity [Anlage] under three heads divided in reference to their end, as elements in the purpose for which man exists: —

1. The capacities belonging to the animal nature of man as a living being.
2. To his humanity as a living and at the same time rational being.
3. To his personality as a rational and at the same time responsible being [capable of imputation].

1. The capacities belonging to the Animal Nature of man may be brought under the general title of physical and merely mechanical self-love, that is, such as does not require reason. It is threefold: — first, for the maintenance of himself; secondly, for the propagation of his kind, and the maintenance of his offspring; thirdly, for communion with other men, that is, the impulse to society. All sorts of vices may be grafted on it, but they do not proceed from that capacity itself as a root. They may be called vices of coarseness of nature, and in their extreme deviation from the end of nature become brutal vices: intemperance, sensuality, and wild lawlessness (in relation to other men).

2. The capacities belonging to his Humanity may be brought under the general title of comparative, though physical, self-love (which requires reason), namely, estimating one's self as happy or unhappy only in comparison with others. From this is derived the inclination to obtain a worth in the opinion of others, and primarily only that of equality: to allow no one a superiority over one's self, joined with a constant apprehension that others might strive to attain it, and from this there ultimately arises an unjust desire to gain superiority for ourselves over others. On this, namely, jealousy and rivalry, the greatest vices may be grafted, secret and open hostilities against all whom we look upon as not belonging to us. These, however, do not properly spring of themselves from nature as their root, but apprehending that others endeavour to gain a hated superiority over us, these are inclinations to secure this superiority for ourselves as a defensive measure, whereas Nature would use the idea of such competition (which in itself does not exclude mutual love) only as a motive to culture. The vices that are grafted on this inclination may therefore be called vices of culture, and in their highest degree of malignancy (in which they are merely the idea of a maximum of badness surpassing humanity), ex. gr. in envy, in ingratitude, malice, &c., are called devilish vices.

3. The capacity belonging to Personality is the capability of respect for the moral law as a spring of the elective will adequate in itself. The capability of mere respect for the moral law in us would be moral feeling, which does not of itself constitute an end of the natural capacity, but only so far as it is a spring of the elective will. Now as this is only possible by free will adopting it into its maxim, hence the character of such an elective will is the good character, which, like every character of free elective will, is something that can only be acquired, the possibility of which, however, requires the presence of a capacity in our nature on which absolutely nothing bad can be grafted. The idea of the moral law alone, with the respect inseparable from it, cannot properly be called a capacity belonging to personality; it is personality itself (the idea of humanity considered altogether intellectually). But that we adopt this respect into our maxims as a spring, this seems to have a subjective ground additional to personality, and so this ground seems therefore to deserve the name of a capacity belonging to personality.

If we consider these three capacities according to the conditions of their possibility, we find that the first requires no reason; the second is based on reason which, though practical, is at the service of other motives; the third has as its root reason, which is practical of itself, that is, unconditionally legislative: all these capacities in man are not only (negatively) good (not resisting the moral law), but are also

capacities for good (promoting obedience to it). They are original, for they appertain to the possibility of human nature. Man can use the two former contrary to their end, but cannot destory them. By the capacities of a being, we understand both its constituent elements and also the forms of their combination which make it such and such a being. They are original if they are essentially necessary to the possibility of such a being; contingent if the being would be in itself possible without them. It is further to be observed that we are speaking here only of those capacities which have immediate reference to the faculty of desire and to the use of the elective will.

II.: OF THE PROPENSITY TO EVIL IN HUMAN NATURE.

By propensity (propensio) I understand the subjective source of possibility of an inclination (habitual desire, concupiscentia) so far as this latter is, as regards man generally, contingent. It is distinguished from a capacity by this, that although it may be innate, it need not be conceived as such, but may be regarded as acquired (when it is good), or (when it is bad) as drawn by the person on himself. Here, however, we are speaking only of the propensity to what is properly, i.e. morally bad, which, as it is possible only as a determination of free elective will, and this can be adjudged to be good or bad only by its maxims, must consist in the subjective ground of the possibility of a deviation of the maxims from the moral law, and if this propensity may be assumed as belonging to man universally (and therefore to the characteristics of his race) will be called a natural propensity of man to evil. We may add further that the capability or incapability of the elective will to adopt the moral law into its maxims or not, arising from natural propensity, is called a good or bad heart.

We may conceive three distinct degrees of this: — first, it is the weakness of the human heart in following adopted maxims generally, or the frailty of human nature; secondly, the propensity to mingle non-moral motives with the moral (even when it is done with a good purpose and under maxims of good), that is impurity; thirdly, the propensity to adopt bad maxims, that is the depravity of human nature or of the human heart.

First, the frailty (fragilitas) of human nature is expressed even in the complaint of an apostle: “To will is present with me, but how to perform I find not;” that is, I adopt the good (the law) into the maxim of my elective will; but this, which, objectively in its ideal conception (in thesi) is an irresistible spring, is subjectively (in hypothesi), when the maxim is to be carried out, weaker than inclination.

Secondly, the impurity (impuritas, improbitas) of the human heart consists in this, that although the maxim is good in its object (the intended obedience to the law), and perhaps also powerful enough for practice, yet it is not purely moral, that is, does not, as ought to be the case, involve the law alone as its sufficient spring, but frequently (perhaps always) has need of other springs beside it, to determine the elective will to what duty demands. In other words, that dutiful actions are not done purely from duty.

Thirdly, the depravity (vitiositas, pravitas), or if it is preferred, the corruption (corruptio), of the human heart, is the propensity of the elective will to maxims which prefer other (not moral) springs to that which arises from the moral law. It may also be called the perversity (perversitas) of the human heart, because it reverses the moral order in respect of the springs of a free elective will; and although legally good actions may be consistent with this, the moral disposition is thereby corrupted in its root, and the man is therefore designated bad.

It will be remarked that the propensity to evil in man is here ascribed even to the best (best in action), which must be the case if it is to be proved that the propensity to evil amongst men is universal, or what here signifies the same thing, that it is interwoven with human nature.

However, a man of good morals (bene moratus) and a morally good man (moraliter bonus) do not differ (or at least ought not to differ) as regards the agreement of their actions with the law; only that in the one these actions have not always the law for their sole and supreme spring; in the other it is invariably so. We may say of the former that he obeys the law in the letter (that is, as far as the act is concerned which the law commands), but of the latter, that he observes it in the spirit (the spirit of the moral law consists in this, that it is alone an adequate spring). Whatever is not done from this faith is sin (in the disposition of mind). For if other springs beside the law itself are necessary to determine the elective will to actions conforming to the law (ex. gr. desire of esteem, self-love in general, or even good-natured instinct, such as compassion), then it is a mere accident that they agree with the law, for they might just as well urge to

its transgression. The maxim, then, the goodness of which is the measure of all moral worth in the person, is in this case opposed to the law, and while the man's acts are all good, he is nevertheless bad.

The following explanation is necessary in order to define the conception of this propensity. Every propensity is either physical, that is, it appertains to man's will as a physical being; or it is moral, that is, appertaining to his elective will as a moral being. In the first sense, there is no propensity to moral evil, for this must spring from freedom; and a physical propensity (founded on sensible impulses) to any particular use of freedom, whether for good or evil, is a contradiction. A propensity to evil, then, can only attach to the elective will as a moral faculty. Now, nothing is morally bad (that is, capable of being imputed) but what is our own act. On the other hand, by the notion of a propensity we understand a subjective ground of determination of the elective will antecedent to any act, and which is consequently not itself an act. Hence there would be a contradiction in the notion of a mere propensity to evil, unless indeed this word "act" could be taken in two distinct senses, both reconcilable with the notion of freedom. Now the term "act" in general applies to that use of freedom by which the supreme maxim is adopted into one's elective will (conformably or contrary to the law), as well as to that in which actions themselves (as to their matter, that is, the objects of the elective will) are performed in accordance with that maxim. The propensity to evil is an act in the former sense (peccatum originarium), and is at the same time the formal source of every act in the second sense, which in its matter violates the law and is called vice (peccatum derivativum); and the first fault remains, even though the second may be often avoided (from motives other than the law itself). The former is an intelligible act only cognizable by reason, apart from any condition of time; the latter sensible, empirical, given in time (factum phœnomenon). The former is especially called, in comparison with the second, a mere propensity; and innate, because it cannot be extirpated (since this would require that the supreme maxim should be good, whereas by virtue of that propensity itself it is supposed to be bad); and especially because, although the corruption of our supreme maxim is our own act, we cannot assign any further cause for it, any more than for any fundamental attribute of our nature. What has just been said will show the reason why we have, at the beginning of this section, sought the three sources of moral evil simply in that which by laws of freedom affects the ultimate ground of our adopting or obeying this or that maxim, not in what affects the sensibility (as receptivity).

III.: MAN IS BY NATURE BAD.

“Vitiis nemo sine nascitur.”
— Horat.

According to what has been said above, the proposition: Man is bad can only mean: He is conscious of the moral law, and yet has adopted into his maxim (occasional) deviation therefrom. He is by nature bad is equivalent to saying: This holds of him considered as a species; not as if such a quality could be inferred from the specific conception of man (that of man in general) (for then it would be necessary); but by what is known of him through experience he cannot be otherwise judged, or it may be presupposed as subjectively necessary in every man, even the best.

Now this propensity itself must be considered as morally bad, and consequently not as a natural property, but as something that can be imputed to the man, and consequently must consist in maxims of the elective will which are opposed to the law; but on account of freedom these must be looked upon as in themselves contingent, which is inconsistent with the universality of this badness, unless the ultimate subjective ground of all maxims is, by whatever means, interwoven with humanity, and, as it were, rooted in it; hence we call this a natural propensity to evil; and as the man must, nevertheless, always incur the blame of it, it may be called even a radical badness in human nature, innate (but not the less drawn upon us by ourselves).

Now that there must be such a corrupt propensity rooted in men need not be formally proved in the face of the multitude of crying examples which experience sets before one’s eyes in the acts of man. If examples are desired from that state in which many philosophers hoped to find pre-eminently the natural goodness of human nature, namely, the so-called state of nature, we need only look at the instances of unprovoked cruelty in the scenes of murder in Tofoa, New Zealand, the Navigator Islands, and the never-ceasing instances in the wide wastes of North-West America (mentioned by Captain Hearne), where no one has even the least advantage from it; and comparing these with that hypothesis, we have vices of savage life more than enough to make us abandon that opinion. On the other hand, if one is disposed to think that human nature can be better known in a civilized condition (in which its characteristic properties can be more perfectly developed), then one must listen to a long melancholy litany of complaints of humanity; of secret falsehood, even in the most intimate friendship, so that it is reckoned a general maxim of prudence that even the best friends should restrain their confidence in their mutual intercourse; of a propensity to hate the man to whom one is under an obligation, for which a benefactor must always be prepared; of a hearty good-will, which nevertheless admits the remark that “in the misfortunes of our best friends there is something which is not altogether displeasing to us”; and of many other vices concealed under the appearance of virtue, not to mention the vices of those who do not conceal them, because we are satisfied to call a man good who is a bad man of the average class. This will give one enough of the vices of culture and civilization (the most mortifying of all) to make him turn away his eye from the conduct of men, lest he should fall into another vice, namely, misanthropy. If he is not yet satisfied, however, he need only take into consideration a condition strangely compounded of both, namely, the external condition of nations — for the relation of civilized nations to one another is that of a rude state of nature (a state of perpetual preparation for war), and they are also firmly resolved never to abandon it — and he will become aware of principles adopted by the great societies called States, which directly contradict the public profession, and yet are never to be laid aside, principles which no philsopher has yet been able to bring into agreement with morals, nor (sad to say) can they propose any better which would be reconcilable with human nature; so that the philosophical millennium, which hopes for a state of perpetual peace founded on a union of nations as a republic of the world, is generally ridiculed as visionary, just as

much as the theological, which looks for the complete moral improvement of the whole human race.

Now the source of this badness (1) cannot, as is usually done, be placed in the sensibility of man and the natural inclinations springing therefrom. For not only have these no direct reference to badness (on the contrary, they afford the occasion for the moral character to show its power, occasion for virtue), but further we are not responsible for their existence (we cannot be, for being implanted in us they have not us for their authors), whereas we are accountable for the propensity to evil; for as this concerns the morality of the subject, and is consequently found in him as a freely acting being, it must be imputed to him as his own fault, notwithstanding its being so deeply rooted in the elective will that it must be said to be found in man by nature. The source of this evil (2) cannot be placed in a corruption of Reason which gives the moral law , as if Reason could abolish the authority of the law in itself and disown its obligation; for this is absolutely impossible. To conceive one's self as a freely acting being, and yet released from the law which is appropriate to such a being (the moral law), would be the same as to conceive a cause operating without any law (for determination by natural laws is excluded by freedom), and this would be a contradiction. For the purpose then of assigning a source of the moral evil in man, sensibility contains too little, for in taking away the motives which arise from freedom it makes him a mere animal being; on the other hand, a Reason releasing from the moral law, a malignant reason, as it were (a simply bad Rational Will, ["Wille"] involves too much, for by this antagonism to the law would itself be made a spring of action (for the elective will cannot be determined without some spring), so that the subject would be made a devilish being. Neither of these views, however, is applicable to man.

Now although the existence of this propensity to evil in human nature can be shown by experience, from the actual antagonism in time between human will and the law, yet this proof does not teach us its proper nature and the source of this antagonism. This propensity concerns a relation of the free elective will (an elective will, therefore, the conception of which is not empirical) to the moral law as a spring (the conception of which is likewise purely intellectual); its nature then must be cognized à priori from the concept of the Bad, so far as the laws of freedom (obligation and accountability) bear upon it. The following is the development of the concept: —

Man (even the worst) does not in any maxim, as it were, rebelliously abandon the moral law (and renounce obedience to it). On the contrary, this forces itself upon him irresistibly by virtue of his moral nature, and if no other spring opposed it he would also adopt it into his ultimate maxim as the adequate determining principle of his elective will, that is, he would be morally good. But by reason of his physical nature, which is likewise blameless, he also depends on sensible springs of action, and adopts them also into his maxim (by the subjective principle of self-love). If, however, he adopted them into his maxim as adequate of themselves alone to determine his will without regarding the moral law (which he has within), then he would be morally bad. Now as he naturally adopts both into his maxim, and as he would find each, if it were alone, sufficient to determine his will, it follows that if the distinction of the maxims depended merely on the distinction of the springs (the matter of the maxims), namely, according as they were furnished by the law or by an impulse of sense, he would be morally good and bad at once, which (as we saw in the Introduction) is a contradiction. Hence the distinction whether the man is good or bad must lie, not in the distinction of the springs that he adopts into his maxim, but in the subordination, i. e. which of the two he makes the condition of the other (that is, not in the matter of the maxim but in its form). Consequently a man (even the best) is bad only by this, that he reverses the moral order of the springs in adopting them into his maxims; he adopts, indeed, the moral law along with that of self-love; but perceiving that they cannot subsist together on equal terms, but that one must be subordinate to the other as its supreme condition, he makes the spring of self-love and its inclinations the condition of obedience to the moral law; whereas, on the contrary, the latter ought to be adopted into the general maxims of the elective will as the sole spring, being the supreme condition of the satisfaction of the former.

The springs being thus reversed by his maxim, contrary to the moral order, his actions may, nevertheless, conform to the law just as though they had sprung from genuine principles: provided reason employs the unity of maxims in general, which is proper to the moral law, merely for the purpose of introducing into the springs of inclination a unity that does not belong to them, under the name of happiness (ex. gr. that truthfulness, if adopted as a principle, relieves us of the anxiety to maintain consistency in our lies and to escape being entangled in their serpent coils). In which case the empirical character is good, but the intelligible character bad.

Now if there is in human nature a propensity to this, then there is in man a natural propensity to evil; and since this propensity itself must ultimately be sought in a free elective will, and therefore can be imputed, it is morally bad. This badness is radical, because it corrupts the source of all maxims; and at the same time being a natural propensity, it cannot be destroyed by human powers, since this could only be done by good maxims; and when by hypothesis the ultimate subjective source of all maxims is corrupt, these cannot exist; nevertheless, it must be possible to overcome it, since it is found in man as a freely acting being.

The depravity of human nature, then, is not so much to be called badness, if this word is taken in its strict sense, namely, as a disposition (subjective principle of maxims) to adopt the bad, as bad, into one's maxims as a spring (for that is devilish); but rather perversity of heart, which, on account of the result, is also called a bad heart. This may co-exist with a Will ["Wille"] good in general, and arises from the frailty of human nature, which is not strong enough to follow its adopted principles, combined with its impurity in not distinguishing the springs (even of well-intentioned actions) from one another by moral rule. So that ultimately it looks at best only to the conformity of its actions with the law, not to their derivation from it, that is, to the law itself as the only spring. Now although this does not always give rise to wrong actions and a propensity thereto, that is, to vice, yet the habit of regarding the absence of vice as a conformity of the mind to the law of duty (as virtue) must itself be designated a radical perversity of the human heart (since in this case the spring in the maxims is not regarded at all, but only the obedience to the letter of the law).

This is called innate guilt (reatus), because it can be perceived as soon as ever the use of freedom manifests itself in man, and nevertheless must have arisen from freedom, and therefore may be imputed. It may in its two first degrees (of frailty and impurity) be viewed as unintentional guilt (culpa), but in the third as intentional (dolus), and it is characterized by a certain malignancy of the human heart (dolus malus), deceiving itself as to its own good or bad dispositions, and provided only its actions have not the bad result which by their maxims they might well have, then not disquieting itself about its dispositions, but, on the contrary, holding itself to be justified before the law. Hence comes the peace of conscience of so many (in their own opinion conscientious) men, when amidst actions in which the law was not taken into counsel, or at least was not the most important consideration, they have merely had the good fortune to escape bad consequences. Perhaps they even imagine they have merit, not feeling themselves guilty of any of the transgressions in which they see others involved; without inquiring whether fortune is not to be thanked for this, and whether the disposition which, if they would, they could discover within, would not have led them to the practice of the like vices, had they not been kept away from them by want of power, by temperament, education, circumstances of time and place which lead into temptation (all things that cannot be imputed to us). This dishonesty in imposing on ourselves, which hinders the establishment of genuine moral principle in us, extends itself then outwardly also to falsehood and deception of others which, if it is not to be called badness, at least deserves to be called worthlessness, and has its root in the radical badness of human nature, which (inasmuch as it perverts the moral judgment in respect of the estimation to be formed of a man, and renders imputation quite uncertain both internally and externally) constitutes the corrupt spot in our nature, which, as long as we do not extirpate it, hinders the source of

good from developing itself as it otherwise would.

A member of the English Parliament uttered in the heat of debate the declaration, “Every man has his price.” If this is true (which every one may decide for himself) — if there is no virtue for which a degree of temptation cannot be found which is capable of overthrowing it — if the question whether the good or the bad spirit shall gain us to its side only depends on which bids highest and offers most prompt payment — then what the Apostle says might well be true of men universally: “There is no difference, they are altogether sinners; there is none that doeth good (according to the spirit of the law), no not one.”

IV.: ON THE ORIGIN OF THE EVIL IN HUMAN NATURE.

Origin (primary) is the derivation of an effect from its primary cause, that is, one which is not in its turn an effect of another cause of the same kind. It may be considered either as a rational or a temporal origin. In the former signification, it is only the existence of the effect that is considered; in the latter, its occurrence, so that it is referred as an event to its cause in time. When the effect is referred to a cause which is connected with it by laws of freedom, as is the case with moral evil, then the determination of the elective will to the production of it is not regarded as connected with its determining principle in time, but merely in the conception of the reason, and cannot be deduced as from any antecedent state, which on the other hand must be done when the bad action, considered as an event in the world, is referred to its physical cause. It is a contradiction then to seek for the time-origin of free actions as such (as we do with physical effects); or of the moral character of man, so far as it is regarded as contingent, because this is the principle of the use of freedom, and this (as well as the determining principle of free will generally) must be sought for simply in conceptions of reason.

But whatever may be the origin of the moral evil in man, the most unsuitable of all views that can be taken of its spread and continuance through all the members of our race and in all generations is, to represent it as coming to us by inheritance from our first parents; for we can say of moral evil what the poet says of good:

. . . Genus et proavos, et quæ non fecimus ipsi, Vix ea nostro puto. . . .

It is to be observed, further, that when we inquire into the origin of evil, we do not at first take into account the propensity to it (as peccatum in potentia), but only consider the actual evil of given actions, in its inner possibility, and in what must concur to determine the will to the doing of them.

Every bad action, when we inquire into its rational origin, must be viewed as if the man had fallen into it directly from the state of innocence. For whatever may have been his previous conduct, and of whatever kind the natural causes influencing him may be, whether moreover they are internal or external, his action is still free, and not determined by any causes, and therefore it both can and must be always judged as an original exercise of his elective will. He ought to have left it undone, in whatever circumstances he may have been; for by no cause in the world can he cease to be a freely acting being. It is said indeed, and justly, that the man is accountable for the consequences, of his previous free but wrong actions; but by this is only meant, that one need not have recourse to the subterfuge of deciding whether the later actions are free or not, because there is sufficient ground for the accountability in the admittedly free action which was their cause. But if a man had been never so bad up to the very moment of an impending free action (even so that custom had become second nature), yet not only has it been his duty to be better, but it is now still his duty to improve himself; he must then be also able to do so, and if he does not, he is just as accountable at the moment of acting as if, endowed with the natural capacity for good (which is inseparable from freedom), he had stepped into evil from the state of innocence. We must not inquire then what is the origin in time of this act, but what is its origin in reason, in order to define thereby the propensity, that is to say, the general subjective principle by which a transgression is adopted into our maxim, if there is such a propensity, and if possible to explain it.

With this agrees very well the mode of representation which the Scriptures employ in depicting the origin of evil as a beginning of it in the human race, inasmuch as they exhibit it in a history in which that which must be conceived as first in the nature of the thing (without regard to the condition of time) appears as first in time. According to the Scriptures, evil does not begin from a fundamental propensity to it — otherwise its beginning would not spring from freedom — but from sin (by which is understood the

transgression of the moral law as a divine command); while the state of man before all propensity to evil is called the state of innocence. The moral law preceded as a prohibition, as must be the case with man as a being not pure, but tempted by inclinations (Gen. ii. 16, 17). Instead now of following this law directly as an adequate spring (one which alone is unconditionally good, and in respect of which no scruple can occur), the man looked about for other springs (iii. 6), which could only be conditionally good (namely, so far as the law is not prejudiced thereby), and made it his maxim — if we conceive the action as consciously arising from freedom — to obey the law of duty not from duty, but from regard to other considerations. Hence he began with questioning the strictness of the law, which excludes the influence of every other spring; then he reasoned down obedience to it to the mere conditional conformity to means (subject to the principle of self-love), whence, finally, the predominance of sensible motives above the spring of the law was adopted into the maxim of action, and so sin was committed (iii. 6). Mutato nomine, de te fabula narratur. That we all do just the same, consequently "have all sinned in Adam, " and still sin, is clear from what has preceded; only that in us an innate propensity to sin is presupposed in time, but in the first man, on the contrary, innocence, so that in him the transgression is called a fall; whereas in us it is conceived as following from the innate depravity of our nature. What is meant, however, by this propensity is no more than this, that if we wish to apply ourselves to the explanation of evil as to its beginning in time, we must in the case of every intentional transgression pursue its causes in a previous period of our life, going backwards till we reach a time when the use of reason was not yet developed: in other words, we must trace the source of evil to a propensity towards it (as a foundation in nature) which, on this account, is called innate. In the case of the first man, who is represented as already possessing the full power of using his reason, this is not necessary, nor indeed possible; since otherwise that natural foundation (the evil propensity) must have been created in him; therefore his sin is represented as produced directly from a state of innocence. But we must not seek for an origin in time of a moral character for which we are to be accountable, however inevitable this is when we try to explain its contingent existence (hence Scripture may have so represented it to us in accommodation to this our weakness).

The rational origin, however, of this perversion of our elective will in respect of the way in which it adopts subordinate springs into its maxims as supreme, i. e. the origin of this propensity to evil, remains inscrutable to us; for it must itself be imputed to us, and consequently that ultimate ground of all maxims would again require the assumption of a bad maxim. What is bad could only have sprung from what is morally bad (not the mere limits of our nature); and yet the original constitution is adapted to good (nor could it be corrupted by any other than man himself, if he is to be accountable for this corruption); there is not then any source conceivable to us from which moral evil could have first come into us. Scripture, in its historical narrative, expresses this inconceivability, at the same time that it defines the depravity of our race more precisely by representing evil as pre-existing at the beginning of the world, not however in man, but in a spirit originally destined for a lofty condition. The first beginning of all evil in general is thus represented as inconceivable to us (for whence came the evil in that spirit?), and man as having fallen into evil only by seduction, and therefore as not fundamentally corrupt (i. e. even in his primary capacity for good), but as still capable of an improvement; in contrast to a seducing spirit, that is, a being in whom the temptation of the flesh cannot be reckoned as alleviating his guilt; so that the former, who, notwithstanding his corrupt heart, continues to have a good Rational Will ["Wille"], has still left the hope of a return to the good from which he has gone astray,

GENERAL REMARK. ON THE RESTORATION OF THE ORIGINAL CAPACITY FOR GOOD TO ITS FULL POWER.

What man is or ought to be in a moral sense he must make or must have made himself. Both must be the effect of his free elective will, otherwise it could not be imputed to him, and, consequently, he would be morally neither good nor bad. When it is said he is created good, that can only mean that he is created for good, and the original constitution in man is good; but this does not yet make the man himself good, but according as he does or does not adopt into his maxim the springs which this constitution contains (which must be left altogether to his own free choice), he makes himself become good or bad. Supposing that a supernatural co-operation is also necessary to make a man good or better, whether this consists only in the diminution of the obstacles or in a positive assistance, the man must previously make himself worthy to receive it and to accept this aid (which is no small thing), that is, to adopt into his maxim the positive increase of power, in which way alone it is possible that the good should be imputed to him, and that he should be recognised as a good man.

Now how it is possible that a man naturally bad should make himself a good man transcends all our conceptions; for how can a bad tree bring forth good fruit? But since it is already admitted that a tree originally good (as to its capacities) has brought forth bad fruit, and the fall from good to bad (when it is considered that it arises from freedom) is not more conceivable than a rising again from bad to good, the possibility of the latter cannot be disputed. For notwithstanding that fall, the command "we ought to become better men," resounds with undiminished force in our soul; consequently, we must be able to do so, even though what we ourselves can do should be insufficient of itself, and though we should thereby only make ourselves susceptible of an inscrutable higher assistance. It must, however, be presupposed that a germ of good has remained in its complete purity, which could not be destroyed or corrupted — a germ that certainly cannot be self-love, which, when taken as the principle of all our maxims, is in fact the source of all evil.

The restoration of the original capacity for good in us is then not the acquisition of a lost spring towards good; for this, which consists in respect for the moral law, we could never lose, and, were it possible to do so, we could never recover it. It is then only the restoration of its purity, as the supreme principle of all our maxims, by which it is adopted into these not merely in combination with other springs or as subordinate to these (the inclinations) as conditions, but in its entire purity as a spring sufficient of itself to determine the elective will. The original good is holiness of maxims in following one's duty, by which the man who adopts this purity into his maxims, although he is not himself as yet on that account holy (for there is still a long interval between maxim and act), nevertheless is on the way to approximate to holiness by an endless progress. Firmness of purpose in following duty, when it has become a habit, is called also virtue, as far as legality is concerned, which is its empirical character (virtus phenomenon). It has then the steady maxim of conformity of actions to the law, whatever may be the source of the spring required for this. Hence virtue in this sense is gradually acquired, and is described by some as a long practice (in observing the law) by which a man has passed from the propensity to vice, by gradual reform of his conduct and strengthening of his maxims, into an opposite propensity. This does not require any change of heart, but only a change of morals. A man regards himself as virtuous when he feels himself confirmed in the maxims of observance of duty, although this be not from the supreme principle of all maxims; but the intemperate man, for instance, returns to temperance for the sake of health; the liar to truth for the sake of reputation; the unjust man to common fairness for the sake of peace or of gain, &c., all on the much-lauded principle of happiness. But that a man should become not merely a legally but a morally good (Godpleasing) man, that is, virtuous in his intelligible

character (virtus noumenon), a man who, when he recognises a thing as his duty, needs no other spring than this conception of duty itself; this is not to be effected by gradual reform, as long as the principle of his maxims remains impure, but requires a revolution in the mind (a transition to the maxim of holiness of mind), and he can only become a new man by a kind of new birth, as it were by a new creation (Gospel of John, iii. 5, compared with Gen. i. 2) and a change of heart.

But if a man is corrupt in the very foundation of his maxims, how is it possible that he should effect this revolution by his own power and become a good man of himself? And yet duty commands it, and duty commands nothing that is not practicable for us. The only way this difficulty can be got over is, that a revolution is necessary for the mental disposition, but a gradual reform for the sensible temperament, which opposes obstacles to the former; and being necessary, must therefore be possible; that is, when a man reverses the ultimate principle of his maxims by which he is a bad man by a single immutable resolution (and in so doing puts on a new man); then so far he is in principle and disposition a subject susceptible of good; but it is only in continued effort and growth that he is a good man, that is, he may hope with such purity of the principle that he has taken as the supreme maxim of his elective will, and by its stability, that he is on the good (though narrow) road of a constant progress from bad to better. In the eyes of one who penetrates the intelligible principle of the heart (of all maxims of elective will), and to whom therefore this endless progress is a unity, that is, in the eyes of God, this comes to the same as being actually a good man (pleasing to Him), and in so far this change may be considered as a revolution; but in the judgment of men, who can estimate themselves and the strength of their maxims only by the superiority which they gain over sensibility in time, it is only to be viewed as an ever continuing struggle for improvement; in other words, as a gradual reform of the perverse disposition, the propensity to evil.

Hence it follows that the moral culture of man must begin, not with improvement in morals, but with a transformation of the mind and the foundation of a character, although men usually proceed otherwise, and contend against vices singly, leaving the general root of them untouched. Now even a man of the most limited intellect is capable of the impression of an increased respect for an action conformable to duty, in proportion as he withdraws from it in thought all other springs which could have influenced the maxim of the action by means of self-love; and even children are capable of finding out even the least trace of a mixture of spurious springs of action, in which case the action instantly loses all moral worth in their eyes. This capacity for good is admirably cultivated by adducing the example of even good men (good as regards their conformity to law), and allowing one's moral pupils to estimate the impurity of many maxims from the actual springs of their actions; and it gradually passes over into the character, so that duty simply of itself commences to acquire considerable weight in their hearts. But to teach them to admire virtuous actions, however great the sacrifice they may cost, is not the right way to maintain the feeling of the pupil for moral good. For however virtuous anyone may be, all the good he can ever do is only duty; and to do his duty is no more than to do what is in the common moral order, and therefore does not deserve to be admired. On the contrary, this admiration is a lowering of our feeling for duty, as if obedience to it were something extraordinary and meritorious.

There is, however, one thing in our soul which, when we take a right view of it, we cannot cease to regard with the highest astonishment, and in regard to which admiration is right or even elevating, and that is the original moral capacity in us generally. What is that in us (we may ask ourselves) by which we, who are constantly dependent on nature by so many wants, are yet raised so far above it in the idea of an original capacity (in us) that we regard them all as nothing, and ourselves as unworthy of existence, if we were to indulge in their satisfaction in opposition to a law which our reason authoritatively prescribes; although it is this enjoyment alone that can make life desirable, while reason neither promises anything nor threatens. The importance of this question must be deeply felt by every man of the most ordinary ability, who has been previously instructed as to the holiness that lies in the idea of duty, but who has not yet ascended to the investigation of the notion of freedom, which first arises from this law; and even the

incomprehensibility of this capacity, a capacity which proclaims a Divine origin, must rouse his spirit to enthusiasm, and strengthen it for any sacrifices which respect for this duty may impose on him. The frequent excitement of this feeling of the sublimity of a man's moral constitution is especially to be recommended as a means of awaking moral sentiments, since it operates in direct opposition to the innate propensity to pervert the springs in the maxims of our elective will, and tends to make unconditional respect for the law the ultimate condition of the admission of all maxims, and so restores the original moral subordination of the springs of action, and the capacity for good in the human heart in its primitive purity.

But is not this restoration by one's own strength directly opposed to the thesis of the innate corruption of man for everything good? Undoubtedly, as far as conceivability is concerned, that is to say, our discernment of its possibility, just as with everything which has to be regarded as an event in time (change), and as such necessarily determined by laws of nature, whilst its opposite must yet be regarded as possible by freedom in accordance with moral laws; but it is not opposed to the possibility of this restoration itself. For if the moral law commands that we shall now be better men, it follows inevitably that we also can be better. The thesis of innate evil has no application in dogmatic morality; for its precepts contain the very same duties, and continue in the same force, whether there is in us an innate propensity to transgression or not. In the culture of morality this thesis has more significance, but still it means no more than this, that in the moral cultivation of the moral capacity for good created in us, we cannot begin from a natural state of innocence, but must start from the supposition of a depravity of the elective will in assuming maxims that are contrary to the original moral capacity, and, since the propensity thereto is ineradicable, with an unceasing effort against it. Now, as this only leads to a progress in infinitum from bad to better, it follows that the transformation of the disposition of a bad into that of a good man is to be placed in the change of the supreme inner principle of all his maxims, in accordance with the moral law, provided that this new principle (the new heart) be itself immutable. A man cannot, however, naturally attain the conviction [that it is immutable], either by immediate consciousness, or by the proof derived from the course of life he has hitherto pursued, for the bottom of his heart (the subjective first principle of his maxims) is inscrutable to himself; but unto the path that leads to it, and which is pointed out to him by a fundamentally improved disposition, he must be able to hope to arrive by his own efforts, since he ought to become a good man and can only be esteemed morally good by virtue of that which can be imputed to him as done by himself.

Now reason, which is naturally disinclined to moral effort, opposes to this expectation of self-improvement all sorts of corrupt ideas of religion, under the pretext of natural impotence (among which is to be reckoned, attributing to God Himself the adoption of the principle of happiness as the supreme condition of His commands). Now we may divide all religions into two classes — favour-seeking religion (mere worship), and moral religion, that is, the religion of a good life. By the former a man either flatters himself that God can make him eternally happy (by remission of his demerits), without his having any need to become a better man, or if this does not seem possible to him, that God can make him a better man, without his having to do anything in the matter himself except to ask for it; which, as before an all-seeing being asking is no more than wishing, would in fact be doing nothing; for if the mere wish were sufficient, every man would be good. But in the moral religion (and amongst all the public religions that have ever existed the Christian alone is moral) it is a fundamental principle that everyone must do as much as lies in his power to become a better man, and that it is only when he has not buried his innate talent (Luke xix. 12-16), when he has used the original capacity for good so as to become a better man, that he can hope that what is not in his power will be supplied by a higher co-operation. But it is not absolutely necessary that man should know in what this co-operation consists; perhaps it is even inevitable that if the way in which it happens had been revealed at a certain time, different men at another time should form different conceptions of it, and that with all honesty. But then the principle holds good:

“it is not essential, and therefore not necessary for everyone to know what God does or has done for his salvation,” but it is essential to know what he himself has to do in order to be worthy of this assistance.

APPENDIX.

I.: — ON A SUPPOSED RIGHT TO TELL LIES FROM BENEVOLENT MOTIVES.

In the work called France, for the year 1797, Part VI. No. 1, on Political Reactions, by Benjamin Constant, the following passage occurs, : —

"The moral principle that it is one's duty to speak the truth, if it were taken singly and unconditionally, would make all society impossible. We have the proof of this in the very direct consequences which have been drawn from this principle by a German philosopher, who goes so far as to affirm that to tell a falsehood to a murderer who asked us whether our friend, of whom he was in pursuit, had not taken refuge in our house, would be a crime."

The French philosopher opposes this principle in the following manner, :— "It is a duty to tell the truth. The notion of duty is inseparable from the notion of right. A duty is what in one being corresponds to the right of another. Where there are no rights there are no duties. To tell the truth then is a duty, but only towards him who has a right to the truth. But no man has a right to a truth that injures others." The πρωˆτον ψενˆδος here lies in the statement that "To tell the truth is a duty, but only towards him who has a right to the truth."

It is to be remarked, first, that the expression "to have a right to the truth" is unmeaning. We should rather say, a man has a right to his own truthfulness (veracitas), that is, to subjective truth in his own person. For to have a right objectively to truth would mean that, as in meum and tuum generally, it depends on his will whether a given statement shall be true or false, which would produce a singular logic.

Now, the first question is whether a man — in cases where he cannot avoid answering Yes or No — has the right to be untruthful. The second question is whether, in order to prevent a misdeed that threatens him or some one else, he is not actually bound to be untruthful in a certain statement to which an unjust compulsion forces him.

Truth in utterances that cannot be avoided is the formal duty of a man to everyone, however great the disadvantage that may arise from it to him or any other; and although by making a false statement I do no wrong to him who unjustly compels me to speak, yet I do wrong to men in general in the most essential point of duty, so that it may be called a lie (though not in the jurist's sense), that is, so far as in me lies I cause that declarations in general find no credit, and hence that all rights founded on contract should lose their force; and this is a wrong which is done to mankind.

If, then, we define a lie merely as an intentionally false declaration towards another man, we need not add that it must injure another; as the jurists think proper to put in their definition (mendacium est falsiloquium in præjudicium alterius). For it always injures another; if not another individual, yet mankind generally, since it vitiates the source of justice. This benevolent lie may, however, by accident (casus) become punishable even by civil laws; and that which escapes liability to punishment only by accident may be condemned as a wrong even by external laws. For instance, if you have by a lie hindered a man who is even now planning a murder, you are legally responsible for all the consequences. But if you have strictly adhered to the truth, public justice can find no fault with you, be the unforeseen consequence what it may. It is possible that whilst you have honestly answered Yes to the murderer's question, whether his intended victim is in the house, the latter may have gone out unobserved, and so not have come in the way of the murderer, and the deed therefore have not been done; whereas, if you lied and said he was not in the house, and he had really gone out (though unknown to you) so that the murderer met him as he went, and executed his purpose on him, then you might with justice be accused as the cause of his death. For, if you had spoken the truth as well as you knew it, perhaps the murderer while seeking for his enemy in the

house might have been caught by neighbours coming up and the deed been prevented. Whoever then tells a lie, however good his intentions may be, must answer for the consequences of it, even before the civil tribunal, and must pay the penalty for them, however unforeseen they may have been; because truthfulness is a duty that must be regarded as the basis of all duties founded on contract, the laws of which would be rendered uncertain and useless if even the least exception to them were admitted.

To be truthful (honest) in all declarations is therefore a sacred unconditional command of reason, and not to be limited by any expediency.

M. Constant makes a thoughtful and sound remark on the decrying of such strict principles, which it is alleged lose themselves in impracticable ideas, and are therefore to be rejected ():— "In every case in which a principle proved to be true seems to be inapplicable, it is because we do not know the middle principle which contains the medium of its application." He adduces () the doctrine of equality as the first link forming the social chain (); "namely, that no man can be bound by any laws except those to the formation of which he has contributed. In a very contracted society this principle may be directly applied and become the ordinary rule without requiring any middle principle. But in a very numerous society we must add a new principle to that which we here state. This middle principle is, that the individuals may contribute to the formation of the laws either in their own person or by representatives. Whoever would try to apply the first principle to a numerous society without taking in the middle principle would infallibly bring about its destruction. But this circumstance, which would only show the ignorance or incompetence of the lawgiver, would prove nothing against the principle itself." He concludes () thus: "A principle recognised as truth must, therefore, never be abandoned, however obviously danger may seem to be involved in it." (And yet the good man himself abandoned the unconditional principle of veracity on account of the danger to society, because he could not discover any middle principle would serve to prevent this danger; and, in fact, no such principle is to be interpolated here.)

Retaining the names of the persons as they have been here brought forward, "the French philosopher" confounds the action by which one does harm (nocet) to another by telling the truth, the admission of which he cannot avoid, with the action by which he does him wrong (lædit). It was merely an accident (casus) that the truth of the statement did harm to the inhabitant of the house; it was not a free deed (in the juridicial sense). For to admit his right to require another to tell a lie for his benefit would be to admit a claim opposed to all law. Every man has not only a right, but the strictest duty to truthfulness in statements which he cannot avoid, whether they do harm to himself or others. He himself, properly speaking, does not do harm to him who suffers thereby; but this harm is caused by accident. For the man is not free to choose, since (if he must speak at all) veracity is an unconditional duty. The "German philosopher" will therefore not adopt as his principle the proposition (): "It is a duty to speak the truth, but only to him who has a right to the truth," first on account of the obscurity of the expression, for truth is not a possession, the right to which can be granted to one, and refused to another; and next and chiefly, because the duty of veracity (of which alone we are speaking here) makes no distinction between persons towards whom we have this duty, and towards whom we may be free from it; but is an unconditional duty which holds in all circumstances.

Now, in order to proceed from a metaphysic of Right (which abstracts from all conditions of experience) to a principle of politics (which implies these notions to cases of experience), and by means of this to the solution of a problem of the latter in accordance with the general principle of right, the philosopher will enunciate: — 1. An Axiom, that is, an apodictically certain proposition, which follows directly from the definition of external right (harmony of the freedom of each with the freedom of all by a universal law). 2. A Postulate of external public law as the united will of all on the principle of equality, without which there could not exist the freedom of all. 3. A problem; how it is to be arranged that harmony may be maintained in a society, however large, on principles of freedom and equality (namely by means of a representative system); and this will then become a principle of the political system, the

establishment and arrangement of which will contain enactments which, drawn from practical knowledge of men, have in view only the mechanism of administration of justice, and how this is to be suitably carried out. Justice must never be accommodated to the political system, but always the political system to justice.

"A principle recognised as true (I add, recognised à priori, and therefore apodictic) must never be abandoned, however obviously danger may seem to be involved in it," says the author. Only here we must not understand the danger of doing harm (accidentally), but of doing wrong; and this would happen if the duty of veracity, which is quite unconditional, and constitutes the supreme condition of justice in utterances, were made conditional and subordinate to other considerations; and, although by a certain lie I in fact do no wrong to any person, yet I infringe the principle of justice in regard to all indispensably necessary statements generally (I do wrong formally, though not materially; and this is much worse than to commit an injustice to any individual, because such a deed does not presuppose any principle leading to it in the subject. The man who, when asked whether in the statement he is about to make he intends to speak truth or not, does not receive the question with indignation at the suspicion thus expressed towards him that he might be a liar, but who asks permission first to consider possible exceptions, is already a liar (in potentia), since he shows that he does not recognize veracity as a duty in itself, but reserves exceptions from a rule which in its nature does not admit of exceptions, since to do so would be self-contradictory.

All practical principles of justice must contain strict truths, and the principles here called middle principles can only contain the closer definition of their application to actual cases (according to the rules of politics), and never exceptions from them, since exceptions destroy the universality, an account of which alone they bear the name of principles.

II.: — ON THE SAYING “NECESSITY HAS NO LAW”.

There is no casus necessitatis except in the case where an unconditional duty conflicts with a duty which, though perhaps great, is yet conditional; e. g. if the question is about preserving the State from disaster by betraying a person who stands towards another in a relation such as, for example, that of father and son. To save the State from harm is an unconditional duty; to save an individual is only a conditional duty, namely, provided he has not been guilty of a crime against the State. The information given to the authorities may be given with the greatest reluctance, but it is given under pressure, namely, moral necessity. But if a shipwrecked man thrusts another from his plank in order to save his own life, and it is said that he had the right of necessity (i. e. physical necessity) to do so, this is wholly false. For to maintain my own life is only a conditional duty (viz. if it can be done without crime), but it is an unconditional duty not to take the life of another who does not injure me, nay, does not even bring me into peril of losing it. However, the teachers of general civil right proceed quite consistently in admitting this right of necessity. For the sovereign power could not connect any punishment with the prohibition; for this punishment would necessarily be death, but it would be an absurd law that would threaten death to a man if when in danger he did not voluntarily submit to death. — From “Das mag in der Theorie richtig seyn, u. s. w.” (Rosenkr., vii., .)

[The two cases here considered were probably suggested by Cicero, who quotes them from Hecato, a disciple of Panætius. — De Off. iii. 23.]

PERPETUAL PEACE

A PHILOSOPHICAL SKETCH

Translated by M. Campbell Smith

This 1795 essay provides a peace program to be implemented by governments. The “Preliminary Articles” describe the steps that should be taken immediately, or with all deliberate speed:

- “No secret treaty of peace shall be held valid in which there is tacitly reserved matter for a future war”
- “No independent states, large or small, shall come under the dominion of another state by inheritance, exchange, purchase, or donation”
- “Standing armies shall in time be totally abolished”
- “National debts shall not be contracted with a view to the external friction of states”
- “No state shall by force interfere with the constitution or government of another state”
- “No state shall, during war, permit such acts of hostility which would make mutual confidence in the subsequent peace impossible: such are the employment of assassins (percussores), poisoners (venefici), breach of capitulation, and incitement to treason (perduellio) in the opposing state”

Three Definitive Articles would provide not merely a cessation of hostilities, but a foundation on which to build a peace.

- “The civil constitution of all states to be republican”
- “The law of nations shall be founded on a federation of free states”
- “The law of world citizenship shall be limited to conditions of universal hospitality”

Kant claims that republics will be at peace not only with each other, but are more pacific than other forms of government in general. The general idea that popular and responsible governments would be more inclined to promote peace and commerce became one current in the stream of European thought and political practice. It was one element of the American policy of George Canning and the foreign policy of Lord Palmerston. It was also represented in the liberal internationalism of Woodrow Wilson, George Creel and H. G. Wells. Kant’s recommendations were clearly represented in the 1940’s in the United Nations.

CONTENTS

PREFACE
TRANSLATOR’S INTRODUCTION
FIRST SECTION
SECOND SECTION
FIRST SUPPLEMENT
SECOND SUPPLEMENT
APPENDIX I
APPENDIX II
FOOTNOTES

“For I dipt into the future, far as human eye could see,
Saw the Vision of the world, and all the wonder that would be;
Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight, dropping down with costly bales;
Heard the heavens fill with shouting, and there rain’d a ghastly dew
From the nations’ airy navies grappling in the central blue;
Far along the world-wide whisper of the south-wind rushing warm,
With the standards of the peoples plunging thro’ the thunder-storm;
Till the war-drum throbb’d no longer, and the battle-flags were furl’d
In the Parliament of man, the Federation of the world.
There the common sense of most shall hold a fretful realm in awe,
And the kindly earth shall slumber, lapt in universal law.”
Tennyson: *Locksley Hall*.

PREFACE

This translation of Kant's essay on *Perpetual Peace* was undertaken by Miss Mary Campbell Smith at the suggestion of the late Professor Ritchie of St. Andrews, who had promised to write for it a preface, indicating the value of Kant's work in relation to recent discussions regarding the possibility of "making wars to cease." In view of the general interest which these discussions have aroused and of the vague thinking and aspiration which have too often characterised them, it seemed to Professor Ritchie that a translation of this wise and sagacious essay would be both opportune and valuable.[1*] His untimely death has prevented the fulfilment of his promise, and I have been asked, in his stead, to introduce the translator's work.

This is, I think, the only complete translation into English of Kant's essay, including all the notes as well as the text, and the translator has added a full historical Introduction, along with numerous notes of her own, so as (in Professor Ritchie's words) "to meet the needs (1) of the student of Politicalp. vi Science who wishes to understand the relation of Kant's theories to those of Grotius, Hobbes, Locke, Rousseau etc., and (2) of the general reader who wishes to understand the significance of Kant's proposals in connection with the ideals of Peace Congresses, and with the development of International Law from the end of the Middle Ages to the Hague Conference."

Although it is more than 100 years since Kant's essay was written, its substantial value is practically unimpaired. Anyone who is acquainted with the general character of the mind of Kant will expect to find in him sound common-sense, clear recognition of the essential facts of the case and a remarkable power of analytically exhibiting the conditions on which the facts necessarily depend. These characteristics are manifest in the essay on *Perpetual Peace*. Kant is not pessimist enough to believe that a perpetual peace is an unrealisable dream or a consummation devoutly to be feared, nor is he optimist enough to fancy that it is an ideal which could easily be realised if men would but turn their hearts to one another. For Kant perpetual peace is an ideal, not merely as a speculative Utopian idea, with which in fancy we may play, but as a moral principle, which ought to be, and therefore can be, realised. Yet he makes it perfectly clear that we cannot hope to approach the realisationp. vii of it unless we honestly face political facts and get a firm grasp of the indispensable conditions of a lasting peace. To strive after the ideal in contempt or in ignorance of these conditions is a labour that must inevitably be either fruitless or destructive of its own ends. Thus Kant demonstrates the hopelessness of any attempt to secure perpetual peace between independent nations. Such nations may make treaties; but these are binding only for so long as it is not to the interest of either party to denounce them. To enforce them is impossible while the nations remain independent. "There is," as Professor Ritchie put it (*Studies in Political and Social Ethics*,), "only one way in which war between independent nations can be prevented; and that is by the nations ceasing to be independent." But this does not necessarily mean the establishment of a despotism, whether autocratic or democratic. On the other hand, Kant maintains that just as peace between individuals within a state can only be permanently secured by the institution of a "republican" (that is to say, a representative) government, so the only real guarantee of a permanent peace between nations is the establishment of a federation of free "republican" states. Such a federation he regards as practically possible. "For if Fortune ordains that a powerful and enlightened people should form a republicp. viii — which by its very nature is inclined to perpetual peace — this would serve as a centre of federal union for other states wishing to join, and thus secure conditions of freedom among the states in accordance with the idea of the law of nations. Gradually, through different unions of this kind, the federation would extend further and further."

Readers who are acquainted with the general philosophy of Kant will find many traces of its influence

in the essay on *Perpetual Peace*. Those who have no knowledge of his philosophy may find some of his forms of statement rather difficult to understand, and it may therefore not be out of place for me to indicate very briefly the meaning of some terms which he frequently uses, especially in the Supplements and Appendices. Thus at the beginning of the First Supplement, Kant draws a distinction between the mechanical and the teleological view of things, between "nature" and "Providence", which depends upon his main philosophical position. According to Kant, pure reason has two aspects, theoretical and practical. As concerning knowledge, strictly so called, the *a priori* principles of reason (*e.g.* substance and attribute, cause and effect etc.) are valid only within the realm of possible sense-experience. Such ideas, for instance, cannot be extended to God, since He is not a possible object of sense-experience. They are limitedp. ix to the world of phenomena. This world of phenomena ("nature" or the world of sense-experience) is a purely mechanical system. But in order to understand fully the phenomenal world, the pure theoretical reason must postulate certain ideas (the ideas of the soul, the world and God), the objects of which transcend sense-experience. These ideas are not theoretically valid, but their validity is practically established by the pure practical reason, which does not yield speculative truth, but prescribes its principles "dogmatically" in the form of imperatives to the will. The will is itself practical reason, and thus it imposes its imperatives upon itself. The fundamental imperative of the practical reason is stated by Kant in Appendix I. :— "Act so that thou canst will that thy maxim should be a universal law, be the end of thy action what it will." If the end of perpetual peace is a duty, it must be necessarily deduced from this general law. And Kant does regard it as a duty. "We must desire perpetual peace not only as a material good, but also as a state of things resulting from our recognition of the precepts of duty" (*loc. cit.*). This is further expressed in the maxim :— "Seek ye first the kingdom of pure practical reason and its righteousness, and the object of your endeavour, the blessing of perpetual peace, will be added unto you." The distinction between thep. x moral politician and the political moralist, which is developed in Appendix I., is an application of the general distinction between duty and expediency, which is a prominent feature of the Kantian ethics. Methods of expediency, omitting all reference to the pure practical reason, can only bring about re-arrangements of circumstances in the mechanical course of nature. They can never guarantee the attainment of their end: they can never make it more than a speculative ideal, which may or may not be practicable. But if the end can be shown to be a duty, we have, from Kant's point of view, the only reasonable ground for a conviction that it is realisable. We cannot, indeed, theoretically *know* that it is realisable. "Reason is not sufficiently enlightened to survey the series of predetermining causes which would make it possible for us to predict with certainty the good or bad results of human action, as they follow from the mechanical laws of nature; although we may hope that things will turn out as we should desire" . On the other hand, since the idea of perpetual peace is a moral ideal, an "idea of duty", we are entitled to believe that it is practicable. "Nature guarantees the coming of perpetual peace, through the natural course of human propensities; not indeed with sufficient certainty to enable us to prophesy the future of this ideal theoretically, but yet clearlyp. xi enough for practical purposes" . One might extend this discussion indefinitely; but what has been said may suffice for general guidance.

The "wise and sagacious" thought of Kant is not expressed in a simple style, and the translation has consequently been a very difficult piece of work. But the translator has shown great skill in manipulating the involutions, parentheses and prodigious sentences of the original. In this she has had the valuable help of Mr. David Morrison, M.A., who revised the whole translation with the greatest care and to whom she owes the solution of a number of difficulties. Her work will have its fitting reward if it succeeds in familiarising the English-speaking student of politics with a political essay of enduring value, written by one of the master thinkers of modern times.

R. LATTA.

University of Glasgow, May 1903.

TRANSLATOR'S INTRODUCTION

This is an age of unions. Not merely in the economic sphere, in the working world of unworthy ends and few ideals do we find great practical organizations; but law, medicine, science, art, trade, commerce, politics and political economy — we might add philanthropy — standing institutions, mighty forces in our social and intellectual life, all have helped to swell the number of our nineteenth century Conferences and Congresses. It is an age of Peace Movements and Peace Societies, of peace-loving monarchs and peace-seeking diplomats. This is not to say that we are preparing for the millennium. Men are working together, there is a newborn solidarity of interest, but rivalries between nation and nation, the bitternesses and hatreds inseparable from competition are not less keen; prejudice and misunderstanding not less frequent; subordinate conflicting interests are not fewer, are perhaps, in view of changing political conditions and an ever-growing international commerce, multiplying with every year. The talisman is, perhaps, self-interest, but, none the less, the spirit of union is there; it is impossible to ignore a clearly marked tendency towards international federation, towards political peace. This slow movement was not born with Peace Societies; its consummation lies perhaps far off in the ages to come. History at best moves slowly. But something of its past progress we shall do well to know. No political idea seems to have so great a future before it as this idea of a federation of the world. It is bound to realise itself some day; let us consider what are the chances that this day come quickly, what that it be long delayed. What obstacles lie in the way, and how may they be removed? What historical grounds have we for hoping that they may ever be removed? What, in a word, is the origin and history of the idea of a perpetual peace between nations, and what would be the advantage, what is the prospect of realising it?

The international relations of states find their expression, we are told, in war and peace. What has been the part played by these great counteracting forces in the history of nations? What has it been in prehistoric times, in the life of man in what is called the "state of nature"? "It is no easy enterprise," says Rousseau, in more than usually careful language, "to disentangle that which is original from that which is artificial in the actual state of man, and to make ourselves well acquainted with a state which no longer exists, which perhaps never has existed and which probably never will exist in the future." (Preface to the *Discourse on the Causes of Inequality*, 1753, publ. 1754.) This is a difficulty which Rousseau surmounts only too easily. A knowledge of history, a scientific spirit may fail him: an imagination ever ready to pour forth detail never does. Man lived, says he, "without industry, without speech, without habitation, without war, without connection of any kind, without any need of his fellows or without any desire to harm them ... sufficing to himself."[2*] (*Discourse on the Sciences and Arts*, 1750.) Nothing, we are now certain, is less probable. We cannot paint the life of man at this stage of his development with any definiteness, but the conclusion is forced upon us that our race had no golden age,[3*] no peaceful beginning, that this early state was indeed, as Hobbes held, a state of war, of incessant war between individuals, families and, finally, tribes.

The Early Conditions of Society.

For the barbarian, war is the rule; peace the exception. His gods, like those of Greece, are warlike gods; his spirit, at death, flees to some Valhalla. For him life is one long battle; his arms go with him even to the grave. Food and the means of existence he seeks through plunder and violence. Here right is with might; the battle is to the strong. Nature has given all an equal claim to all things, but not everyone can have them. This state of fearful insecurity is bound to come to an end. "Government," says Locke, (*On Civil Government*, Chap. VIII., § 105) "is hardly to be avoided amongst men that live together."[4*] A constant dread of attack and a growing consciousness of the necessity of presenting a united front against it result in the choice of some leader — the head of a family perhaps — who acts, it may be, only as

captain of the hosts, as did Joshua in Israel, or who may discharge the simple duties of a primitive governor or king.[5*] Peace within is found to be strength without. The civil state is established, so that "if there needs must be war, it may not yet be against all men, nor yet without some helps." (Hobbes: *On Liberty*, Chap. I., § 13.) This foundation of the state is the first establishment in history of a peace institution. It changes the character of warfare, it gives it method and system; but it does not bring peace in its train. We have now, indeed, no longer a wholesale war of all against all, a constant irregular raid and plunder of one individual by another; but we have the systematic, deliberate war of community against community, of nation against nation.[6*]

War in Classical Times.

In early times, there were no friendly neighbouring nations: beyond the boundaries of every nation's territory, lay the land of a deadly foe. This was the way of thinking, even of so highly cultured a people as the Greeks, who believed that a law of nature had made every outsider, every barbarian their inferior and their enemy.[7*] Their treaties of peace, at the time of the Persian War, were frankly of the kind denounced by Kant, mere armistices concluded for the purpose of renewing their fighting strength. The ancient world is a world of perpetual war in which defeat meant annihilation. In the East no right was recognised in the enemy; and even in Greece and Rome the fate of the unarmed was death or slavery.[8*] The barbaric or non-Grecian states had, according to Plato and Aristotle, no claim upon humanity, no rights in fact of any kind. Among the Romans things were little better. According to Mr. T. J. Lawrence — see his *Principles of International Law*, III., §§ 21, 22 — they were worse. For Rome stood alone in the world: she was bound by ties of kinship to no other state. She was, in other words, free from a sense of obligation to other races. War, according to Roman ideas, was made by the gods, apart altogether from the quarrels of rulers or races. To disobey the sacred command, expressed in signs and auguries would have been to hold in disrespect the law and religion of the land. When, in the hour of victory, the Romans refrained from pressing their rights against the conquered — rights recognised by all Roman jurists — it was from no spirit of leniency, but in the pursuit of a prudent and far-sighted policy, aiming at the growth of Roman supremacy and the establishment of a world-embracing empire, shutting out all war as it blotted out natural boundaries, reducing all rights to the one right of imperial citizenship. There was no real *jus belli*, even here in the cradle of international law; the only limits to the fury of war were of a religious character.

The treatment of a defeated enemy among the Jews rested upon a similar religious foundation. In the East, we find a special cruelty in the conduct of war. The wars of the Jews and Assyrians were wars of extermination. The whole of the *Old Testament*, it has been said, resounds with the clash of arms.[9*] "An eye for an eye, a tooth for a tooth!" was the command of Jehovah to his chosen people. Vengeance was bound up in their very idea of the Creator. The Jews, unlike the followers of Mahomet, attempted, and were commanded to attempt no violent conversion[10*]; they were then too weak a nation; but they fought, and fought with success against the heathen of neighbouring lands, the Lord of Hosts leading them forth to battle. The God of Israel stood to his chosen people in a unique and peculiarly logical relation. He had made a covenant with them; and, in return for their obedience and allegiance, cared for their interests and advanced their national prosperity. The blood of this elect people could not be suffered to intermix with that of idolaters. Canaan must be cleared of the heathen, on the coming of the children of Israel to their promised land; and mercy to the conquered enemy, even to women, children or animals was held by the Hebrew prophets to be treachery to Jehovah. (*Sam.* XV.; *Josh.* VI. 21.)

Hence the attitude of the Jews to neighbouring nations[11*] was still more hostile than that of the Greeks. The cause of this difference is bound up with the transition from polytheism to monotheism. The most devout worshipper of the national gods of ancient times could endure to see other gods than his worshipped in the next town or by a neighbouring nation. There was no reason why all should not exist side by side. Religious conflicts in polytheistic countries, when they arose, were due not to the rivalry of

conflicting faiths, but to an occasional attempt to put one god above the others in importance. There could be no interest here in the propagation of belief through the sword. But, under the Jews, these relations were entirely altered. Jehovah, their Creator, became the one invisible God. Such an one can suffer no others near him; their existence is a continual insult to him. Monotheism is, in its very nature, a religion of intolerance. Its spirit among the Jews was warlike: it commanded the subjugation of other nations, but its instrument was rather extermination than conversion.

The Attitude of Christianity and the Early Church to War.

From the standpoint of the peace of nations, we may say that the Christian faith, compared with other prominent monotheistic religious systems, occupies an intermediate position between two extremes — the fanaticism of Islam, and to a less extent of Judaism, and the relatively passive attitude of the Buddhist who thought himself bound to propagate his religion, but held himself justified only in the employment of peaceful means. Christianity, on the other hand, contains no warlike principles: it can in no sense be called a religion of the sword, but circumstances gave the history of the Church, after the first few centuries of its existence, a character which cannot be called peace-loving.

This apparent contradiction between the spirit of the new religion and its practical attitude to war has led to some difference of opinion as to the actual teaching of Christ. The *New Testament* seems, at a superficial glance, to furnish support as readily to the champions of war as to its denouncers. The Messiah is the Prince of Peace (*Is.* IX. 6, 7; *Heb.* VI.), and here lies the way of righteousness (*Rom.* III. 19): but Christ came not to bring peace, but a sword (*Matth.* X. 34). Such statements may be given the meaning which we wish them to bear — the quoting of Scripture is ever an unsatisfactory form of evidence; but there is no direct statement in the *New Testament* in favour of war, no saying of Christ which, fairly interpreted, could be understood too regard this proof of human imperfection as less condemnable than any other.[12*] When men shall be without sin, nation shall rise up against nation no more. But man the individual can attain peace only when he has overcome the world, when, in the struggle with his lower self, he has come forth victorious. This is the spiritual sword which Christ brought into the world — strife, not with the unbeliever, but with the lower self: meekness and the spirit of the Word of God are the weapons with which man must fight for the Faith.

An elect people there was no longer: Israel had rejected its Messiah. Instead there was a complete brotherhood of all men, the bond and the free, as children of one God. The aim of the Church was a world-empire, bound together by a universal religion. In this sense, as sowing the first seeds of a universal peace, we may speak of Christianity as a re-establishment of peace among mankind.

The later attitude of Christians to war, however, by no means corresponds to the earliest tenets of the Church. Without doubt, certain sects, from the beginning of our era and through the ages up to the present time, held, like the Mennonites and Quakers in our day, that the divine command, “Love your enemies,” could not be reconciled with the profession of a soldier. The early Christians were reproached under the Roman Emperors, before the time of Constantine, with avoiding the citizen’s duty of military service.[13*] “To those enemies of our faith,” wrote Origen (*Contra Celsum*, VIII., Ch. LXXIII., Anti-Nicene Christian Library), “who require us to bear arms for the commonwealth, and to slay men, we can reply: ‘Do not those who are priests at certain shrines, and those who attend on certain gods, as you account them, keep their hands free from blood, that they may with hands unstained and free from human blood offer the appointed sacrifices to your gods; and even when war is upon you, you never enlist the priests in the army. If that, then, is a laudable custom, how much more so, that while others are engaged in battle, these too should engage as the priests and ministers of God, keeping their hands pure, and wrestling in prayers to God on behalf of those who are fighting in a righteous cause, and for the king who reigns righteously, that whatever is opposed to those who act righteously may be destroyed!’ ... And we do take our part in public affairs, when along with righteous prayers we join self-denying exercises and meditations, which teach us to despise pleasures, and not to be led away by them. And none fight better for the king than we

do. We do not indeed fight under him, although he require it; but we fight on his behalf, forming a special army — an army of piety — by offering our prayers to God.” The Fathers of the Church, Justin Martyr, Clement of Alexandria, Tertullian, Ambrose and the rest gave the same testimony against war. The pagan rites connected with the taking of the military oath had no doubt some influence in determining the feeling of the pious with regard to this life of bloodshed; but the reasons lay deeper. “Shall it be held lawful,” asked Tertullian, (*De Corona*,) “to make an occupation of the sword, when the Lord proclaims that he who uses the sword shall perish by the sword? And shall the son of peace take part in the battle when it does not become him even to sue at law? And shall he apply the chain, and the prison, and the torture, and the punishment, who is not the avenger even of his own wrongs?”

The doctrine of the Church developed early in the opposite direction. It was its fighting spirit and not a love of peace that made Christianity a state religion under Constantine. Nor was Augustine the first of the Church Fathers to regard military service as permissible. To come to a later time, this change of attitude has been ascribed partly to the rise of Mahometan power and the wave of fanaticism which broke over Europe. To destroy these unbelievers with fire and sword was regarded as a deed of piety pleasing to God. Hence the wars of the Crusades against the infidel were holy wars, and appear as a new element in the history of civilisation. The nations of ancient times had known only civil and foreign war.[14]* They had rebelled at home, and they had fought mainly for material interests abroad. In the Middle Ages there were, besides, religious wars and, with the rise of Feudalism, private war:[15]* among all the powers of the Dark Ages and for centuries later, none was more aggressive than the Catholic Church, nor a more active and untiring defender of its rights and claims, spiritual or temporal. It was in some respects a more warlike institution than the states of Greece and Rome. It struggled through centuries with the Emperor:[16]* it pronounced its ban against disobedient states and disloyal cities: it pursued with its vengeance each heretical or rebellious prince: unmindful of its early traditions about peace, it showed in every crisis a fiercely military spirit.[17]*

For more than a thousand years the Church counted fighting clergy[18]* among its most active supporters. This strange anomaly was, it must be said, at first rather suffered in deference to public opinion than encouraged by ecclesiastical canons and councils, but it gave rise to great discontent at the time of the Reformation.[19]* The whole question of the lawfulness of military service for Christians was then raised again. “If there be anything in the affairs of mortals,” wrote Erasmus at this time (*Opera*, II., *Prov.*, 951 C) “which it becomes us deliberately to attack, which we ought indeed to shun by every possible means, to avert and to abolish, it is certainly war, than which there is nothing more wicked, more mischievous or more widely destructive in its effects, nothing harder to be rid of, or more horrible and, in a word, more unworthy of a man, not to say of a Christian.”[20]* The mediæval Church indeed succeeded, by the establishment of such institutions as the Truce of God, in setting some limits to the fury of the soldier: but its endeavours (and it made several to promote peace)[21]* were only to a trifling extent successful. Perhaps custom and public opinion in feudal Europe were too strong, perhaps the Church showed a certain apathy in denouncing the evils of a military society: no doubt the theoretical tenets of its doctrine did less to hinder war than its own strongly military tendency, its lust for power and the force of its example did to encourage it.

Hence, in spite of Christianity and its early vision of a brotherhood of men, the history of the Middle Ages came nearer to a realization of the idea of perpetual war than was possible in ancient times. The tendency of the growth of Roman supremacy was to diminish the number of wars, along with the number of possible causes of racial friction. It united many nations in one great whole, and gave them, to a certain extent, a common culture and common interests; even, when this seemed prudent, a common right of citizenship. The fewer the number of boundaries, the less the likelihood of war. The establishment of great empires is of necessity a force, and a great and permanent force working on the side of peace. With the fall of Rome this guarantee was removed.

The Development of the New Science of International Law.

Out of the ruins of the old feudal system arose the modern state as a free independent unity. Private war between individuals or classes of society was now branded as a breach of the peace: it became the exclusive right of kings to appeal to force. War, wrote Gentilis[22*] towards the end of sixteenth century, is the just or unjust conflict between states. Peace was now regarded as the normal condition of society. As a result of these great developments in which the name "state" acquired new meaning, jurisprudence freed itself from the trammelling conditions of mediæval Scholasticism. Men began to consider the problem of the rightfulness or wrongfulness of war, to question even the possibility of a war on rightful grounds. Out of theses new ideas — partly too as one of the fruits of the Reformation,[23*] — arose the first consciously formulated principles of the science of international law, whose fuller, but not yet complete, development belongs to modern times.

From the beginning of history every age, every people has something to show here, be it only a rudimentary sense of justice in their dealings with one another. We may instance the Amphictyonic League in Greece which, while it had a merely Hellenic basis and was mainly a religious survival, shows the germ of some attempt at arbitration between Greek states. Among the Romans we have the *jus feciale*[24*] and the *jus gentium*, as distinguished from the civil law of Rome, and certain military regulations about the taking of booty in war. Ambassadors were held inviolate in both countries; the formal declaration of war was never omitted. Many Roman writers held the necessity of a just cause for war. But nowhere do these considerations form the subject matter of a special science.

In the Middle Ages the development of these ideas received little encouragement. All laws are silent in the time of war,[25*] and this was a period of war, both bloody and constant. There was no time to think of the right or wrong of anything. Moreover, the Church emphasised the lack of rights in unbelievers, and gave her blessing on their annihilation.[26*] The whole Christian world was filled with the idea of a spiritual universal monarchy. Not such as that in the minds of Greek and Jew and Roman who had been able to picture international peace only under the form of a great national and exclusive empire. In this great Christian state there were to be no distinctions between nations; its sphere was bounded by the universe. But, here, there was no room or recognition for independent national states with equal and personal rights. This recognition, opposed by the Roman Church, is the real basis of international law. The Reformation was the means by which the personality of the peoples, the unity and independence of the state were first openly admitted. On this foundation, mainly at first in Protestant countries, the new science developed rapidly. Like the civil state and the Christian religion, international law may be called a peace institution.

Grotius, Puffendorf and Vattel.

In the beginning of the seventeenth century, Grotius laid the foundations of a code of universal law (*De Jure Belli et Pacis*, 1625) independent of differences of religion, in the hope that its recognition might simplify the intercourse between the newly formed nations. The primary object of this great work, written during the misery and horrors of the Thirty Years' war, was expressly to draw attention to these evils and suggest some methods by which the severity of warfare might be mitigated. Grotius originally meant to explain only one chapter of the law of nations:[27*] his book was to be called *De Jure Belli*, but there is scarcely any subject of international law which he leaves untouched. He obtained, moreover, a general recognition for the doctrine of the Law of Nature which exerted so strong an influence upon succeeding centuries; indeed, between these two sciences, as between international law and ethics, he draws no very sharp line of demarcation, although, on the whole, in spite of an unscientific, scholastic use of quotation from authorities, his treatment of the new field is clear and comprehensive. Grotius made the attempt to set up an ethical principle of right, in the stead of such doctrines of self-interest as had been held by many of the ancient writers. There was a law, he held, established in each state purely with a view to the interests of that state, but, besides this, there was another higher law in the interest of the whole society of

nations. Its origin was divine; the reason of man commanded his obedience. This was what we call international law.[28*]

Grotius distinctly holds, like Kant and Rousseau, and unlike Hobbes, that the state can never be regarded as a unity or institution separable from the people; the terms *civitas*, *communitas*, *coetus*, *populus*, he uses indiscriminately. But these nations, these independent units of society cannot live together side by side just as they like; they must recognise one another as members of a European society of states.[29*] Law, he said, stands above force even in war, "which may only be begun to pursue the right;" and the beginning and manner of conduct of war rests on fixed laws and can be justified only in certain cases. War is not to be done away with: Grotius accepts it as fact,[30*] (as Hobbes did later) as the natural method for settling the disputes which were bound constantly to arise between so many independent and sovereign nations. A terrible scourge it must ever remain, but as the only available form of legal procedure, it is sanctioned by the practice of states and not less by the law of nature and of nations. Grotius did not advance beyond this position. Every violation of the law of nations can be settled but in one way — by war, the force of the stronger.

The necessary distinction between law and ethics was drawn by Puffendorf,[31*] a successor of Grotius who gave an outwardly systematic form to the doctrine of the great jurist, without adding to it either strength or completeness. His views, when they were not based upon the system of Grotius, were strongly influenced by the speculation of Hobbes, his chronological predecessor, to whom we shall have later occasion to refer. In the works of Vattel,[32*] who was, next to Rousseau, the most celebrated of Swiss publicists, we find the theory of the customs and practice in war widely developed, and the necessity for humanising its methods and limiting its destructive effects upon neutral countries strongly emphasised. Grotius and Puffendorf, while they recommend acts of mercy, hold that there is legally no right which requires that a conquered enemy shall be spared. This is a matter of humanity alone. It is to the praise of Vattel that he did much to popularise among the highest and most powerful classes of society, ideas of humanity in warfare, and of the rights and obligations of nations. He is, moreover, the first to make a clear separation between this science and the Law of Nature. What, he asks, is international law as distinguished from the Law of Nature? What are the powers of a state and the duties of nations to one another? What are the causes of quarrel among nations, and what the means by which they can be settled without any sacrifice of dignity?

They are, in the first place, a friendly conciliatory attitude; and secondly, such means of settlement as mediation, arbitration and Peace Congresses. These are the refuges of a peace-loving nation, in cases where vital interests are not at stake. "Nature gives us no right to use force, except where mild and conciliatory measures are useless." (*Law of Nations*, II. Ch. xviii. § 331.) "Every power owes it in this matter to the happiness of human society to show itself ready for every means of reconciliation, in cases where the interests at stake are neither vital nor important." (*ibid.* § 332.) At the same time, it is never advisable that a nation should forgive an insult which it has not the power to resent.

The Dream of a Perpetual Peace.

But side by side with this development and gradual popularisation of the new science of International Law, ideas of a less practical, but not less fruitful kind had been steadily making their way and obtaining a strong hold upon the popular mind. The Decree of Eternal Pacification of 1495 had abolished private war, one of the heavy curses of the Middle Ages. Why should it not be extended to banish warfare between states as well? Gradually one proposal after another was made to attain this end, or, at least, to smooth the way for its future realisation. The first of these in point of time is to be found in a somewhat bare, vague form in Sully's *Memoirs*,[33*] said to have been published in 1634. Half a century later the Quaker William Penn suggested an international tribunal of arbitration in the interests of peace.[34*] But it was by the French Abbé St. Pierre that the problem of perpetual peace was fairly introduced into political literature: and

this, in an age of cabinet and dynastic wars, while the dreary cost of the war of the Spanish succession was yet unpaid. St. Pierre was the first who really clearly realised and endeavoured to prove that the establishment of a permanent state of peace is not only in the interest of the weaker, but is required by the European society of nations and by the reason of man. From the beginning of the history of humanity, poets and prophets had cherished the "sweet dream" of a peaceful civilisation: it is in the form of a practical project that this idea is new.

The ancient world actually represented a state of what was almost perpetual war. This was the reality which confronted man, his inevitable doom, it seemed, as it had been pronounced to the fallen sinners of Eden. Peace was something which man had enjoyed once, but forfeited. The myth- and poetry-loving Greeks, and, later, the poets of Rome delighted to paint a state of eternal peace, not as something to whose coming they could look forward in the future, but as a golden age of purity whose records lay buried in the past, a paradise which had been, but which was no more. Voices, more scientific, were raised even in Greece in attempts, such as Aristotle's, to show that the evolution of man had been not a course of degeneration from perfection, but of continual progress upwards from barbarism to civilisation and culture. But the change in popular thinking on this matter was due less to the arguments of philosophy than to a practical experience of the causes which operate in the interests of peace. The foundation of a universal empire under Alexander the Great gave temporary rest to nations heretofore incessantly at war. Here was a proof that the Divine Will had not decreed that man was to work out his punishment under unchanging conditions of perpetual warfare. This idea of a universal empire became the Greek ideal of a perpetual peace. Such an empire was, in the language of the Stoics, a world-state in which all men had rights of citizenship, in which all other nations were absorbed.

Parallel to this ideal among the Greeks, we find the hope in Israel of a Messiah whose coming was to bring peace, not only to the Jewish race, but to all the nations of the earth. This idea stands out in the sharpest contrast to the early nationalism of the Hebrew people, who regarded every stranger as an idolater and an enemy. The prophecies of Judaism, combined with the cosmopolitan ideas of Greece, were the source of the idea, which is expressed in the teaching of Christ, of a spiritual world-empire, an empire held together solely by the tie of a common religion.

This hope of peace did not actually die during the first thousand years of our era, nor even under the morally stagnating influences of the Middle Ages. When feudalism and private war were abolished in Europe, it wakened to a new life. Not merely in the mouths of poets and religious enthusiasts was the cry raised against war, but by scholars like Thomas More and Erasmus, jurists like Gentilis and Grotius, men high in the state and in the eyes of Europe like Henry IV. of France and the Duc de Sully or the Abbé de St. Pierre whose *Projet de Paix Perpétuelle* (1713)[35*] obtained immediate popularity and wide-spread fame. The first half of the eighteenth century was already prepared to receive and mature a plan of this kind.

Henry IV. and St. Pierre.

The *Grand Dessein* of Henry IV. is supposed to have been formed by that monarch and reproduced in Sully's *Memoirs*, written in 1634 and discovered nearly a century later by St. Pierre. The story goes that the Abbé found the book buried in an old garden. It has been shewn, however, that there is little likelihood that this project actually originated with the king, who probably corresponded fairly well to Voltaire's picture of him as war hero of the *Henriade*. The plan was more likely conceived by Sully, and ascribed to the popular king for the sake of the better hearing and greater influence it might in this way be likely to have, and also because, thereby, it might be less likely to create offence in political circles. St. Pierre himself may or may not have been acquainted with the facts.

The so-called *Grand Dessein* of Henry IV. was, shortly, as follows.[36*] It proposed to divide Europe between fifteen Powers,[37*] in such a manner that the balance of power should be established and preserved. These were to form a Christian republic on the basis of the freedom and equality of its

members, the armed forces of the federation being supported by fixed contribution. A general council, consisting of representatives from the fifteen states, was to make all laws necessary for cementing the union thus formed and for maintaining the order once established. It would also be the business of this senate to “deliberate on questions that might arise, to occupy themselves with discussing different interests, to settle quarrels amicably, to throw light upon and arrange all the civil, political and religious affairs of Europe, whether internal or foreign.” (*Mémoires*, vol. VI., *seq*.)

This scheme of the king or his minister was expanded with great thoroughness and clear-sightedness by the Abbé St. Pierre: none of the many later plans for a perpetual peace has been so perfect in details. He proposes that there should be a permanent and perpetual union between, if possible, all Christian sovereigns — of whom he suggests nineteen, excluding the Czar— “to preserve unbroken peace in Europe,” and that a permanent Congress or senate should be formed by deputies of the federated states. The union should protect weak sovereigns, minors during a regency, and so on, and should banish civil as well as international war — it should “render prompt and adequate assistance to rulers and chief magistrates against seditious persons and rebels.” All warfare henceforth is to be waged between the troops of the federation — each nation contributing an equal number — and the enemies of European security, whether outsiders or rebellious members of the union. Otherwise, where it is possible, all disputes occurring within the union are to be settled by the arbitration of the senate, and the combined military force of the federation is to be applied to drive the Turks out of Europe. There is to be a rational rearrangement of boundaries, but after this no change is to be permitted in the map of Europe. The union should bind itself to tolerate the different forms of faith.

The objections to St. Pierre’s scheme are, many of them, obvious. He himself produces sixty-two arguments likely to be raised against his plan, and he examines these in turn with acuteness and eloquence. But there are other criticisms which he was less likely to be able to forestall. Of the nineteen states he names as a basis of the federation, some have disappeared and the governments of others have completely changed. Indeed St. Pierre’s scheme did not look far beyond the present. But it has besides a too strongly political character.[38]* From this point of view, the Abbé’s plan amounts practically to a European coalition against the Ottoman Empire. Moreover, we notice with a smile that the French statesman and patriot is not lost in the cosmopolitan political reformer. “The kingdom of Spain shall not go out of the House of Bourbon!”[39]* France is to enjoy more than the privileges of honour; she is to reap distinct material and political advantages from the union. Humanity is to be a brotherhood, but, in the federation of nations, France is to stand first.[40]* We see that these “rêves d’un homme de bien,” as Cardinal Dubois called them, are not without their practical element. But the great mistake of St. Pierre is this: he actually thought that his plan could be put into execution in the near future, that an ideal of this kind was realisable at once.[41]* “I, myself, form’d it,” he says in the preface, “in full expectation to see it one Day executed.” As Hobbes, says, “there can be nothing so absurd, but may be found in the books of philosophers.”[42]* St. Pierre was not content to make his influence felt on the statesmen of his time and prepare the way for the abolition of all arbitrary forms of government. This was the flaw which drew down upon the good Abbé Voltaire’s sneering epigram[43]* and the irony of Leibniz.[44]* Here, above all, in this unpractical enthusiasm his scheme differs from that of Kant.

Rousseau’s Criticism of St. Pierre.

Rousseau took St. Pierre’s project[45]* much more seriously than either Leibniz or Voltaire. But sovereigns, he thought, are deaf to the voice of justice; the absolutism of princely power would never allow a king to submit to a tribunal of nations. Moreover war was, according to Rousseau’s experience, a matter not between nations, but between princes and cabinets. It was one of the ordinary pleasures of royal existence and one not likely to be voluntarily given up.[46]* We know that history has not supported Rousseau’s contention. Dynastic wars are now no more. The Great Powers have shown themselves able to impose their own conditions, where the welfare and security of Europe have seemed to demand it. Such

a development seemed impossible enough in the eighteenth century. In the military organisation of the nations of Europe and in the necessity of making their internal development subordinate to the care for their external security, Rousseau saw the cause of all the defects in their administration.[47]* The formation of unions on the model of the Swiss Confederation or the German *Bund* would, he thought, be in the interest of all rulers. But great obstacles seemed to him to lie in the way of the realisation of such a project as that of St. Pierre. "Without doubt," says Rousseau in conclusion, "the proposal of a perpetual peace is at present an absurd one.... It can only be put into effect by methods which are violent in themselves and dangerous to humanity. One cannot conceive of the possibility of a federative union being established, except by a revolution. And, that granted, who among us would venture to say whether this European federation is to be desired or to be feared? It would work, perhaps, more harm in a moment than it would prevent in the course of centuries." (*Jugement sur la Paix Perpétuelle.*)

The Position of Hobbes.

The most profound and searching analysis of this problem comes from Immanuel Kant, whose indebtedness in the sphere of politics to Hobbes, Locke, Montesquieu and Rousseau it is difficult to overestimate. Kant's doctrine of the sovereignty of the people comes to him from Locke through Rousseau. His explanation of the origin of society is practically that of Hobbes. The direct influence on politics of this philosopher, apart from his share in moulding the Kantian theory of the state, is one we cannot afford to neglect. His was a great influence on the new science just thrown on the world by Grotius, and his the first clear and systematic statement we have of the nature of society and the establishment of the state. The natural state of man, says Hobbes, is a state of war,[48]* a *bellum omnium contra omnes*, where all struggle for honour and for preferment and the prizes to which every individual is by natural right equally entitled, but which can of necessity fall only to the few, the foremost in the race. Men hate and fear the society of their kind, but through this desire to excel are forced to seek it: only where there are many can there be a first. This state of things, this apparent sociability which is brought about by and coupled with the least sociable of instincts, becomes unendurable. "It is necessary to peace," writes Hobbes (*On Dominion*, Ch. VI. 3) "that a man be so far forth protected against the violence of others, that he may live securely; that is, that he may have no just cause to fear others, so long as he doth them no injury. Indeed, to make men altogether safe from mutual harms, so as they cannot be hurt or injuriously killed, is impossible; and, therefore, comes not within deliberation." But to protect them so far as is possible the state is formed. Hobbes has no great faith in human contracts or promises. Man's nature is malicious and untrustworthy. A coercive power is necessary to guarantee this long-desired security within the community. "We must therefore," he adds, "provide for our security, not by compacts, but by punishments; and there is then sufficient provision made, when there are so great punishments appointed for every injury, as apparently it prove a greater evil to have done it, than not to have done it. For all men, by a necessity of nature, choose that which to them appears to be the less evil." (*Op. cit.*, Ch. VI. 4.)

These precautions secure that relative peace within the state which is one of the conditions of the safety of the people. But it is, besides, the duty of a sovereign to guarantee an adequate protection to his subjects against foreign enemies. A state of defence as complete and perfect as possible is not only a national duty, but an absolute necessity. The following statement of the relation of the state to other states shows how closely Hobbes has been followed by Kant. "There are two things necessary," says Hobbes, (*On Dominion*, Ch. XIII. 7) "for the people's defence; to be warned and to be forearmed. *For the state of commonwealths considered in themselves, is natural, that is to say, hostile.*[49]* Neither, if they cease from fighting, is it therefore to be called peace; but rather a breathing time, in which one enemy observing the motion and countenance of the other, values his security not according to pacts, but the forces and counsels of his adversary."

Hobbes is a practical philosopher: no man was less a dreamer, a follower after ideals than he. He is,

moreover, a pessimist, and his doctrine of the state is a political absolutism,[50*] the form of government which above all has been, and is, favourable to war. He would no doubt have ridiculed the idea of a perpetual peace between nations, had such a project as that of St. Pierre — a practical project, counting upon a realisation in the near future — been brought before him. He might not even have accepted it in the very much modified form which Kant adopts, that of an ideal — an unattainable ideal — towards which humanity could not do better than work. He expected the worst possible from man the individual. *Homo homini lupus*. The strictest absolutism, amounting almost to despotism, was required to keep the vicious propensities of the human animal in check. States he looked upon as units of the same kind, members also of a society. They had, and openly exhibited, the same faults as individual men. They too might be driven with a strong enough coercive force behind them, but not without it; and such a coercive force as this did not exist in a society of nations. Federation and federal troops are terms which represent ideas of comparatively recent origin. Without something of this kind, any enduring peace was not to be counted upon. International relations were and must remain at least potentially warlike in character. Under no circumstances could ideal conditions be possible either between the members of a state or between the states themselves. Human nature could form no satisfactory basis for a counsel of perfection.

Hence Hobbes never thought of questioning the necessity of war. It was in his eyes the natural condition of European society; but certain rules were necessary both for its conduct and, where this was compatible with a nation's dignity and prosperity, for its prevention. He held that international law was only a part of the Law of Nature, and that this Law of Nature laid certain obligations upon nations and their kings. Mediation must be employed between disputants as much as possible, the person of the mediators of peace being held inviolate; an umpire ought to be chosen to decide a controversy, to whose judgment the parties in dispute agree to submit themselves; such an arbiter must be impartial. These are all what Hobbes calls precepts of the Law of Nature. And he appeals to the Scriptures in confirmation of his assertion that peace is the way of righteousness and that the laws of nature of which these are a few are also laws of the heavenly kingdom. But peace is like the straight path of Christian endeavour, difficult to find and difficult to keep. We must seek after it where it may be found; but, having done this and sought in vain, we have no alternative but to fall back upon war. Reason requires "that every man ought to endeavour peace," (*Lev.* I. Ch. XIV.) "as far as he has hope of obtaining it; and when he cannot obtain it, that he may seek, and use, all helps, and advantages of war."[51*] This, says Hobbes elsewhere, (*On Liberty*, Ch. I. 15) is the dictate of right reason, the first and fundamental law of nature.

Kant's Idea of a Perpetual Peace.

With regard to the problems of international law, Kant is of course a hundred and fifty years ahead of Hobbes. But he starts from the same point: his theory of the beginning of society is practically identical with that of the older philosopher. Men are by nature imperfect creatures, unsociable and untrustworthy, cursed by a love of glory, of possession, and of power, passions which make happiness something for ever unattainable by them. Hobbes is content to leave them here with their imperfections, and let a strong government help them out as it may. But not so Kant. He looks beyond man the individual, developing slowly by stages scarcely measurable, progressing at one moment, and the next, as it seems, falling behind: he looks beyond the individual, struggling and never attaining, to the race. Here Kant is no pessimist. The capacities implanted in man by nature are not all for evil: they are, he says, "destined to unfold themselves completely in the course of time, and in accordance with the end to which they are adapted." (*Idea of a Universal History from a Cosmopolitan Point of View*, 1784. Pro.) This end of humanity is the evolution of man from the stage of mere self-satisfied animalism to a high state of civilisation. Through his own reason man is to attain a perfect culture, intellectual and moral. In this long period of struggle, the potential faculties which nature or Providence has bestowed upon him reach their full development. The process in which this evolution takes place is what we call history.

To man nature has given none of the perfect animal equipments for self-preservation and self-defence

which she has bestowed on others of her creatures. But she has given to him reason and freedom of will, and has determined that through these faculties and without the aid of instinct he shall win for himself a complete development of his capacities and natural endowments. It is, says Kant, no happy life that nature has marked out for man. He is filled with desires which he can never satisfy. His life is one of endeavour and not of attainment: not even the consciousness of the well-fought battle is his, for the struggle is more or less an unconscious one, the end unseen. Only in the race, and not in the individual, can the natural capacities of the human species reach full development. Reason, says Kant, (Pro, *op. cit*.) "does not itself work by instinct, but requires experiments, exercise and instruction in order to advance gradually from one stage of insight to another. Hence each individual man would necessarily have to live an enormous length of time, in order to learn by himself how to make a complete use of all his natural endowments. Or, if nature should have given him but a short lease of life, as is actually the case, reason would then require an almost interminable series of generations, the one handing down its enlightenment to the other, in order that the seeds she has sown in our species may be brought at last to a stage of development which is in perfect accordance with her design." Man the individual shall travel towards the land of promise and fight for its possession, but not he, nor his children, nor his children's children shall inherit the land. "Only the latest comers can have the good fortune of inhabiting the dwelling which the long series of their predecessors have toiled — though," adds Kant, "without any conscious intent — to build up without even the possibility of participating in the happiness which they were preparing." (Proposition 3.)

The means which nature employs to bring about this development of all the capacities implanted in men is their mutual antagonism in society — what Kant calls the "unsocial sociableness of men, that is to say, their inclination to enter into society, an inclination which yet is bound up at every point with a resistance which threatens continually to break up the society so formed." (Proposition 4.) Man hates society, and yet there alone he can develop his capacities; he cannot live there peaceably, and yet cannot live without it. It is the resistance which others offer to his inclinations and will — which he, on his part, shows likewise to the desires of others — that awakens all the latent powers of his nature and the determination to conquer his natural propensity to indolence and love of material comfort and to struggle for the first place among his fellow-creatures, to satisfy, in outstripping them, his love of glory and possession and power. "Without those, in themselves by no means lovely, qualities which set man in social opposition to man, so that each finds his selfish claims resisted by the selfishness of all the others, men would have lived on in an Arcadian shepherd life, in perfect harmony, contentment, and mutual love; but all their talents would forever have remained hidden and undeveloped. Thus, kindly as the sheep they tended, they would scarcely have given to their existence a greater value than that of their cattle. And the place among the ends of creation which was left for the development of rational beings would not have been filled. Thanks be to nature for the unsociableness, for the spiteful competition of vanity, for the insatiate desires of gain and power! Without these, all the excellent natural capacities of humanity would have slumbered undeveloped. Man's will is for harmony; but nature knows better what is good for his species: her will is for dissension. He would like a life of comfort and satisfaction, but nature wills that he should be dragged out of idleness and inactive content and plunged into labour and trouble, in order that he may be made to seek in his own prudence for the means of again delivering himself from them. The natural impulses which prompt this effort, — the causes of unsociableness and mutual conflict, out of which so many evils spring, — are also in turn the spurs which drive him to the development of his powers. Thus, they really betray the providence of a wise Creator, and not the interference of some evil spirit which has meddled with the world which God has nobly planned, and enviously overturned its order." (Proposition 4: Caird's translation in *The Critical Philosophy of Kant*, Vol. II., p, 551.)

The problem now arises, How shall men live together, each free to work out his own development, without at the same time interfering with a like liberty on the part of his neighbour? The solution of this problem is the state. Here the liberty of each member is guaranteed and its limits strictly defined. A

perfectly just civil constitution, administered according to the principles of right, would be that under which the greatest possible amount of liberty was left to each citizen within these limits. This is the ideal of Kant, and here lies the greatest practical problem which has presented itself to humanity. An ideal of this kind is difficult of realisation. But nature imposes no such duty upon us. “Out of such crooked material as man is made,” says Kant, “nothing can be hammered quite straight.” (Proposition 6.) We must make our constitution as good as we can and, with that, rest content.

The direct cause of this transition from a state of nature and conditions of unlimited freedom to civil society with its coercive and restraining forces is found in the evils of that state of nature as they are painted by Hobbes. A wild lawless freedom becomes impossible for man: he is compelled to seek the protection of a civil society. He lives in uncertainty and insecurity: his liberty is so far worthless that he cannot peacefully enjoy it. For this peace he voluntarily yields up some part of his independence. The establishment of the state is in the interest of his development to a higher civilisation. It is more — the guarantee of his existence and self-preservation. This is the sense, says Professor Paulsen, in which Kant like Hobbes regards the state as “resting on a contract,”[52*] that is to say, on the free will of all.[53*] *Volenti non fit injuria*. Only, adds Paulsen, we must remember that this contract is not a historical fact, as it seemed to some writers of the eighteenth century, but an “idea of reason”: we are speaking here not of the history of the establishment of the state, but of the reason of its existence. (Paulsen’s *Kant*, .)[54*]

In this civil union, self-sought, yet sought reluctantly, man is able to turn his most unlovable qualities to a profitable use. They bind this society together. They are the instrument by which he wins for himself self-culture. It is here with men, says Kant, as it is with the trees in a forest: “just because each one strives to deprive the other of air and sun, they compel each other to seek both above, and thus they grow beautiful and straight. Whereas those that, in freedom and isolation from one another, shoot out their branches at will, grow stunted and crooked and awry.” (Proposition 5, *op. cit*.) Culture, art, and all that is best in the social order are the fruits of that self-loving unsociableness in man.

The problem of the establishment of a perfect civil constitution cannot be solved, says this treatise (*Idea for a Universal History*), until the external relations of states are regulated in accordance with principles of right. For, even if the ideal internal constitution were attained, what end would it serve in the evolution of humanity, if commonwealths themselves were to remain like individuals in a state of nature, each existing in uncontrolled freedom, a law unto himself? This condition of things again cannot be permanent. Nature uses the same means as before to bring about a state of law and order. War, present or near at hand, the strain of constant preparation for a possible future campaign or the heavy burden of debt and devastation left by the last, — these are the evils which must drive states to leave a lawless, savage state of nature, hostile to man’s inward development, and seek in union the end of nature, peace. All wars are the attempts nature makes to bring about new political relations between nations, relations which, in their very nature, cannot be, and are not desired to be, permanent. These combinations will go on succeeding each other, until at last a federation of all powers is formed for the establishment of perpetual peace. This is the end of humanity, demanded by reason. Justice will reign, not only in the state, but in the whole human race when perpetual peace exists between the nations of the world.

This is the point of view of the *Idea for a Universal History*. But equally, we may say, law and justice will reign between nations, when a legally and morally perfect constitution adorns the state. External perpetual peace presupposes internal peace — peace civil, social, economic, religious. Now, when men are perfect — and what would this be but perfection — how can there be war? Cardinal Fleury’s only objection — no light one — to St. Pierre’s project was that, as even the most peace-loving could not avoid war, all men must first be men of noble character. This seems to be what is required in the treatise on *Perpetual Peace*. Kant demands, to a certain extent, the moral regeneration of man. There must be perfect honesty in international dealings, good faith in the interpretation and fulfilment of treaties and so

on (Art. 1)[55*]: and again, every state must have a republican constitution — a term by which Kant understands a constitution as nearly as possible in accordance with the spirit of right. (Art. 1.)[56*] This is to say that we have to start with our reformation at home, look first to the culture and education and morals of our citizens, then to our foreign relations. This is a question of self-interest as well as of ethics. On the civil and religious liberty of a state depends its commercial success. Kant saw the day coming, when industrial superiority was to be identified with political pre-eminence. The state which does not look to the enlightenment and liberty of its subjects must fail in the race. But the advantages of a high state of civilisation are not all negative. The more highly developed the individuals who form a state, the more highly developed is its consciousness of its obligations to other nations. In the ignorance and barbarism of races lies the great obstacle to a reign of law among states. Uncivilised states cannot be conceived as members of a federation of Europe. First, the perfect civil constitution according to right: then the federation of these law-abiding Powers. This is the path which reason marks out. The treatise on *Perpetual Peace* seems to be in this respect more practical than the *Idea for a Universal History*. But it matters little which way we take it. The point of view is the same in both cases: the end remains the development of man towards good, the order of his steps in this direction is indifferent.

The Political and Social Conditions of Kant's Time.

The history of the human race, viewed as a whole, Kant regards as the realisation of a hidden plan of nature to bring about a political constitution internally and externally perfect — the only condition under which the faculties of man can be fully developed. Does experience support this theory? Kant thought that, to a certain degree, it did. This conviction was not, however, a fruit of his experience of citizenship in Prussia, an absolute dynastic state, a military monarchy waging perpetual dynastic wars of the kind he most hotly condemned. Kant had no feeling of love to Prussia,[57*] and little of a citizen's patriotic pride, or even interest, in its political achievements. This was partly because of his sympathy with republican doctrines: partly due to his love of justice and peculiar hatred of war,[58*] a hatred based, no doubt, not less on principle than on a close personal experience of the wretchedness it brings with it. It was not the political and social conditions in which he lived which fostered Kant's love of liberty and gave him inspiration, unless in the sense in which the mind reacts upon surrounding influences. Looking beyond Prussia to America, in whose struggle for independence he took a keen interest, and looking to France where the old dynastic monarchy had been succeeded by a republican state, Kant seemed to see the signs of a coming democratisation of the old monarchical society of Europe. In this growing influence on the state of the mass of the people who had everything to lose in war and little to gain by victory, he saw the guarantee of a future perpetual peace. Other forces too were at work to bring about this consummation. There was a growing consciousness that war, this costly means of settling a dispute, is not even a satisfactory method of settlement. Hazardous and destructive in its effect, it is also uncertain in its results. Victory is not always gain; it no longer signifies a land to be plundered, a people to be sold to slavery. It brings fresh responsibilities to a nation, at a time when it is not always strong enough to bear them. But, above all, Kant saw, even at the end of the eighteenth century, the nations of Europe so closely bound together by commercial interests that a war — and especially a maritime war where the scene of conflict cannot be to the same extent localised as on land — between any two of them could not but seriously affect the prosperity of the others.[59*] He clearly realised that the spirit of commerce was the strongest force in the service of the maintenance of peace, and that in it lay a guarantee of future union.

This scheme of a federation of the nations of the world, in accordance with principles which would put an end to war between them, was one whose interest for Kant seemed to increase during the last twenty years of his life.[60*] It was according to him an idea of reason, and, in his first essay on the subject — that of 1784 — we see the place this ideal of a perpetual peace held in the Kantian system of philosophy. Its realisation is the realisation of the highest good — the ethical and political *summum bonum*, for here the aims of morals and politics coincide: only in a perfect development of his faculties in culture and in

morals can man at last find true happiness. History is working towards the consummation of this end. A moral obligation lies on man to strive to establish conditions which bring its realisation nearer. It is the duty of statesmen to form a federative union as it was formerly the duty of individuals to enter the state. The moral law points the way here as clearly as in the sphere of pure ethics:— "Thou can'st, therefore thou ought'st."

Let us be under no misapprehension as to Kant's attitude to the problem of perpetual peace. It is an ideal. He states plainly that he so regards it[61*] and that as such it is unattainable. But this is the essence of all ideals: they have not the less value in shaping the life and character of men and nations on that account. They are not ends to be realised but ideas according to which we must live, regulative principles. We cannot, says Kant, shape our life better than in acting as if such ideas of reason have objective validity and there be an immortal life in which man shall live according to the laws of reason, in peace with his neighbour and in freedom from the trammels of sense.

Hence we are concerned here, not with an end, but with the means by which we might best set about attaining it, if it were attainable. This is the subject matter of the *Treatise on Perpetual Peace* (1795), a less eloquent and less purely philosophical essay than that of 1784, but throughout more systematic and practical. We have to do, not with the favourite dream of philanthropists like St. Pierre and Rousseau, but with a statement of the conditions on the fulfilment of which the transition to a reign of peace and law depends.

The Conditions of the Realisation of the Kantian Ideal.

These means are of two kinds. In the first place, what evils must we set about removing? What are the negative conditions? And, secondly, what are the general positive conditions which will make the realisation of this idea possible and guarantee the permanence of an international peace once attained? These negative and positive conditions Kant calls Preliminary and Definitive Articles respectively, the whole essay being carefully thrown into the form of a treaty. The Preliminary Articles of a treaty for perpetual peace are based on the principle that anything that hinders or threatens the peaceful co-existence of nations must be abolished. These conditions have been classified by Kuno Fischer. Kant, he points out,[62*] examines the principles of right governing the different sets of circumstances in which nations find themselves — namely, (*a*) while they are actually at war; (*b*) when the time comes to conclude a treaty of peace; (*c*) when they are living in a state of peace. The six Preliminary Articles fall naturally into these groups. War must not be conducted in such a manner as to increase national hatred and embitter a future peace. (Art. 6.)[63*] The treaty which brings hostilities to an end must be concluded in an honest desire for peace. (Art. 1.)[64*] Again a nation, when in a state of peace, must do nothing to threaten the political independence of another nation or endanger its existence, thereby giving the strongest of all motives for a fresh war. A nation may commit this injury in two ways: (1) indirectly, by causing danger to others through the growth of its standing army (Art. 3)[65*] — always a menace to the state of peace — or by any unusual war preparations: and (2) through too great a supremacy of another kind, by amassing money, the most powerful of all weapons in warfare. The National Debt (Art. 4)[66*] is another standing danger to the peaceful co-existence of nations. But, besides, we have the danger of actual attack. There is no right of intervention between nations. (Art. 5.)[67*] Nor can states be inherited or conquered (Art. 2),[68*] or in any way treated in a manner subversive of their independence and sovereignty as individuals. For a similar reason, armed troops cannot be hired and sold as things.

These then are the negative conditions of peace.[69*] There are, besides, three positive conditions:

(*a*) The intercourse of nations is to be confined to a right of hospitality. (Art. 3.)[70*] There is nothing new to us in this assertion of a right of way. The right to free means of international communication has in

the last hundred years become a commonplace of law. And the change has been brought about, as Kant anticipated, not through an abstract respect for the idea of right, but through the pressure of purely commercial interests. Since Kant's time the nations of Europe have all been more or less transformed from agricultural to commercial states whose interests run mainly in the same direction, whose existence and development depend necessarily upon "conditions of universal hospitality." Commerce depends upon this freedom of international intercourse, and on commerce mainly depends our hope of peace.

(*b*) The first Definitive Article[71]* requires that the constitution of every state should be republican. What Kant understands by this term is that, in the state, law should rule above force and that its constitution should be a representative one, guaranteeing public justice and based on the freedom and equality of its members and their mutual dependence on a common legislature. Kant's demand is independent of the *form* of the government. A constitutional monarchy like that of Prussia in the time of Frederick the Great, who regarded himself as the first servant of the state and ruled with the wisdom and forethought which the nation would have had the right to demand from such an one — such a monarchy is not in contradiction to the idea of a true republic. That the state should have a constitution in accordance with the principles of right is the essential point.[72]* To make this possible, the law-giving power must lie with the representatives of the people: there must be a complete separation, such as Locke and Rousseau demand, between the legislature and executive. Otherwise we have despotism. Hence, while Kant admitted absolutism under certain conditions, he rejected democracy where, in his opinion, the mass of the people was despot.

An internal constitution, firmly established on the principles of right, would not only serve to kill the seeds of national hatred and diminish the likelihood of foreign war. It would do more: it would destroy sources of revolution and discontent within the state. Kant, like many writers on this subject, does not directly allude to civil war[73]* and the means by which it may be prevented or abolished. Actually to achieve this would be impossible: it is beyond the power of either arbitration or disarmament. But in a representative government and the liberty of a people lie the greatest safeguards against internal discontent. Civil peace and international peace must to a certain extent go hand in hand.

We come now to the central idea of the treatise: (*c*) the law of nations must be based upon a federation of free states. (Art. 2.)[74]* This must be regarded as the end to which mankind is advancing. The problem here is not out of many nations to make one. This would be perhaps the surest way to attain peace, but it is scarcely practicable, and, in certain forms, it is undesirable. Kant is inclined to approve of the separation of nations by language and religion, by historical and social tradition and physical boundaries: nature seems to condemn the idea of a universal monarchy.[75]* The only footing on which a thorough-going, indubitable system of international law is in practice possible is that of the society of nations: not the world-republic[76]* the Greeks dreamt of, but a federation of states. Such a union in the interests of perpetual peace between nations would be the "highest political good." The relation of the federated states to one another and to the whole would be fixed by cosmopolitan law: the link of self-interest which would bind them would again be the spirit of commerce.

This scheme of a perpetual peace had not escaped ridicule in the eighteenth century: the name of Kant protected it henceforth. The facts of history, even more conclusively than the voices of philosophers, soldiers and princes, show how great has been the progress of this idea in recent years. But it has not gained its present hold upon the popular mind without great and lasting opposition. Indeed we have here what must still be regarded as a controversial question. There have been, and are still, men who regard perpetual peace as a state of things as undesirable as it is unattainable. For such persons, war is a necessity of our civilisation: it is impossible that it should ever cease to exist. All that we can do, and there is no harm, nor any contradiction in the attempt, is to make wars shorter, fewer and more humane: the whole question, beyond this, is without practical significance. Others, on the other hand, — and these perhaps more thoughtful — regard war as hostile to culture, an evil of the worst kind, although a

necessary evil. In peace, for them, lies the true ideal of humanity, although in any perfect form this cannot be realised in the near future. The extreme forms of these views are to be sought in what has been called in Germany "the philosophy of the barracks" which comes forward with a glorification of war for its own sake, and in the attitude of modern Peace Societies which denounce all war wholesale, without respect of causes or conditions.

Hegel, Schiller and Moltke.

Hegel, the greatest of the champions of war, would have nothing to do with Kant's federation of nations formed in the interests of peace. The welfare of a state, he held, is its own highest law; and he refused to admit that this welfare was to be sought in an international peace. Hegel lived in an age when all power and order seemed to lie with the sword. Something of the charm of Napoleonism seems to hang over him. He does not go the length of writers like Joseph de Maistre, who see in war the finger of God or an arrangement for the survival of the fittest — a theory, as far as regards individuals, quite in contradiction with the real facts, which show that it is precisely the physically unfit whom war, as a method of extermination, cannot reach. But, like Schiller and Moltke, Hegel sees in war an educative instrument, developing virtues in a nation which could not be fully developed otherwise, (much as pain and suffering bring patience and resignation and other such qualities into play in the individual), and drawing the nation together, making each citizen conscious of his citizenship, as no other influence can. War, he holds, leaves a nation always stronger than it was before; it buries causes of inner dissension, and consolidates the internal power of the state.[77*] No other trial can, in the same way, show what is the real strength and weakness of a nation, what it *is*, not merely materially, but physically, intellectually and morally.

With this last statement most people will be inclined to agree. There is only a part of the truth in Napoleon's dictum that "God is on the side of the biggest battalions"; or in the old saying that war requires three necessaries — in the first place, money; in the second place, money; and in the third, money. Money is a great deal: it is a necessity; but what we call national back-bone and character is more. So far we are with Hegel. But he goes further. In peace, says he, mankind would grow effeminate and degenerate in luxury. This opinion was expressed in forcible language in his own time by Schiller,[78*] and in more recent years by Count Moltke. "Perpetual peace," says a letter of the great general,[79*] "is a dream and not a beautiful dream either: war is part of the divine order of the world. During war are developed the noblest virtues which belong to man — courage and self-denial, fidelity to duty and the spirit of self-sacrifice: the soldier is called upon to risk his life. Without war the world would sink in materialism."[80*] "Want and misery, disease, suffering and war," he says elsewhere, "are all given elements in the Divine order of the universe." Moltke's eulogy of war, however, is somewhat modified by his additional statement that "the greatest kindness in war lies in its being quickly ended." (Letter to Bluntschli, 11th Dec., 1880.)[81*] The great forces which we recognise as factors in the moral regeneration of mankind are always slow of action as they are sure. War, if too quickly over, could not have the great moral influence which has been attributed to it. The explanation may be that it is not all that it naturally appears to a great and successful general. Hegel, Moltke, Trendelenburg, Treitschke[82*] and the others — not Schiller[83*] who was able to sing the blessings of peace as eloquently as of war — were apt to forget that war is as efficient a school for forming vices as virtues; and that, moreover, those virtues which military life is said to cultivate — courage, self-sacrifice and the rest — can be at least as perfectly developed in other trials. There are in human life dangers every day bravely met and overcome which are not less terrible than those which face the soldier, in whom patriotism may be less a sentiment than a duty, and whose cowardice must be dearly paid.

War under Altered Conditions.

The Peace Societies of our century, untiring supporters of a point of view diametrically opposite to that of Hegel, owe their existence in the first place to new ideas on the subject of the relative advantages and disadvantages of war, which again were partly due to changes in the character of war itself, partly to a

new theory that the warfare of the future should be a war of free competition for industrial interests, or, in Herbert Spencer's language, that the warlike type of mankind should make room for an industrial type. This theory, amounting in the minds of some thinkers to a fervid conviction, and itself, in a sense, the source of what has been contemptuously styled our British "shopkeeper's policy" in Europe, was based on something more solid than mere enthusiasm. The years of peace which followed the downfall of Napoleon had brought immense increase in material wealth to countries like France and Britain. Something of the glamour had fallen away from the sword of the great Emperor. The illusive excitement of a desire for conquest had died: the glory of war had faded with it, but the burden still remained: its cost was still there, something to be calmly reckoned up and not soon to be forgotten. Europe was seen to be actually moving towards ruin. "We shall have to get rid of war in all civilised countries," said Louis Philippe in 1843. "Soon no nation will be able to afford it." War was not only becoming more costly. New conditions had altered it in other directions. With the development of technical science and its application to the perfecting of methods and instruments of destruction every new war was found to be bloodier than the last; and the day seemed to be in sight, when this very development would make war (with instruments of extermination) impossible altogether. The romance and picturesqueness with which it was invested in the days of hand-to-hand combat was gone. But, above all, war was now waged for questions fewer and more important than in the time of Kant. Napoleon's successful appeal to the masses had suggested to Prussia the idea of consciously nationalising the army. Our modern national wars exact a sacrifice, necessarily much more heavy, much more reluctantly made than those of the past which were fought with mercenary troops. Such wars have not only greater dignity: they are more earnest, and their issue, as in a sense the issue of conflict between higher and lower types of civilisation, is speedier and more decisive.

In the hundred years since Kant's death, much that he prophesied has come to pass, although sometimes by different paths than he anticipated. The strides made in recent years by commerce and the growing power of the people in every state have had much of the influence which he foretold. There is a greater reluctance to wage war.[84*] But, unfortunately, as Professor Paulsen points out, the progress of democracy and the nationalisation of war have not worked merely in the direction of progress towards peace. War has now become popular for the first time. "The progress of democracy in states," he says, (*Kant*, [85*]) "has not only not done away with war, but has very greatly changed the feeling of people towards it. With the universal military service, introduced by the Revolution, war has become the people's affair and popular, as it could not be in the case of dynastic wars carried on with mercenary troops." In the people the love of peace is strong, but so too is the love of a fight, the love of victory.

It is in the contemplation of facts and conflicting tendencies like these that Peace Societies[86*] have been formed. The peace party is, we may say, an eclectic body: it embraces many different sections of political opinion. There are those who hold, for instance, that peace is to be established on a basis of communism of property. There are others who insist on the establishment throughout Europe of a republican form of government, or again, on a redistribution of European territory in which Alsace-Lorraine is restored to France — changes of which at least the last two would be difficult to carry out, unless through international warfare. But these are not the fundamental general principles of peace workers. The members of this party agree in rejecting the principle of intervention, in demanding a complete or partial disarmament of the nations of Europe, and in requiring that all disputes between nations — and they admit the prospects of dispute — should be settled by means of arbitration. In how far are these principles useful or practicable?

The Value of Arbitration.

There is a strong feeling in favour of arbitration on the part of all classes of society. It is cheaper under all circumstances than war. It is a judgment at once more certain and more complete, excluding as far as possible the element of chance, leaving irritation perhaps behind it, but none of the lasting bitterness

which is the legacy of every war. Arbitration has an important place in all peace projects except that of Kant, whose federal union would naturally fulfil the function of a tribunal of arbitration. St. Pierre, Jeremy Bentham,[87] Bluntschli[88] the German publicist, Professor Lorimer[89] and others among political writers,[90] and among rulers, Louis Napoleon and the Emperor Alexander I. of Russia, have all made proposals more or less ineffectual for the peaceful settlement of international disputes. A number of cases have already been decided by this means. But let us examine the questions which have been at issue. Of a hundred and thirty matters of dispute settled by arbitration since 1815 (cf. *International Tribunals*, published by the Peace Society, 1899) it will be seen that all, with the exception of one or two trifling cases of doubt as to the succession to certain titles or principalities, can be classified roughly under two heads — disputes as to the determination of boundaries or the possession of certain territory, and questions of claims for compensation and indemnities due either to individuals or states, arising from the seizure of fleets or merchant vessels, the insult or injury to private persons and so on — briefly, questions of money or of territory. These may fairly be said to be trifling causes, not touching national honour or great political questions. That they should have been settled in this way, however, shows a great advance. Smaller causes than these have made some of the bloodiest wars in history. That arbitration should have been the means of preventing even one war which would otherwise have been waged is a strong reason why we should fully examine its claims. "Quand l'institution d'une haute cour," writes Laveleye, (*Des causes actuelles de guerre en Europe et de l'arbitrage*) "n'éviterait qu'une guerre sur vingt, il vaudrait encore la peine de l'établir." But history shows us that there is no single instance of a supreme conflict having been settled otherwise than by war. Arbitration is a method admirably adapted to certain cases: to those we have named, where it has been successfully applied, to the interpretation of contracts, to offences against the Law of Nations — some writers say to trivial questions of honour — in all cases where the use of armed force would be impossible, as, for instance, in any quarrel in which neutralised countries[91] like Belgium or Luxembourg should take a principal part, or in a difference between two nations, such as (to take an extreme case) the United States and Switzerland, which could not easily engage in actual combat. These cases, which we cannot too carefully examine, show that what is here essential is that it should be possible to formulate a juridical statement of the conflicting claims. In Germany the *Bundestag* had only power to decide questions of law. Other disputes were left to be fought out. Questions on which the existence and vital honour of a state depend — any question which nearly concerns the disputants — cannot be reduced to any cut and dry legal formula of right and wrong. We may pass over the consideration that in some cases (as in the Franco-Prussian War) the delay caused by seeking mediation of any kind would deprive a nation of the advantage its state of military preparation deserved. And we may neglect the problem of finding an impartial judge on some questions of dispute, although its solution might be a matter of extreme difficulty, so closely are the interests of modern nations bound up in one another. How could the Eastern Question, for example, be settled by arbitration? It is impossible that such a means should be sufficient for every case. Arbitration in other words may prevent war, but can never be a substitute for war. We cannot wonder that this is so. So numerous and conflicting are the interests of states, so various are the grades of civilisation to which they have attained and the directions along which they are developing, that differences of the most vital kind are bound to occur and these can never be settled by any peaceful means at present known to Europe. This is above all true where the self-preservation[92] or independence of a people are concerned. Here the "good-will" of the nations who disagree would necessarily be wanting: there could be no question of the arbitration of an outsider.

But, indeed, looking away from questions so vital and on which there can be little difference of opinion, we are apt to forget, when we allow ourselves to talk extravagantly of the future of arbitration, that every nation thinks, or at least pretends to think, that it is in the right in every dispute in which it appears (cf. Kant: *Perpetual Peace*, .): and, as a matter of history, there has never been a conflict between civilised states in which an appeal to this "right" on the part of each has not been made. We talk

glibly of the right and wrong of this question or of that, of the justice of this war, the iniquity of that. But what do these terms really mean? *Do* we know, in spite of the labour which has been spent on this question by the older publicists, which are the causes that justify a war? Is it not true that the same war might be just in one set of circumstances and unjust in another? Practically all writers on this subject, exclusive of those who apply the biblical doctrine of non-resistance, agree in admitting that a nation is justified in defending its own existence or independence, that this is even a moral duty as it is a fundamental right of a state. Many, especially the older writers, make the confident assertion that all wars of defence are just. But will this serve as a standard? Gibbon tells us somewhere, that Livy asserts that the Romans conquered the world in self-defence. The distinction between wars of aggression and defence is one very difficult to draw. The cause of a nation which waits to be actually attacked is often lost: the critical moment in its defence may be past. The essence of a state's defensive power may lie in a readiness to strike the first blow, or its whole interests may be bound up in the necessity of fighting the matter out in its enemy's country, rather than at home. It is not in the strictly military interpretation of the term "defensive", but in its wider ethical and political sense that we can speak of wars of defence as just. But, indeed, we cannot judge these questions abstractly. Where a war is necessary, it matters very little whether it is just or not. Only the judgment of history can finally decide; and generally it seems at the time that both parties have something of right on their side, something perhaps too of wrong.[93*]

A consideration of difficulties like these brings us to a realisation of the fact that the chances are small that a nation, in the heat of a dispute, will admit the likelihood of its being in the wrong. To refuse to admit this is generally tantamount to a refusal to submit the difficulty to arbitration. And neither international law, nor the moral force of public opinion can induce a state to act contrary to what it believes to be its own interest. Moreover, as international law now stands, it is not a duty to have recourse to arbitration. This was made quite clear in the proceedings of the Peace Conference at the Hague in 1899.[94*] It was strongly recommended that arbitration should be sought wherever it was possible, but, at the same time definitely stated, that this course could in no case be compulsory. In this respect things have not advanced beyond the position of the Paris Congress of 1856.[95*] The wars waged in Europe subsequent to that date, have all been begun without previous attempt at mediation.

But the work of the peace party regarding the humaner methods of settlement is not to be neglected. The popular feeling which they have been partly the means of stimulating has no doubt done something to influence the action of statesmen towards extreme caution in the treatment of questions likely to arouse national passions and prejudices. Arbitration has undoubtedly made headway in recent years. Britain and America, the two nations whose names naturally suggest themselves to us as future centres of federative union, both countries whose industrial interests are numerous and complicated, have most readily, as they have most frequently, settled disputes in this practical manner. It has shown itself to be a policy as economical as it is business-like. Its value, in its proper place, cannot be overrated by any Peace Congress or by any peace pamphlet; but we have endeavoured to make it clear that this sphere is but a limited one. The "good-will" may not be there when it ought perhaps to appear: it will certainly not be there when any vital interest is at stake. But, even if this were not so and arbitration were the natural sequence of every dispute, no coercive force exists to enforce the decree of the court. The moral restraint of public opinion is here a poor substitute. Treaties, it is often said, are in the same position; but treaties have been broken, and will no doubt be broken again. We are moved to the conclusion that a thoroughly logical peace programme cannot stop short of the principle of federation. Federal troops are necessary to carry out the decrees of a tribunal of arbitration, if that court is not to run a risk of being held feeble and ineffectual. Except on some such basis, arbitration, as a substitute for war, stands on but a weak footing.

Disarmament.

The efforts of the Peace Society are directed with even less hope of complete success against another

evil of our time, the crushing burden of modern armaments. We have peace at this moment, but at a daily increasing cost. The Peace Society is rightly concerned in pressing this point. It is not enough to keep off actual war: there is a limit to the price we can afford to pay even for peace. Probably no principle has cost Europe so much in the last century as that handed down from Rome:— "Si vis pacem, para bellum." It is now a hundred and fifty years since Montesquieu[96*] protested against this "new distemper" which was spreading itself over Europe; but never, in time of peace, has complaint been so loud or so general as now: and this, not only against the universal burden of taxation which weighs upon all nations alike, but, in continental countries, against the waste of productive force due to compulsory military service, a discontent which seems to strike at the very foundations of society. Vattel relates that in early times a treaty of peace generally stipulated that both parties should afterwards disarm. And there is no doubt that Kant was right in regarding standing armies as a danger to peace, not only as openly expressing the rivalry and distrust between nation and nation which Hobbes regards as the basis of international relations, but also as putting a power into the hand of a nation which it may some day have the temptation to abuse. A war-loving, overbearing spirit in a people thrives none the worse for a consciousness that its army or navy can hold its own with any other in Europe. Were it not the case that the essence of armed peace is that a high state of efficiency should be general, the danger to peace would be very great indeed. No doubt it is due to this fact that France has kept quietly to her side of the Rhine during the last thirty years. The annexation of Alsace-Lorraine was an immediate stimulus to the increase of armaments; but otherwise, just because of this greater efficiency and the slightly stronger military position of Germany, it has been an influence on the side of peace.

The Czar's Rescript of 1898 gave a new stimulus to an interest in this question which the subsequent conference at the Hague was unable fully to satisfy. We are compelled to consider carefully how a process of simultaneous disarmament can actually be carried out, and what results might be anticipated from this step, with a view not only to the present but the future. Can this be done in accordance with the principles of justice? Organisations like a great navy or a highly disciplined army have been built up, in the course of centuries, at great cost and at much sacrifice to the nation. They are the fruit of years of wise government and a high record of national industry. Are such visible tokens of the culture and character and worth of a people to be swept away and Britain, France, Germany, Italy, Spain, Turkey to stand on the same level? And, even if no such ethical considerations should arise, on what method are we to proceed? The standard as well as the nature of armament depends in every state on its geographical conditions and its historical position. An ocean-bound empire like Britain is comparatively immune from the danger of invasion: her army can be safely despatched to the colonies, her fleet protects her at home, her position is one of natural defence. But Germany and Austria find themselves in exactly opposite circumstances, with the hard necessity imposed upon them of guarding their frontiers on every side. The safety of a nation like Germany is in the hands of its army: its military strength lies in an almost perfect mastery of the science of attack.

The Peace Society has hitherto made no attempt to face the difficulties inseparable from any attempt to apply a uniform method of treatment to peculiarities and conditions so conflicting and various as these. Those who have been more conscientious have not been very successful in solving them. Indeed, so constantly is military technique changing that it is difficult to prophesy wherein will lie, a few years hence, the essence of a state's defensive power or what part the modern navy will play in this defence. No careful thinker would suggest, in the face of dangers threatening from the East,[97*] a complete disarmament. The simplest of many suggestions made — but this on the basis of universal conscription — seems to be that the number of years or months of compulsory military service should be reduced to some fixed period. But this does not touch the difficulty of colonial empires[98*] like Britain which might to a certain extent disarm, like their neighbours, in Europe, but would be compelled to keep an army for the defence of their colonies elsewhere. It is, in the meantime, inevitable that Europe should keep up a high standard

of armament — this is, (and even if we had European federation, would remain) an absolute necessity as a protection against the yellow races, and in Europe itself there are at present elements hostile to the cause of peace. Alsace-Lorraine, Polish Prussia, Russian Poland and Finland are still, to a considerable degree, sources of discontent and dissatisfaction. But in Russia itself lies the great obstacle to a future European peace or European federation: we can scarcely picture Russia as a reliable member of such a union. That Russia should disarm is scarcely feasible, in view of its own interest: it has always to face the danger of rebellion in Poland and anarchy at home. But that Europe should disarm, before Russia has attained a higher civilisation, a consciousness of its great future as a north-eastern, inter-oceanic empire, and a government more favourable to the diffusion of liberty, is still less practicable.[99*] We have here to fall back upon federation again. It is not impossible that, in the course of time, this problem may be solved and that the contribution to the federal troops of a European union may be regulated upon some equitable basis the form of which we cannot now well prophesy.

European federation would likewise meet all difficulties where a risk might be likely to occur of one nation intervening to protect another. As we have said (above, , *note*) nations are now-a-days slow to intervene in the interests of humanity: they are in general constrained to do so only by strong motives of self-interest, and when these are not at hand they are said to refrain from respect for another’s right of independent action. Actually a state which is actuated by less selfish impulses is apt to lose considerably more than it gains, and the feeling of the people expresses itself strongly against any quixotic or sentimental policy. It is not impossible that the Powers may have yet to intervene to protect Turkey against Russia. Such a step might well be dictated purely by a proper care for the security of Europe; but wars of this kind seem not likely to play an important part in the near future.

We have said that the causes of difference which may be expected to disturb the peace of Europe are now fewer. A modern sovereign no longer spends his leisure time in the excitement of slaying or seeing slain. He could not, if he would. His honour and his vanity are protected by other means: they play no longer an important part in the affairs of nations. The causes of war can no more be either trifling or personal. Some crises there are, which are ever likely to be fatal to peace. There present themselves, in the lives of nations, ideal ends for which everything must be sacrificed: there are rights which must at all cost be defended. The question of civil war we may neglect: liberty and wise government are the only medicine for social discontent, and much may be hoped from that in the future. But now, looking beyond the state to the great family of civilised nations, we may say that the one certain cause of war between them or of rebellion within a future federated union will be a menace to the sovereign rights, the independence and existence of any member of that federation. Other causes of quarrel offer a more hopeful prospect. Some questions have been seen to be specially fitted for the legal procedure of a tribunal of arbitration, others to be such as a federal court would quickly settle. The preservation of the balance of power which Frederick the Great regarded as the talisman of peace in Europe — a judgment surely not borne out by experience — is happily one of the causes of war which are of the past. Wars of colonisation, such as would be an attempt on the part of Russia to conquer India, seem scarcely likely to recur except between higher and lower races. The cost is now-a-days too great. Political wars, wars for national union and unity, of which there were so many during the past century, seem at present not to be near at hand; and the integration of European nations — what may be called the great mission of war — is, for the moment, practically complete; for it is highly improbable that either Alsace-Lorraine or Poland — still less Finland — will be the cause of a war of this kind.

Our hope lies in a federated Europe. Its troops would serve to preserve law and order in the country from which they were drawn and to protect its colonies abroad; but their higher function would be to keep peace in Europe, to protect the weaker members of the Federation and to enforce the decision of the majority, either, if necessary, by actual war, or by the mere threatening demonstrations of fleets, such as have before proved effectual.

We have carefully considered what has been attempted by peace workers, and we have now to take note that all the results of the last fifty years are not to be attributed to their conscientious but often ill-directed labour. The diminution of the causes of war is to be traced less to the efforts of the Peace Society, (except indirectly, in so far as they have influenced the minds of the masses) than to the increasing power of the people themselves. The various classes of society are opposed to violent methods of settlement, not in the main from a conviction as to the wrongfulness of war or from any fanatical enthusiasm for a brotherhood of nations, but from self-interest. War is death to the industrial interests of a nation. It is vain to talk, in the language of past centuries, of trade between civilised countries being advanced and markets opened up or enlarged by this means.[100*] Kings give up the dream of military glory and accept instead the certainty of peaceful labour and industrial progress, and all this (for we may believe that to some monarchs it is much) from no enthusiastic appreciation of the efforts of Peace Societies, from no careful examination of the New Testament nor inspired interpretation of its teaching. It is self-interest, the prosperity of the country — patriotism, if you will — that seems better than war.

What may be expected from Federation.

Federation and federation alone can help out the programme of the Peace Society. It cannot be pretended that it will do everything. To state the worst at once, it will not prevent war. Even the federations of the states of Germany and America, bound together by ties of blood and language and, in the latter case, of sentiment, were not strong enough within to keep out dissension and disunion.[101*] Wars would not cease, but they would become much less frequent. “Why is there no longer war between England and Scotland? Why did Prussian and Hanoverian fight side by side in 1870, though they had fought against each other only four years before?... If we wish to know how war is to cease, we should ask ourselves how it *has* ceased” (Professor D. G. Ritchie, *op. cit.*,). Wars between different grades of civilisation are bound to exist as long as civilisation itself exists. The history of culture and of progress has been more or less a history of war. A calm acceptance of this position may mean to certain short-sighted, enthusiastic theorists an impossible sacrifice of the ideal; but, the sacrifice once made, we stand on a better footing with regard to at least one class of arguments against a federation of the world. Such a union will lead, it is said, to an equality in culture, a sameness of interests fatal to progress; all struggle and conflict will be cast out of the state itself; national characteristics and individuality will be obliterated; the lamb and the wolf will lie down together: stagnation will result, intellectual progress will be at an end, politics will be no more, history will stand still. This is a sweeping assertion, an alarming prophecy. But a little thought will assure us that there is small cause for apprehension. There can be no such standstill, no millennium in human affairs. A gradual smoothing down of sharply accentuated national characteristics there might be: this is a result which a freer, more friendly intercourse between nations would be very likely to produce. But conflicting interests, keen rivalry in their pursuit, difference of culture and natural aptitude, and all or much of the individuality which language and literature, historical and religious traditions, even climatic and physical conditions produce are bound to survive until the coming of some more overwhelming and far-spreading revolution than this. It would not be well if it were otherwise, if those “unconscious and invisible peculiarities” in which Fichte sees the hand of God and the guarantee of a nation’s future dignity, virtue and merit should be swept away. (*Reden an die deutsche Nation*,[102*] 1807.) Nor is stagnation to be feared. “Strife,” said the old philosopher, “is the father of all things.” There can be no lasting peace in the processes of nature and existence. It has been in the constant rivalry between classes within themselves, and in the struggle for existence with other races that great nations have reached the highwater mark of their development. A perpetual peace in international relations we may — nay, surely will — one day have, but eternity will not see the end to the feverish unrest within the state and the jealous competition and distrust between individuals, groups and classes of society. Here there must ever be perpetual war.

It was only of this political peace between civilised nations that Kant thought.[103*] In this form it is bound to come. The federation of Europe will follow the federation of Germany and of Italy, not only because it offers a solution of many problems which have long taxed Europe, but because great men and careful thinkers believe in it.[104*] It may not come quickly, but such men can afford to wait. "If I were legislator," cried Jean Jacques Rousseau, "I should not say what ought to be done, but I would do it." This is the attitude of the unthinking, unpractical enthusiast. The wish is not enough: the will is not enough. The mills of God must take their own time: no hope or faith of ours, no struggle or labour even can hurry them.

It is a misfortune that the Peace Society has identified itself with so narrow and uncritical an attitude towards war, and that the copious eloquence of its members is not based upon a consideration of the practical difficulties of the case. This well-meaning, hard working and enthusiastic body would like to do what is impossible by an impossible method. The end which it sets for itself is an unattainable one. But this need not be so. To make unjustifiable aggression difficult, to banish unworthy pretexts for making war might be a high enough ideal for any enthusiasm and offer scope wide enough for the labours of any society. But the Peace Society has not contented itself with this great work. Through its over-estimation of the value of peace,[105*] its cause has been injured and much of its influence has been weakened or lost. Our age is one which sets a high value upon human life; and to this change of thinking may be traced our modern reform in the methods of war and all that has been done for the alleviation of suffering by the great Conventions of recent years. For the eyes of most people war is merely a hideous spectacle of bloodshed and deliberate destruction of life: this is its obvious side. But it is possible to exaggerate this confessedly great evil. Peace has its sacrifices as well as war: the progress of humanity requires that the individual should often be put aside for the sake of lasting advantage to the whole. An opposite view can only be reckoned individualistic, perhaps materialistic. "The reverence for human life," says Martineau, (*Studies of Christianity*, p, 354) "is carried to an immoral idolatry, when it is held more sacred than justice and right, and when the spectacle of blood becomes more horrible than the sight of desolating tyrannies and triumphant hypocrisies.... We have, therefore, no more doubt that a war may be right, than that a policeman may be a security for justice, and we object to a fortress as little as to a handcuff."

The Peace Society are not of this opinion: they greatly doubt that a war may be right, and they rarely fail to take their doubts to the tribunal of Scripture. Their efforts are well meant, this piety may be genuine enough; but a text is rarely a proof of anything, and in any case serves one man in as good stead as another. We remember that "the devil can cite Scripture for his purpose." This unscientific method of proof or persuasion has ever been widely popular. It is a serious examination of the question that we want, a more careful study of its actual history and of the possibilities of human nature; less vague, exaggerated language about what ought to be done, and a realisation of what has been actually achieved; above all, a clear perception of what may fairly be asked from the future.

It used to be said — is perhaps asserted still by the war-lovers — that there was no path to civilisation which had not been beaten by the force of arms, no height to which the sword had not led the way. The inspiration of war was upon the great arts of civilisation: its hand was upon the greatest of the sciences. These obligations extended even to commerce. War not only created new branches of industry, it opened new markets and enlarged the old. These are great claims, according to which war might be called the moving principle of history. If we keep our eyes fixed upon the history of the past, they seem not only plausible: they are in a great sense true. Progress did tread at the heels of the great Alexander's army: the advance of European culture stands in the closest connection with the Crusades. But was this happy compensation for a miserable state of affairs not due to the peculiarly unsocial conditions of early times and the absence of every facility for the interchange of ideas or material advantages? It is inconceivable that now-a-days[106*] any aid to the development of thought in Europe should come from war. The old adage, in more than a literal sense, has but too often been proved true:— "Inter arma, Musae silent." Peace is for us the real promoter of culture.

We have to endeavour to take an intermediate course between uncritical praise and wholesale condemnation, between extravagant expectation and unjustifiable pessimism. War used to be the rule: it is now an overwhelming and terrible exception — an interruption to the peaceful prosperous course of things, inflicting unlimited suffering and temporary or lasting loss. Its evils are on the surface, apparent to the most unthinking observer. The day may yet dawn, when Europeans will have learned to regard the force of arms as an instrument for the civilisation of savage or half-savage races, and war within their continent as civil war, necessary and justifiable sometimes perhaps, but still a blot upon their civilisation and brotherhood as men. Such a suggestion rings strangely. But the great changes, which the roll of centuries has marked, once came upon the world not less unexpectedly. How far off must the idea of a civil peace have seemed to small towns and states of Europe in the fifteenth century! How strange, only a century ago, would the idea of applying steam power or electrical force have seemed to ourselves! Let us not despair. War has played a great part in the history of the world: it has been ever the great architect of nations, the true mother of cities. It has justified itself to-day in the union of kindred peoples, the making of great empires. It may be that one decisive war may yet be required to unite Europe. May Europe survive that struggle and go forward fearlessly to her great future! A peaceful future that may not be. It must never be forgotten that war is sometimes a moral duty, that it is ever the natural sequence of human passion and human prejudice. An unbroken peace we cannot and do not expect; but it is this that we must work for. As Kant says, we must keep it before us as an ideal.

TRANSLATION[107*]

"PERPETUAL PEACE"[108*]

We need not try to decide whether this satirical inscription, (once found on a Dutch innkeeper's sign-board above the picture of a churchyard) is aimed at mankind in general, or at the rulers of states in particular, unwearying in their love of war, or perhaps only at the philosophers who cherish the sweet dream of perpetual peace. The author of the present sketch would make one stipulation, however. The practical politician stands upon a definite footing with the theorist: with great self-complacency he looks down upon him as a mere pedant whose empty ideas can threaten no danger to the state (starting as it does from principles derived from experience), and who may always be permitted to knock down his eleven skittles at once without a worldly-wise statesman needing to disturb himself. Hence, in the event of a quarrel arising between the two, the practical statesman must always act consistently, and not scent danger to the state behind opinions ventured by the theoretical politician at random and publicly expressed. With which saving clause (*clausula salvatoria*) the author will herewith consider himself duly and expressly protected against all malicious misinterpretation.

FIRST SECTION

CONTAINING THE PRELIMINARY ARTICLES OF PERPETUAL PEACE BETWEEN STATES

1.— “No treaty of peace shall be regarded as valid, if made with the secret reservation of material for a future war.”

For then it would be a mere truce, a mere suspension of hostilities, not peace. A peace signifies the end of all hostilities and to attach to it the epithet “eternal” is not only a verbal pleonasm, but matter of suspicion. The causes of a future war existing, although perhaps not yet known to the high contracting parties themselves, are entirely annihilated by the conclusion of peace, however acutely they may be ferreted out of documents in the public archives. There may be a mental reservation of old claims to be thought out at a future time, which are, none of them, mentioned at this stage, because both parties are too much exhausted to continue the war, while the evil intention remains of using the first favourable opportunity for further hostilities. Diplomacy of this kind only Jesuitical casuistry can justify: it is beneath the dignity of a ruler, just as acquiescence in such processes of reasoning is beneath the dignity of his minister, if one judges the facts as they really are.[109*]

If, however, according to present enlightened ideas of political wisdom, the true glory of a state lies in the uninterrupted development of its power by every possible means, this judgment must certainly strike one as scholastic and pedantic.

2.— “No state having an independent existence — whether it be great or small — shall be acquired by another through inheritance, exchange, purchase or donation.”[110*]

For a state is not a property (*patrimonium*), as may be the ground on which its people are settled. It is a society of human beings over whom no one but itself has the right to rule and to dispose. Like the trunk of a tree, it has its own roots, and to graft it on to another state is to do away with its existence as a moral person, and to make of it a thing. Hence it is in contradiction to the idea of the original contract without which no right over a people is thinkable.[111*] Everyone knows to what danger the bias in favour of these modes of acquisition has brought Europe (in other parts of the world it has never been known). The custom of marriage between states, as if they were individuals, has survived even up to the most recent times,[112*] and is regarded partly as a new kind of industry by which ascendency may be acquired through family alliances, without any expenditure of strength; partly as a device for territorial expansion. Moreover, the hiring out of the troops of one state to another to fight against an enemy not at war with their native country is to be reckoned in this connection; for the subjects are in this way used and abused at will as personal property.

3.— “Standing armies (*miles perpetuus*) shall be abolished in course of time.”

For they are always threatening other states with war by appearing to be in constant readiness to fight. They incite the various states to outrival one another in the number of their soldiers, and to this number no limit can be set. Now, since owing to the sums devoted to this purpose, peace at last becomes even more oppressive than a short war, these standing armies are themselves the cause of wars of aggression, undertaken in order to get rid of this burden. To which we must add that the practice of hiring men to kill or to be killed seems to imply a use of them as mere machines and instruments in the hand of another (namely, the state) which cannot easily be reconciled with the right of humanity in our own person.[113*] The matter stands quite differently in the case of voluntary periodical military exercise on the part of citizens of the state, who thereby seek to secure themselves and their country against attack from without.

The accumulation of treasure in a state would in the same way be regarded by other states as a menace of war, and might compel them to anticipate this by striking the first blow. For of the three forces, the

power of arms, the power of alliance and the power of money, the last might well become the most reliable instrument of war, did not the difficulty of ascertaining the amount stand in the way.

4.— "No national debts shall be contracted in connection with the external affairs of the state."

This source of help is above suspicion, where assistance is sought outside or within the state, on behalf of the economic administration of the country (for instance, the improvement of the roads, the settlement and support of new colonies, the establishment of granaries to provide against seasons of scarcity, and so on). But, as a common weapon used by the Powers against one another, a credit system under which debts go on indefinitely increasing and are yet always assured against immediate claims (because all the creditors do not put in their claim at once) is a dangerous money power. This ingenious invention of a commercial people in the present century is, in other words, a treasure for the carrying on of war which may exceed the treasures of all the other states taken together, and can only be exhausted by a threatening deficiency in the taxes — an event, however, which will long be kept off by the very briskness of commerce resulting from the reaction of this system on industry and trade. The ease, then, with which war may be waged, coupled with the inclination of rulers towards it — an inclination which seems to be implanted in human nature — is a great obstacle in the way of perpetual peace. The prohibition of this system must be laid down as a preliminary article of perpetual peace, all the more necessarily because the final inevitable bankruptcy of the state in question must involve in the loss many who are innocent; and this would be a public injury to these states. Therefore other nations are at least justified in uniting themselves against such an one and its pretensions.

5.— "No state shall violently interfere with the constitution and administration of another."

For what can justify it in so doing? The scandal which is here presented to the subjects of another state? The erring state can much more serve as a warning by exemplifying the great evils which a nation draws down on itself through its own lawlessness. Moreover, the bad example which one free person gives another, (as *scandalum acceptum*) does no injury to the latter. In this connection, it is true, we cannot count the case of a state which has become split up through internal corruption into two parts, each of them representing by itself an individual state which lays claim to the whole. Here the yielding of assistance to one faction could not be reckoned as interference on the part of a foreign state with the constitution of another, for here anarchy prevails. So long, however, as the inner strife has not yet reached this stage the interference of other powers would be a violation of the rights of an independent nation which is only struggling with internal disease.[114*] It would therefore itself cause a scandal, and make the autonomy of all states insecure.

6.— "No state at war with another shall countenance such modes of hostility as would make mutual confidence impossible in a subsequent state of peace: such are the employment of assassins (*percussores*) or of poisoners (*venefici*), breaches of capitulation, the instigating and making use of treachery (*perduellio*) in the hostile state."

These are dishonourable stratagems. For some kind of confidence in the disposition of the enemy must exist even in the midst of war, as otherwise peace could not be concluded, and the hostilities would pass into a war of extermination (*bellum internecinum*). War, however, is only our wretched expedient of asserting a right by force, an expedient adopted in the state of nature, where no court of justice exists which could settle the matter in dispute. In circumstances like these, neither of the two parties can be called an unjust enemy, because this form of speech presupposes a legal decision: the issue of the conflict — just as in the case of the so-called judgments of God — decides on which side right is. Between states, however, no punitive war (*bellum punitivum*) is thinkable, because between them a relation of superior and inferior does not exist. Whence it follows that a war of extermination, where the process of annihilation would strike both parties at once and all right as well, would bring about perpetual peace only in the great graveyard of the human race. Such a war then, and therefore also the use of all means which lead to it, must be absolutely forbidden. That the methods just mentioned do inevitably lead to this

result is obvious from the fact that these infernal arts, already vile in themselves, on coming into use, are not long confined to the sphere of war. Take, for example, the use of spies (*uti exploratoribus*). Here only the dishonesty of others is made use of; but vices such as these, when once encouraged, cannot in the nature of things be stamped out and would be carried over into the state of peace, where their presence would be utterly destructive to the purpose of that state.

Although the laws stated are, objectively regarded, (*i.e.* in so far as they affect the action of rulers) purely prohibitive laws (*leges prohibitivæ*), some of them (*leges strictæ*) are strictly valid without regard to circumstances and urgently require to be enforced. Such are Nos. 1, 5, 6. Others, again, (like Nos. 2, 3, 4) although not indeed exceptions to the maxims of law, yet in respect of the practical application of these maxims allow subjectively of a certain latitude to suit particular circumstances. The enforcement of these *leges latæ* may be legitimately put off, so long as we do not lose sight of the ends at which they aim. This purpose of reform does not permit of the deferment of an act of restitution (as, for example, the restoration to certain states of freedom of which they have been deprived in the manner described in article 2) to an infinitely distant date — as Augustus used to say, to the "Greek Kalends", a day that will never come. This would be to sanction non-restitution. Delay is permitted only with the intention that restitution should not be made too precipitately and so defeat the purpose we have in view. For the prohibition refers here only to the *mode of acquisition* which is to be no longer valid, and not to the *fact of possession* which, although indeed it has not the necessary title of right, yet at the time of so-called acquisition was held legal by all states, in accordance with the public opinion of the time.[115][*]

SECOND SECTION

CONTAINING THE DEFINITIVE ARTICLES OF A PERPETUAL PEACE BETWEEN STATES

A state of peace among men who live side by side is not the natural state (*status naturalis*), which is rather to be described as a state of war:[116*] that is to say, although there is not perhaps always actual open hostility, yet there is a constant threatening that an outbreak may occur. Thus the state of peace must be *established*.[117*] For the mere cessation of hostilities is no guarantee of continued peaceful relations, and unless this guarantee is given by every individual to his neighbour — which can only be done in a state of society regulated by law — one man is at liberty to challenge another and treat him as an enemy.[118*]

FIRST DEFINITIVE ARTICLE OF PERPETUAL PEACE

I.— "The civil constitution of each state shall be republican."

The only constitution which has its origin in the idea of the original contract, upon which the lawful legislation of every nation must be based, is the republican.[119*] It is a constitution, in the first place, founded in accordance with the principle of the freedom of the members of society as human beings: secondly, in accordance with the principle of the dependence of all, as subjects, on a common legislation: and, thirdly, in accordance with the law of the equality of the members as citizens. It is then, looking at the question of right, the only constitution whose fundamental principles lie at the basis of every form of civil constitution. And the only question for us now is, whether it is also the one constitution which can lead to perpetual peace.

Now the republican constitution apart from the soundness of its origin, since it arose from the pure source of the concept of right, has also the prospect of attaining the desired result, namely, perpetual peace. And the reason is this. If, as must be so under this constitution, the consent of the subjects is required to determine whether there shall be war or not, nothing is more natural than that they should weigh the matter well, before undertaking such a bad business. For in decreeing war, they would of necessity be resolving to bring down the miseries of war upon their country. This implies: they must fight themselves; they must hand over the costs of the war out of their own property; they must do their poor best to make good the devastation which it leaves behind; and finally, as a crowning ill, they have to accept a burden of debt which will embitter even peace itself, and which they can never pay off on account of the new wars which are always impending. On the other hand, in a government where the subject is not a citizen holding a vote, (*i.e.* in a constitution which is not republican), the plunging into war is the least serious thing in the world. For the ruler is not a citizen, but the owner of the state, and does not lose a whit by the war, while he goes on enjoying the delights of his table or sport, or of his pleasure palaces and gala days. He can therefore decide on war for the most trifling reasons, as if it were a kind of pleasure party.[120*] Any justification of it that is necessary for the sake of decency he can leave without concern to the diplomatic corps who are always only too ready with their services.

* * *

The following remarks must be made in order that we may not fall into the common error of confusing the republican with the democratic constitution. The forms of the state (*civitas*)[121*] may be classified according to either of two principles of division: — the difference of the persons who hold the supreme authority in the state, and the manner in which the people are governed by their ruler whoever he may be. The first is properly called the form of sovereignty (*forma imperii*), and there can be only three constitutions differing in this respect: where, namely, the supreme authority belongs to only one, to several individuals working together, or to the whole people constituting the civil society. Thus we have autocracy or the sovereignty of a monarch, aristocracy or the sovereignty of the nobility, and democracy or the sovereignty of the people. The second principle of division is the form of government (*forma*

regiminis), and refers to the way in which the state makes use of its supreme power: for the manner of government is based on the constitution, itself the act of that universal will which transforms a multitude into a nation. In this respect the form of government is either republican or despotic. Republicanism is the political principle of severing the executive power of the government from the legislature. Despotism is that principle in pursuance of which the state arbitrarily puts into effect laws which it has itself made: consequently it is the administration of the public will, but this is identical with the private will of the ruler. Of these three forms of a state, democracy, in the proper sense of the word, is of necessity despotism, because it establishes an executive power, since all decree regarding — and, if need be, against — any individual who dissents from them. Therefore the "whole people", so-called, who carry their measure are really not all, but only a majority: so that here the universal will is in contradiction with itself and with the principle of freedom.

Every form of government in fact which is not representative is really no true constitution at all, because a law-giver may no more be, in one and the same person, the administrator of his own will, than the universal major premise of a syllogism may be, at the same time, the subsumption under itself of the particulars contained in the minor premise. And, although the other two constitutions, autocracy and aristocracy, are always defective in so far as they leave the way open for such a form of government, yet there is at least always a possibility in these cases, that they may take the form of a government in accordance with the spirit of a representative system. Thus Frederick the Great used at least to *say* that he was "merely the highest servant of the state."[122]* The democratic constitution, on the other hand, makes this impossible, because under such a government every one wishes to be master. We may therefore say that the smaller the staff of the executive — that is to say, the number of rulers — and the more real, on the other hand, their representation of the people, so much the more is the government of the state in accordance with a possible republicanism; and it may hope by gradual reforms to raise itself to that standard. For this reason, it is more difficult under an aristocracy than under a monarchy — while under a democracy it is impossible except by a violent revolution — to attain to this, the one perfectly lawful constitution. The kind of government,[123]* however, is of infinitely more importance to the people than the kind of constitution, although the greater or less aptitude of a people for this ideal greatly depends upon such external form. The form of government, however, if it is to be in accordance with the idea of right, must embody the representative system in which alone a republican form of administration is possible and without which it is despotic and violent, be the constitution what it may. None of the ancient so-called republics were aware of this, and they necessarily slipped into absolute despotism which, of all despotisms, is most endurable under the sovereignty of one individual.

SECOND DEFINITIVE ARTICLE OF PERPETUAL PEACE

II.— "The law of nations shall be founded on a federation of free states."

Nations, as states, may be judged like individuals who, living in the natural state of society — that is to say, uncontrolled by external law — injure one another through their very proximity.[124]* Every state, for the sake of its own security, may — and ought to — demand that its neighbour should submit itself to conditions, similar to those of the civil society where the right of every individual is guaranteed. This would give rise to a federation of nations which, however, would not have to be a State of nations.[125]* That would involve a contradiction. For the term "state" implies the relation of one who rules to those who obey — that is to say, of law-giver to the subject people: and many nations in one state would constitute only one nation, which contradicts our hypothesis, since here we have to consider the right of one nation against another, in so far as they are so many separate states and are not to be fused into one.

The attachment of savages to their lawless liberty, the fact that they would rather be at hopeless variance with one another than submit themselves to a legal authority constituted by themselves, that they therefore prefer their senseless freedom to a reason-governed liberty, is regarded by us with profound contempt as barbarism and uncivilisation and the brutal degradation of humanity. So one would think that

civilised races, each formed into a state by itself, must come out of such an abandoned condition as soon as they possibly can. On the contrary, however, every state thinks rather that its majesty (the "majesty" of a people is an absurd expression) lies just in the very fact that it is subject to no external legal authority; and the glory of the ruler consists in this, that, without his requiring to expose himself to danger, thousands stand at his command ready to let themselves be sacrificed for a matter of no concern to them.[126*] The difference between the savages of Europe and those of America lies chiefly in this, that, while many tribes of the latter have been entirely devoured by their enemies, Europeans know a better way of using the vanquished than by eating them; and they prefer to increase through them the number of their subjects, and so the number of instruments at their command for still more widely spread war.

The depravity of human nature[127*] shows itself without disguise in the unrestrained relations of nations to each other, while in the law-governed civil state much of this is hidden by the check of government. This being so, it is astonishing that the word "right" has not yet been entirely banished from the politics of war as pedantic, and that no state has yet ventured to publicly advocate this point of view. For Hugo Grotius, Puffendorf, Vattel and others — Job's comforters, all of them — are always quoted in good faith to justify an attack, although their codes, whether couched in philosophical or diplomatic terms, have not — nor can have — the slightest legal force, because states, as such, are under no common external authority; and there is no instance of a state having ever been moved by argument to desist from its purpose, even when this was backed up by the testimony of such great men. This homage which every state renders — in words at least — to the idea of right, proves that, although it may be slumbering, there is, notwithstanding, to be found in man a still higher natural moral capacity by the aid of which he will in time gain the mastery over the evil principle in his nature, the existence of which he is unable to deny. And he hopes the same of others; for otherwise the word "right" would never be uttered by states who wish to wage war, unless to deride it like the Gallic Prince who declared:— "The privilege which nature gives the strong is that the weak must obey them."[128*]

The method by which states prosecute their rights can never be by process of law — as it is where there is an external tribunal — but only by war. Through this means, however, and its favourable issue, victory, the question of right is never decided. A treaty of peace makes, it may be, an end to the war of the moment, but not to the conditions of war which at any time may afford a new pretext for opening hostilities; and this we cannot exactly condemn as unjust, because under these conditions everyone is his own judge. Notwithstanding, not quite the same rule applies to states according to the law of nations as holds good of individuals in a lawless condition according to the law of nature, namely, "that they ought to advance out of this condition." This is so, because, as states, they have already within themselves a legal constitution, and have therefore advanced beyond the stage at which others, in accordance with their ideas of right, can force them to come under a wider legal constitution. Meanwhile, however, reason, from her throne of the supreme law-giving moral power, absolutely condemns war[129*] as a morally lawful proceeding, and makes a state of peace, on the other hand, an immediate duty. Without a compact between the nations, however, this state of peace cannot be established or assured. Hence there must be an alliance of a particular kind which we may call a covenant of peace (*foedus pacificum*), which would differ from a treaty of peace (*pactum pacis*) in this respect, that the latter merely puts an end to one war, while the former would seek to put an end to war for ever. This alliance does not aim at the gain of any power whatsoever of the state, but merely at the preservation and security of the freedom of the state for itself and of other allied states at the same time.[130*] The latter do not, however, require, for this reason, to submit themselves like individuals in the state of nature to public laws and coercion. The practicability or objective reality of this idea of federation which is to extend gradually over all states and so lead to perpetual peace can be shewn. For, if Fortune ordains that a powerful and enlightened people should form a republic, — which by its very nature is inclined to perpetual peace — this would serve as a centre of federal union for other states wishing to join, and thus secure conditions of freedom among the states in

accordance with the idea of the law of nations. Gradually, through different unions of this kind, the federation would extend further and further.

It is quite comprehensible that a people should say:— "There shall be no war among us, for we shall form ourselves into a state, that is to say, constitute for ourselves a supreme legislative, administrative and judicial power which will settle our disputes peaceably." But if this state says:— "There shall be no war between me and other states, although I recognise no supreme law-giving power which will secure me my rights and whose rights I will guarantee;" then it is not at all clear upon what grounds I could base my confidence in my right, unless it were the substitute for that compact on which civil society is based — namely, free federation which reason must necessarily connect with the idea of the law of nations, if indeed any meaning is to be left in that concept at all.

There is no intelligible meaning in the idea of the law of nations as giving a right to make war; for that must be a right to decide what is just, not in accordance with universal, external laws limiting the freedom of each individual, but by means of one-sided maxims applied by force. We must then understand by this that men of such ways of thinking are quite justly served, when they destroy one another, and thus find perpetual peace in the wide grave which covers all the abominations of acts of violence as well as the authors of such deeds. For states, in their relation to one another, there can be, according to reason, no other way of advancing from that lawless condition which unceasing war implies, than by giving up their savage lawless freedom, just as individual men have done, and yielding to the coercion of public laws. Thus they can form a State of nations (*civitas gentium*), one, too, which will be ever increasing and would finally embrace all the peoples of the earth. States, however, in accordance with their understanding of the law of nations, by no means desire this, and therefore reject *in hypothesi* what is correct *in thesi*. Hence, instead of the positive idea of a world-republic, if all is not to be lost, only the negative substitute for it, a federation averting war, maintaining its ground and ever extending over the world may stop the current of this tendency to war and shrinking from the control of law. But even then there will be a constant danger that this propensity may break out.[131]* "Furor impius intus — fremit horridus ore cruento." (Virgil.)[132]*

THIRD DEFINITIVE ARTICLE OF PERPETUAL PEACE

III.— "The rights of men, as citizens of the world, shall be limited to the conditions of universal hospitality."

We are speaking here, as in the previous articles, not of philanthropy, but of right; and in this sphere hospitality signifies the claim of a stranger entering foreign territory to be treated by its owner without hostility. The latter may send him away again, if this can be done without causing his death; but, so long as he conducts himself peaceably, he must not be treated as an enemy. It is not a right to be treated as a guest to which the stranger can lay claim — a special friendly compact on his behalf would be required to make him for a given time an actual inmate — but he has a right of visitation. This right[133]* to present themselves to society belongs to all mankind in virtue of our common right of possession on the surface of the earth on which, as it is a globe, we cannot be infinitely scattered, and must in the end reconcile ourselves to existence side by side: at the same time, originally no one individual had more right than another to live in any one particular spot. Uninhabitable portions of the surface, ocean and desert, split up the human community, but in such a way that ships and camels— "the ship of the desert" — make it possible for men to come into touch with one another across these unappropriated regions and to take advantage of our common claim to the face of the earth with a view to a possible intercommunication. The inhospitality of the inhabitants of certain sea coasts — as, for example, the coast of Barbary — in plundering ships in neighbouring seas or making slaves of shipwrecked mariners; or the behaviour of the Arab Bedouins in the deserts, who think that proximity to nomadic tribes constitutes a right to rob, is thus contrary to the law of nature. This right to hospitality, however — that is to say, the privilege of strangers arriving on foreign soil — does not amount to more than what is implied in a permission to make an

attempt at intercourse with the original inhabitants. In this way far distant territories may enter into peaceful relations with one another. These relations may at last come under the public control of law, and thus the human race may be brought nearer the realisation of a cosmopolitan constitution.

Let us look now, for the sake of comparison, at the inhospitable behaviour of the civilised nations, especially the commercial states of our continent. The injustice which they exhibit on visiting foreign lands and races — this being equivalent in their eyes to conquest — is such as to fill us with horror. America, the negro countries, the Spice Islands, the Cape etc. were, on being discovered, looked upon as countries which belonged to nobody; for the native inhabitants were reckoned as nothing. In Hindustan, under the pretext of intending to establish merely commercial depots, the Europeans introduced foreign troops; and, as a result, the different states of Hindustan were stirred up to far-spreading wars. Oppression of the natives followed, famine, insurrection, perfidy and all the rest of the litany of evils which can afflict mankind.

China[134][*] and Japan (Nipon) which had made an attempt at receiving guests of this kind, have now taken a prudent step. Only to a single European people, the Dutch, has China given the right of access to her shores (but not of entrance into the country), while Japan has granted both these concessions; but at the same time they exclude the Dutch who enter, as if they were prisoners, from social intercourse with the inhabitants. The worst, or from the standpoint of ethical judgment the best, of all this is that no satisfaction is derived from all this violence, that all these trading companies stand on the verge of ruin, that the Sugar Islands, that seat of the most horrible and deliberate slavery, yield no real profit, but only have their use indirectly and for no very praiseworthy object — namely, that of furnishing men to be trained as sailors for the men-of-war and thereby contributing to the carrying on of war in Europe. And this has been done by nations who make a great ado about their piety, and who, while they are quite ready to commit injustice, would like, in their orthodoxy, to be considered among the elect.

The intercourse, more or less close, which has been everywhere steadily increasing between the nations of the earth, has now extended so enormously that a violation of right in one part of the world is felt all over it. Hence the idea of a cosmopolitan right is no fantastical, high-flown notion of right, but a complement of the unwritten code of law — constitutional as well as international law — necessary for the public rights of mankind in general and thus for the realisation of perpetual peace. For only by endeavouring to fulfil the conditions laid down by this cosmopolitan law can we flatter ourselves that we are gradually approaching that ideal.

FIRST SUPPLEMENT

CONCERNING THE GUARANTEE OF PERPETUAL PEACE

This guarantee is given by no less a power than the great artist nature (*natura dædala rerum*) in whose mechanical course is clearly exhibited a predetermined design to make harmony spring from human discord, even against the will of man. Now this design, although called Fate when looked upon as the compelling force of a cause, the laws of whose operation are unknown to us, is, when considered as the purpose manifested in the course of nature, called Providence,[135*] as the deep-lying wisdom of a Higher Cause, directing itself towards the ultimate practical end of the human race and predetermining the course of things with a view to its realisation. This Providence we do not, it is true, perceive in the cunning contrivances *Kunstanstalten* of nature; nor can we even conclude from the fact of their existence that it is there; but, as in every relation between the form of things and their final cause, we can, and must, supply the thought of a Higher Wisdom, in order that we may be able to form an idea of the possible existence of these products after the analogy of human works of art *Kunsthandlungen*.[136*] The representation to ourselves of the relation and agreement of these formations of nature to the moral purpose for which they were made and which reason directly prescribes to us, is an Idea, it is true, which is in theory superfluous; but in practice it is dogmatic, and its objective reality is well established.[137*] Thus we see, for example, with regard to the ideal *Pflichtbegriff* of perpetual peace, that it is our duty to make use of the mechanism of nature for the realisation of that end. Moreover, in a case like this where we are interested merely in the theory and not in the religious question, the use of the word “nature” is more appropriate than that of “providence”, in view of the limitations of human reason, which, in considering the relation of effects to their causes, must keep within the limits of possible experience. And the term “nature” is also less presumptuous than the other. To speak of a Providence knowable by us would be boldly to put on the wings of Icarus in order to draw near to the mystery of its unfathomable purpose.

Before we determine the surety given by nature more exactly, we must first look at what ultimately makes this guarantee of peace necessary — the circumstances in which nature has carefully placed the actors in her great theatre. In the next place, we shall proceed to consider the manner in which she gives this surety.

The provisions she has made are as follow: (1) she has taken care that men *can* live in all parts of the world; (2) she has scattered them by means of war in all directions, even into the most inhospitable regions, so that these too might be populated; (3) by this very means she has forced them to enter into relations more or less controlled by law. It is surely wonderful that, on the cold wastes round the Arctic Ocean, there is always to be found moss for the reindeer to scrape out from under the snow, the reindeer itself either serving as food or to draw the sledge of the Ostiak or Samoyedes. And salt deserts which would otherwise be left unutilised have the camel, which seems as if created for travelling in such lands. This evidence of design in things, however, is still more clear when we come to know that, besides the fur-clad animals of the shores of the Arctic Ocean, there are seals, walruses and whales whose flesh furnishes food and whose oil fire for the dwellers in these regions. But the providential care of nature excites our wonder above all, when we hear of the driftwood which is carried — whence no one knows — to these treeless shores: for without the aid of this material the natives could neither construct their craft, nor weapons, nor huts for shelter. Here too they have so much to do, making war against wild animals, that they live at peace with one another. But what drove them originally into these regions was probably nothing but war.

Of animals, used by us as instruments of war, the horse was the first which man learned to tame and domesticate during the period of the peopling of the earth; the elephant belongs to the later period of the

luxury of states already established. In the same way, the art of cultivating certain grasses called cereals — no longer known to us in their original form — and also the multiplication and improvement, by transplanting and grafting, of the original kinds of fruit — in Europe, probably only two species, the crab-apple and wild pear — could only originate under the conditions accompanying established states where the rights of property are assured. That is to say it would be after man, hitherto existing in lawless liberty, had advanced beyond the occupations of a hunter,[138*] a fisherman or a shepherd to the life of a tiller of the soil, when salt and iron were discovered, — to become, perhaps, the first articles of commerce between different peoples, — and were sought far and near. In this way the peoples would be at first brought into peaceful relation with one another, and so come to an understanding and the enjoyment of friendly intercourse, even with their most distant neighbours.

Now while nature provided that men could live on all parts of the earth, she also at the same time despotically willed that they *should* live everywhere on it, although against their own inclination and even although this imperative did not presuppose an idea of duty which would compel obedience to nature with the force of a moral law. But, to attain this end, she has chosen war. So we see certain peoples, widely separated, whose common descent is made evident by affinity in their languages. Thus, for instance, we find the Samoyedes on the Arctic Ocean, and again a people speaking a similar language on the Altai Mts., 200 miles *Meilen*[139*] off, between whom has pressed in a mounted tribe, warlike in character and of Mongolian origin, which has driven one branch of the race far from the other, into the most inhospitable regions where their own inclination would certainly not have carried them.[140*] In the same way, through the intrusion of the Gothic and Sarmatian tribes, the Finns in the most northerly regions of Europe, whom we call Laplanders, have been separated by as great a distance from the Hungarians, with whose language their own is allied. And what but war can have brought the Esquimos to the north of America, a race quite distinct from those of that country and probably European adventurers of prehistoric times? And war too, nature's method of populating the earth, must have driven the Pescherais[141*] in South America as far as Patagonia. War itself, however, is in need of no special stimulating cause, but seems engrafted in human nature, and is even regarded as something noble in itself to which man is inspired by the love of glory apart from motives of self-interest. Hence, among the savages of America as well as those of Europe in the age of chivalry, martial courage is looked upon as of great value itself, not merely when a war is going on, as is reasonable enough, but in order that there should be war: and thus war is often entered upon merely to exhibit this quality. So that an intrinsic dignity is held to attach to war in itself, and even philosophers eulogise it as an ennobling, refining influence on humanity, unmindful of the Greek proverb, "War is evil, in so far as it makes more bad people than it takes away."

So much, then, of what nature does for her own ends with regard to the human race as members of the animal world. Now comes the question which touches the essential points in this design of a perpetual peace:— "What does nature do in this respect with reference to the end which man's own reason sets before him as a duty? and consequently what does she do to further the realisation of his moral purpose? How does she guarantee that what man, by the laws of freedom, ought to do and yet fails to do, he will do, without any infringement of his freedom by the compulsion of nature and that, moreover, this shall be done in accordance with the three forms of public right — constitutional or political law, international law and cosmopolitan law?" When I say of nature that she *wills* that this or that should take place, I do not mean that she imposes upon us the duty to do it — for only the free, unrestrained, practical reason can do that — but that she does it herself, whether we will or not. "*Fata volentem ducunt, nolentem trahunt.*"

1. Even if a people were not compelled through internal discord to submit to the restraint of public laws, war would bring this about, working from without. For, according to the contrivance of nature which we have mentioned, every people finds another tribe in its neighbourhood, pressing upon it in such a manner that it is compelled to form itself internally into a state to be able to defend itself as a power should. Now the republican constitution is the only one which is perfectly adapted to the rights of man, but

it is also the most difficult to establish and still more to maintain. So generally is this recognised that people often say the members of a republican state would require to be angels,[142*] because men, with their self-seeking propensities, are not fit for a constitution of so sublime a form. But now nature comes to the aid of the universal, reason-derived will which, much as we honour it, is in practice powerless. And this she does, by means of these very self-seeking propensities, so that it only depends — and so much lies within the power of man — on a good organisation of the state for their forces to be so pitted against one another, that the one may check the destructive activity of the other or neutralise its effect. And hence, from the standpoint of reason, the result will be the same as if both forces did not exist, and each individual is compelled to be, if not a morally good man, yet at least a good citizen. The problem of the formation of the state, hard as it may sound, is not insoluble, even for a race of devils, granted that they have intelligence. It may be put thus:— "Given a multitude of rational beings who, in a body, require general laws for their own preservation, but each of whom, as an individual, is secretly inclined to exempt himself from this restraint: how are we to order their affairs and how establish for them a constitution such that, although their private dispositions may be really antagonistic, they may yet so act as a check upon one another, that, in their public relations, the effect is the same as if they had no such evil sentiments." Such a problem must be capable of solution. For it deals, not with the moral reformation of mankind, but only with the mechanism of nature; and the problem is to learn how this mechanism of nature can be applied to men, in order so to regulate the antagonism of conflicting interests in a people that they may even compel one another to submit to compulsory laws and thus necessarily bring about the state of peace in which laws have force. We can see, in states actually existing, although very imperfectly organised, that, in externals, they already approximate very nearly to what the Idea of right prescribes, although the principle of morality is certainly not the cause. A good political constitution, however, is not to be expected as a result of progress in morality; but rather, conversely, the good moral condition of a nation is to be looked for, as one of the first fruits of such a constitution. Hence the mechanism of nature, working through the self-seeking propensities of man (which of course counteract one another in their external effects), may be used by reason as a means of making way for the realisation of her own purpose, the empire of right, and, as far as is in the power of the state, to promote and secure in this way internal as well as external peace. We may say, then, that it is the irresistible will of nature that right shall at last get the supremacy. What one here fails to do will be accomplished in the long run, although perhaps with much inconvenience to us. As Bouterwek says, "If you bend the reed too much it breaks: he who would do too much does nothing."

2. The idea of international law presupposes the separate existence of a number of neighbouring and independent states; and, although such a condition of things is in itself already a state of war, (if a federative union of these nations does not prevent the outbreak of hostilities) yet, according to the Idea of reason, this is better than that all the states should be merged into one under a power which has gained the ascendency over its neighbours and gradually become a universal monarchy.[143*] For the wider the sphere of their jurisdiction, the more laws lose in force; and soulless despotism, when it has choked the seeds of good, at last sinks into anarchy. Nevertheless it is the desire of every state, or of its ruler, to attain to a permanent condition of peace in this very way; that is to say, by subjecting the whole world as far as possible to its sway. But nature wills it otherwise. She employs two means to separate nations, and prevent them from intermixing: namely, the differences of language and of religion.[144*] These differences bring with them a tendency to mutual hatred, and furnish pretexts for waging war. But, none the less, with the growth of culture and the gradual advance of men to greater unanimity of principle, they lead to concord in a state of peace which, unlike the despotism we have spoken of, (the churchyard of freedom) does not arise from the weakening of all forces, but is brought into being and secured through the equilibrium of these forces in their most active rivalry.

3. As nature wisely separates nations which the will of each state, sanctioned even by the principles of

international law, would gladly unite under its own sway by stratagem or force; in the same way, on the other hand, she unites nations whom the principle of a cosmopolitan right would not have secured against violence and war. And this union she brings about through an appeal to their mutual interests. The commercial spirit cannot co-exist with war, and sooner or later it takes possession of every nation. For, of all the forces which lie at the command of a state, the power of money is probably the most reliable. Hence states find themselves compelled — not, it is true, exactly from motives of morality — to further the noble end of peace and to avert war, by means of mediation, wherever it threatens to break out, just as if they had made a permanent league for this purpose. For great alliances with a view to war can, from the nature of things, only very rarely occur, and still more seldom succeed.

In this way nature guarantees the coming of perpetual peace, through the natural course of human propensities: not indeed with sufficient certainty to enable us to prophesy the future of this ideal theoretically, but yet clearly enough for practical purposes. And thus this guarantee of nature makes it a duty that we should labour for this end, an end which is no mere chimera.

SECOND SUPPLEMENT

A SECRET ARTICLE FOR PERPETUAL PEACE

A secret article in negotiations concerning public right is, when looked at objectively or with regard to the meaning of the term, a contradiction. When we view it, however, from the subjective standpoint, with regard to the character and condition of the person who dictates it, we see that it might quite well involve some private consideration, so that he would regard it as hazardous to his dignity to acknowledge such an article as originating from him.

The only article of this kind is contained in the following proposition:— “The opinions of philosophers, with regard to the conditions of the possibility of a public peace, shall be taken into consideration by states armed for war.”

It seems, however, to be derogatory to the dignity of the legislative authority of a state — to which we must of course attribute all wisdom — to ask advice from subjects (among whom stand philosophers) about the rules of its behaviour to other states. At the same time, it is very advisable that this should be done. Hence the state will silently invite suggestion for this purpose, while at the same time keeping the fact secret. This amounts to saying that the state will allow philosophers to discuss freely and publicly the universal principles governing the conduct of war and establishment of peace; for they will do this of their own accord, if no prohibition is laid upon them.[145*] The arrangement between states, on this point, does not require that a special agreement should be made, merely for this purpose; for it is already involved in the obligation imposed by the universal reason of man which gives the moral law. We would not be understood to say that the state must give a preference to the principles of the philosopher, rather than to the opinions of the jurist, the representative of state authority; but only that he should be heard. The latter, who has chosen for a symbol the scales of right and the sword of justice,[146*] generally uses that sword not merely to keep off all outside influences from the scales; for, when one pan of the balance will not go down, he throws his sword into it; and then *Vœ victis*! The jurist, not being a moral philosopher, is under the greatest temptation to do this, because it is his business only to apply existing laws and not to investigate whether these are not themselves in need of improvement; and this actually lower function of his profession he looks upon as the nobler, because it is linked to power (as is the case also in both the other faculties, theology and medicine). Philosophy occupies a very low position compared with this combined power. So that it is said, for example, that she is the handmaid of theology; and the same has been said of her position with regard to law and medicine. It is not quite clear, however, “whether she bears the torch before these gracious ladies, or carries the train.”

That kings should philosophise, or philosophers become kings, is not to be expected. But neither is it to be desired; for the possession of power is inevitably fatal to the free exercise of reason. But it is absolutely indispensable, for their enlightenment as to the full significance of their vocations, that both kings and sovereign nations, which rule themselves in accordance with laws of equality, should not allow the class of philosophers to disappear, nor forbid the expression of their opinions, but should allow them to speak openly. And since this class of men, by their very nature, are incapable of instigating rebellion or forming unions for purposes of political agitation, they should not be suspected of propagandism.

APPENDIX I

ON THE DISAGREEMENT BETWEEN MORALS AND POLITICS WITH REFERENCE TO PERPETUAL PEACE

In an objective sense, morals is a practical science, as the sum of laws exacting unconditional obedience, in accordance with which we *ought* to act. Now, once we have admitted the authority of this idea of duty, it is evidently inconsistent that we should think of saying that we *cannot* act thus. For, in this case, the idea of duty falls to the ground of itself; "*ultra posse nemo obligatur*." Hence there can be no quarrel between politics, as the practical science of right, and morals, which is also a science of right, but theoretical. That is, theory cannot come into conflict with practice. For, in that case, we would need to understand under the term "ethics" or "morals" a universal doctrine of expediency, or, in other words, a theory of precepts which may guide us in choosing the best means for attaining ends calculated for our advantage. This is to deny that a science of morals exists.

Politics says, "Be wise as serpents"; morals adds the limiting condition, "and guileless as doves." If these precepts cannot stand together in one command, then there is a real quarrel between politics and morals.[147]* But if they can be completely brought into accord, then the idea of any antagonism between them is absurd, and the question of how best to make a compromise between the two points of view ceases to be even raised. Although the saying, "Honesty is the best policy," expresses a theory which, alas, is often contradicted in practice, yet the likewise theoretical maxim, "Honesty is better than any policy," is exalted high above every possible objection, is indeed the necessary condition of all politics.

The Terminus of morals does not yield to Jupiter, the Terminus of force; for the latter remains beneath the sway of Fate. In other words, reason is not sufficiently enlightened to survey the series of predetermining causes which would make it possible for us to predict with certainty the good or bad results of human action, as they follow from the mechanical laws of nature; although we may hope that things will turn out as we should desire. But what we have to do, in order to remain in the path of duty guided by the rules of wisdom, reason makes everywhere perfectly clear, and does this for the purpose of furthering her ultimate ends.

The practical man, however, for whom morals is mere theory, even while admitting that what ought to be can be, bases his dreary verdict against our well-meant hopes really on this: he pretends that he can foresee from his observation of human nature, that men will never be willing to do what is required in order to bring about the wished-for results leading to perpetual peace. It is true that the will of all individual men to live under a legal constitution according to the principles of liberty — that is to say, the distributive unity of the wills of all — is not sufficient to attain this end. We must have the collective unity of their united will: all as a body must determine these new conditions. The solution of this difficult problem is required in order that civil society should be a whole. To all this diversity of individual wills there must come a uniting cause, in order to produce a common will which no distributive will is able to give. Hence, in the practical realisation of that idea, no other beginning of a law-governed society can be counted upon than one that is brought about by force: upon this force, too, public law afterwards rests. This state of things certainly prepares us to meet considerable deviation in actual experience from the theoretical idea of perpetual peace, since we cannot take into account the moral character and disposition of a law-giver in this connection, or expect that, after he has united a wild multitude into one people, he will leave it to them to bring about a legal constitution by their common will.

It amounts to this. Any ruler who has once got the power in his hands will not let the people dictate laws for him. A state which enjoys an independence of the control of external law will not submit to the

judgment of the tribunals of other states, when it has to consider how to obtain its rights against them. And even a continent, when it feels its superiority to another, whether this be in its way or not, will not fail to take advantage of an opportunity offered of strengthening its power by the spoliation or even conquest of this territory. Hence all theoretical schemes, connected with constitutional, international or cosmopolitan law, crumble away into empty impracticable ideals. While, on the other hand, a practical science, based on the empirical principles of human nature, which does not disdain to model its maxims on an observation of actual life, can alone hope to find a sure foundation on which to build up a system of national policy.

Now certainly, if there is neither freedom nor a moral law founded upon it, and every actual or possible event happens in the mere mechanical course of nature, then politics, as the art of making use of this physical necessity in things for the government of men, is the whole of practical wisdom and the idea of right is an empty concept. If, on the other hand, we find that this idea of right is necessarily to be conjoined with politics and even to be raised to the position of a limiting condition of that science, then the possibility of reconciling them must be admitted. I can thus imagine a moral politician, that is to say, one who understands the principles of statesmanship to be such as do not conflict with morals; but I cannot conceive of a political moralist who fashions for himself such a system of ethics as may serve the interest of statesmen.

The moral politician will always act upon the following principle:— "If certain defects which could not have been avoided are found in the political constitution or foreign relations of a state, it is a duty for all, especially for the rulers of the state, to apply their whole energy to correcting them as soon as possible, and to bringing the constitution and political relations on these points into conformity with the Law of Nature, as it is held up as a model before us in the idea of reason; and this they should do even at a sacrifice of their own interest." Now it is contrary to all politics — which is, in this particular, in agreement with morals — to dissever any of the links binding citizens together in the state or nations in cosmopolitan union, before a better constitution is there to take the place of what has been thus destroyed. And hence it would be absurd indeed to demand that every imperfection in political matters must be violently altered on the spot. But, at the same time, it may be required of a ruler at least that he should earnestly keep the maxim in mind which points to the necessity of such a change; so that he may go on constantly approaching the end to be realised, namely, the best possible constitution according to the laws of right. Even although it is still under despotic rule, in accordance with its constitution as then existing, a state may govern itself on republican lines, until the people gradually become capable of being influenced by the mere idea of the authority of law, just as if it had physical power. And they become accordingly capable of self-legislation, their faculty for which is founded on original right. But if, through the violence of revolution, the product of a bad government, a constitution more in accord with the spirit of law were attained even by unlawful means, it should no longer be held justifiable to bring the people back to the old constitution, although, while the revolution was going on, every one who took part in it by use of force or stratagem, may have been justly punished as a rebel. As regards the external relations of nations, a state cannot be asked to give up its constitution, even although that be a despotism (which is, at the same time, the strongest constitution where foreign enemies are concerned), so long as it runs the risk of being immediately swallowed up by other states. Hence, when such a proposal is made, the state whose constitution is in question must at least be allowed to defer acting upon it until a more convenient time.[148*]

It is always possible that moralists who rule despotically, and are at a loss in practical matters, will come into collision with the rules of political wisdom in many ways, by adopting measures without sufficient deliberation which show themselves afterwards to have been overestimated. When they thus offend against nature, experience must gradually lead them into a better track. But, instead of this being the case, politicians who are fond of moralising do all they can to make moral improvement impossible and

to perpetuate violations of law, by extenuating political principles which are antagonistic to the idea of right, on the pretext that human nature is not capable of good, in the sense of the ideal which reason prescribes.

These politicians, instead of adopting an open, straightforward way of doing things (as they boast), mix themselves up in intrigue. They get at the authorities in power and say what will please them; their sole bent is to sacrifice the nation, or even, if they can, the whole world, with the one end in view that their own private interest may be forwarded. This is the manner of regular jurists (I mean the journeyman lawyer not the legislator), when they aspire to politics. For, as it is not their business to reason too nicely over legislation, but only to enforce the laws of the country, every legal constitution in its existing form and, when this is changed by the proper authorities, the one which takes its place, will always seem to them the best possible. And the consequence is that everything is purely mechanical. But this adroitness in suiting themselves to any circumstances may lead them to the delusion that they are also capable of giving an opinion about the principles of political constitutions in general, in so far as they conform to ideas of right, and are therefore not empirical, but *a priori*. And they may therefore brag about their knowledge of men, — which indeed one expects to find, since they have to deal with so many — without really knowing the nature of man and what can be made of it, to gain which knowledge a higher standpoint of anthropological observation than theirs is required. Filled with ideas of this kind, if they trespass outside their own sphere on the boundaries of political and international law, looked upon as ideals which reason holds before us, they can do so only in the spirit of chicanery. For they will follow their usual method of making everything conform mechanically to compulsory laws despotically made and enforced, even here, where the ideas of reason recognise the validity of a legal compulsory force, only when it is in accordance with the principles of freedom through which a permanently valid constitution becomes first of all possible. The would-be practical man, leaving out of account this idea of reason, thinks that he can solve this problem empirically by looking to the way in which those constitutions which have best survived the test of time were established, even although the spirit of these may have been generally contrary to the idea of right. The principles which he makes use of here, although indeed he does not make them public, amount pretty much to the following sophistical maxims.

1. **Fac et excusa.** Seize the most favourable opportunity for arbitrary usurpation — either of the authority of the state over its own people or over a neighbouring people; the justification of the act and extenuation of the use of force will come much more easily and gracefully, when the deed is done, than if one has to think out convincing reasons for taking this step and first hear through all the objections which can be made against it. This is especially true in the first case mentioned, where the supreme power in the state also controls the legislature which we must obey without any reasoning about it. Besides, this show of audacity in a statesman even lends him a certain semblance of inward conviction of the justice of his action; and once he has got so far the god of success (*bonus eventus*) is his best advocate.

2. **Si fecisti, nega.** As for any crime you have committed, such as has, for instance, brought your people to despair and thence to insurrection, deny that it has happened owing to any fault of yours. Say rather that it is all caused by the insubordination of your subjects, or, in the case of your having usurped a neighbouring state, that human nature is to blame; for, if a man is not ready to use force and steal a march upon his neighbour, he may certainly count on the latter forestalling him and taking him prisoner.

3. **Divide et impera.** That is to say, if there are certain privileged persons, holding authority among the people, who have merely chosen you for their sovereign as *primus inter pares*, bring about a quarrel among them, and make mischief between them and the people. Now back up the people with a dazzling promise of greater freedom; everything will now depend unconditionally on your will. Or again, if there is a difficulty with foreign states, then to stir up dissension among them is a pretty sure means of subjecting first one and then the other to your sway, under the pretext of aiding the weaker.

It is true that now-a-days no body is taken in by these political maxims, for they are all familiar to

everyone. Moreover, there is no need of being ashamed of them, as if their injustice were too patent. For the great Powers never feel shame before the judgment of the common herd, but only before one another; so that as far as this matter goes, it is not the revelation of these guiding principles of policy that can make rulers ashamed, but only the unsuccessful use of them. For as to the morality of these maxims, politicians are all agreed. Hence there is always left political prestige on which they can safely count; and this means the glory of increasing their power by any means that offer.[149*]

* * *

In all these twistings and turnings of an immoral doctrine of expediency which aims at substituting a state of peace for the warlike conditions in which men are placed by nature, so much at least is clear; — that men cannot get away from the idea of right in their private any more than in their public relations; and that they do not dare (this is indeed most strikingly seen in the concept of an international law) to base politics merely on the manipulations of expediency and therefore to refuse all obedience to the idea of a public right. On the contrary, they pay all fitting honour to the idea of right in itself, even although they should, at the same time, devise a hundred subterfuges and excuses to avoid it in practice, and should regard force, backed up by cunning, as having the authority which comes from being the source and unifying principle of all right. It will be well to put an end to this sophistry, if not to the injustice it extenuates, and to bring the false advocates of the mighty of the earth to confess that it is not right but might in whose interest they speak, and that it is the worship of might from which they take their cue, as if in this matter they had a right to command. In order to do this, we must first expose the delusion by which they deceive themselves and others; then discover the ultimate principle from which their plans for a perpetual peace proceed; and thence show that all the evil which stands in the way of the realisation of that ideal springs from the fact that the political moralist begins where the moral politician rightly ends and that, by subordinating principles to an end or putting the cart before the horse, he defeats his intention of bringing politics into harmony with morals.

In order to make practical philosophy consistent with itself, we must first decide the following question: — In dealing with the problems of practical reason must we begin from its material principle — the end as the object of free choice — or from its formal principle which is based merely on freedom in its external relation? — from which comes the following law:— “Act so that thou canst will that thy maxim should be a universal law, be the end of thy action what it will.”[150*]

Without doubt, the latter determining principle of action must stand first; for, as a principle of right, it carries unconditional necessity with it, whereas the former is obligatory only if we assume the empirical conditions of the end set before us, — that is to say, that it is an end capable of being practically realised. And if this end — as, for example, the end of perpetual peace — should be also a duty, this same duty must necessarily have been deduced from the formal principle governing the maxims which guide external action. Now the first principle is the principle of the political moralist; the problems of constitutional, international and cosmopolitan law are mere technical problems (*problema technicum*). The second or formal principle, on the other hand, as the principle of the moral politician who regards it as a moral problem (*problema morale*), differs widely from the other principle in its methods of bringing about perpetual peace, which we desire not only as a material good, but also as a state of things resulting from our recognition of the precepts of duty.[151*]

To solve the first problem — that, namely, of political expediency — much knowledge of nature is required, that her mechanical laws may be employed for the end in view. And yet the result of all knowledge of this kind is uncertain, as far as perpetual peace is concerned. This we find to be so, whichever of the three departments of public law we take. It is uncertain whether a people could be better kept in obedience and at the same time prosperity by severity or by baits held out to their vanity; whether

they would be better governed under the sovereignty of a single individual or by the authority of several acting together; whether the combined authority might be better secured merely, say, by an official nobility or by the power of the people within the state; and, finally, whether such conditions could be long maintained. There are examples to the contrary in history in the case of all forms of government, with the exception of the only true republican constitution, the idea of which can occur only to a moral politician. Still more uncertain is a law of nations, ostensibly established upon statutes devised by ministers; for this amounts in fact to mere empty words, and rests on treaties which, in the very act of ratification, contain a secret reservation of the right to violate them. On the other hand, the solution of the second problem — the problem of political wisdom — forces itself, we may say, upon us; it is quite obvious to every one, and puts all crooked dealings to shame; it leads, too, straight to the desired end, while at the same time, discretion warns us not to drag in the conditions of perpetual peace by force, but to take time and approach this ideal gradually as favourable circumstances permit.

This may be expressed in the following maxim:— "Seek ye first the kingdom of pure practical reason and its righteousness, and the object of your endeavour, the blessing of perpetual peace, will be added unto you." For the science of morals generally has this peculiarity, — and it has it also with regard to the moral principles of public law, and therefore with regard to a science of politics knowable *a priori*, — that the less it makes a man's conduct depend on the end he has set before him, his purposed material or moral gain, so much the more, nevertheless, does it conform in general to this end. The reason for this is that it is just the universal will, given *a priori*, which exists in a people or in the relation of different peoples to one another, that alone determines what is lawful among men. This union of individual wills, however, if we proceed consistently in practice, in observance of the mechanical laws of nature, may be at the same time the cause of bringing about the result intended and practically realizing the idea of right. Hence it is, for example, a principle of moral politics that a people should unite into a state according to the only valid concepts of right, the ideas of freedom and equality; and this principle is not based on expediency, but upon duty. Political moralists, however, do not deserve a hearing, much and sophistically as they may reason about the existence, in a multitude of men forming a society, of certain natural tendencies which would weaken those principles and defeat their intention. They may endeavour to prove their assertion by giving instances of badly organised constitutions, chosen both from ancient and modern times, (as, for example, democracies without a representative system); but such arguments are to be treated with contempt, all the more, because a pernicious theory of this kind may perhaps even bring about the evil which it prophesies. For, in accordance with such reasoning, man is thrown into a class with all other living machines which only require the consciousness that they are not free creatures to make them in their own judgment the most miserable of all beings.

Fiat justitia, pereat mundus. This saying has become proverbial, and although it savours a little of boastfulness, is also true. We may translate it thus:— "Let justice rule on earth, although all the rogues in the world should go to the bottom." It is a good, honest principle of right cutting off all the crooked ways made by knavery or violence. It must not, however, be misunderstood as allowing anyone to exercise his own rights with the utmost severity, a course in contradiction to our moral duty; but we must take it to signify an obligation, binding upon rulers, to refrain from refusing to yield anyone his rights or from curtailing them, out of personal feeling or sympathy for others. For this end, in particular, we require, firstly, that a state should have an internal political constitution, established according to the pure principles of right; secondly, that a union should be formed between this state and neighbouring or distant nations for a legal settlement of their differences, after the analogy of the universal state. This proposition means nothing more than this: — Political maxims must not start from the idea of a prosperity and happiness which are to be expected from observance of such precepts in every state; that is, not from the end which each nation makes the object of its will as the highest empirical principle of political wisdom; but they must set out from the pure concept of the duty of right, from the "*ought*" whose principle is given

a priori through pure reason. This is the law, whatever the material consequences may be. The world will certainly not perish by any means, because the number of wicked people in it is becoming fewer. The morally bad has one peculiarity, inseparable from its nature; — in its purposes, especially in relation to other evil influences, it is in contradiction with itself, and counteracts its own natural effect, and thus makes room for the moral principle of good, although advance in this direction may be slow.

Hence objectively, in theory, there is no quarrel between morals and politics. But subjectively, in the self-seeking tendencies of men (which we cannot actually call their morality, as we would a course of action based on maxims of reason,) this disagreement in principle exists and may always survive; for it serves as a whetstone to virtue. According to the principle, *Tu ne cede malis, sed contra audentior ito*, the true courage of virtue in the present case lies not so much in facing the evils and self-sacrifices which must be met here as in firmly confronting the evil principle in our own nature and conquering its wiles. For this is a principle far more dangerous, false, treacherous and sophistical which puts forward the weakness in human nature as a justification for every transgression.

In fact the political moralist may say that a ruler and people, or nation and nation do *one another* no wrong, when they enter on a war with violence or cunning, although they do wrong, generally speaking, in refusing to respect the idea of right which alone could establish peace for all time. For, as both are equally wrongly disposed to one another, each transgressing the duty he owes to his neighbour, they are both quite rightly served, when they are thus destroyed in war. This mutual destruction stops short at the point of extermination, so that there are always enough of the race left to keep this game going on through all the ages, and a far-off posterity may take warning by them. The Providence that orders the course of the world is hereby justified. For the moral principle in mankind never becomes extinguished, and human reason, fitted for the practical realisation of ideas of right according to that principle, grows continually in fitness for that purpose with the ever advancing march of culture; while at the same time, it must be said, the guilt of transgression increases as well. But it seems that, by no theodicy or vindication of the justice of God, can we justify Creation in putting such a race of corrupt creatures into the world at all, if, that is, we assume that the human race neither will nor can ever be in a happier condition than it is now. This standpoint, however, is too high a one for us to judge from, or to theorise, with the limited concepts we have at our command, about the wisdom of that supreme Power which is unknowable by us. We are inevitably driven to such despairing conclusions as these, if we do not admit that the pure principles of right have objective reality — that is to say, are capable of being practically realised — and consequently that action must be taken on the part of the people of a state and, further, by states in relation to one another, whatever arguments empirical politics may bring forward against this course. Politics in the real sense cannot take a step forward without first paying homage to the principles of morals. And, although politics, *per se*, is a difficult art,[152*] in its union with morals no art is required; for in the case of a conflict arising between the two sciences, the moralist can cut asunder the knot which politics is unable to untie. Right must be held sacred by man, however great the cost and sacrifice to the ruling power. Here is no half-and-half course. We cannot devise a happy medium between right and expediency, a right pragmatically conditioned. But all politics must bend the knee to the principle of right, and may, in that way, hope to reach, although slowly perhaps, a level whence it may shine upon men for all time.

APPENDIX II

CONCERNING THE HARMONY OF POLITICS WITH MORALS ACCORDING TO THE TRANSCENDENTAL IDEA OF PUBLIC RIGHT

If I look at public right from the point of view of most professors of law, and abstract from its *matter* or its empirical elements, varying according to the circumstances given in our experience of individuals in a state or of states among themselves, then there remains the *form* of publicity. The possibility of this publicity, every legal title implies. For without it there could be no justice, which can only be thought as before the eyes of men; and, without justice, there would be no right, for, from justice only, right can come.

This characteristic of publicity must belong to every legal title. Hence, as, in any particular case that occurs, there is no difficulty in deciding whether this essential attribute is present or not, (whether, that is, it is reconcilable with the principles of the agent or not), it furnishes an easily applied criterion which is to be found *a priori* in the reason, so that in the particular case we can at once recognise the falsity or illegality of a proposed claim (*praetensio juris*), as it were by an experiment of pure reason.

Having thus, as it were, abstracted from all the empirical elements contained in the concept of a political and international law, such as, for instance, the evil tendency in human nature which makes compulsion necessary, we may give the following proposition as the *transcendental formula* of public right:— “All actions relating to the rights of other men are wrong, if the maxims from which they follow are inconsistent with publicity.”

This principle must be regarded not merely as ethical, as belonging to the doctrine of virtue, but also as juridical, referring to the rights of men. For there is something wrong in a maxim of conduct which I cannot divulge without at once defeating my purpose, a maxim which must therefore be kept secret, if it is to succeed, and which I could not publicly acknowledge without infallibly stirring up the opposition of everyone. This necessary and universal resistance with which everyone meets me, a resistance therefore evident *a priori*, can be due to no other cause than the injustice with which such a maxim threatens everyone. Further, this testing principle is merely negative; that is, it serves only as a means by which we may know when an action is unjust to others. Like axioms, it has a certainty incapable of demonstration; it is besides easy of application as appears from the following examples of public right.

1. — **Constitutional Law.** Let us take in the first place the public law of the state (*jus civitatis*), particularly in its application to matters within the state. Here a question arises which many think difficult to answer, but which the transcendental principle of publicity solves quite readily:— “Is revolution a legitimate means for a people to adopt, for the purpose of throwing off the oppressive yoke of a so-called tyrant (*non titulo, sed exercitio talis*)?” The rights of a nation are violated in a government of this kind, and no wrong is done to the tyrant in dethroning him. Of this there is no doubt. None the less, it is in the highest degree wrong of the subjects to prosecute their rights in this way; and they would be just as little justified in complaining, if they happened to be defeated in their attempt and had to endure the severest punishment in consequence.

A great many reasons for and against both sides of this question may be given, if we seek to settle it by a dogmatic deduction of the principles of right. But the transcendental principle of the publicity of public right can spare itself this diffuse argumentation. For, according to that principle, the people would ask themselves, before the civil contract was made, whether they could venture to publish maxims, proposing insurrection when a favourable opportunity should present itself. It is quite clear that if, when a constitution is established, it were made a condition that force may be exercised against the sovereign under certain circumstances, the people would be obliged to claim a lawful authority higher than his. But

in that case, the so-called sovereign would be no longer sovereign: or, if both powers, that of the sovereign and that of the people, were made a condition of the constitution of the state, then its establishment (which was the aim of the people) would be impossible. The wrongfulness of revolution is quite obvious from the fact that openly to acknowledge maxims which justify this step would make attainment of the end at which they aim impossible. We are obliged to keep them secret. But this secrecy would not be necessary on the part of the head of the state. He may say quite plainly that the ringleaders of every rebellion will be punished by death, even although they may hold that it was he who first transgressed the fundamental law. For, if a ruler is conscious of possessing irresistible sovereign power (and this must be assumed in every civil constitution, because a sovereign who has not power to protect any individual member of the nation against his neighbour has also not the right to exercise authority over him), then he need have no fear that making known the maxims which guide him will cause the defeat of his plans. And it is quite consistent with this view to hold that, if the people are successful in their insurrection, the sovereign must return to the rank of a subject, and refrain from inciting rebellion with a view to regaining his lost sovereignty. At the same time he need have no fear of being called to account for his former administration.[153*]

2. — **International Law.** There can be no question of an international law, except on the assumption of some kind of a law-governed state of things, the external condition under which any right can belong to man. For the very idea of international law, as public right, implies the publication of a universal will determining the rights and property of each individual nation; and this *status juridicus* must spring out of a contract of some sort which may not, like the contract to which the state owes its origin, be founded upon compulsory laws, but may be, at the most, the agreement of a permanent free association such as the federation of the different states, to which we have alluded above. For, without the control of law to some extent, to serve as an active bond of union among different merely natural or moral individuals, — that is to say, in a state of nature, — there can only be private law. And here we find a disagreement between morals, regarded as the science of right, and politics. The criterion, obtained by observing the effect of publicity on maxims, is just as easily applied, but only when we understand that this agreement binds the contracting states solely with the object that peace may be preserved among them, and between them and other states; in no sense with a view to the acquisition of new territory or power. The following instances of antinomy occur between politics and morals, which are given here with the solution in each case.

a. “When either of these states has promised something to another, (as, for instance, assistance, or a relinquishment of certain territory, or subsidies and such like), the question may arise whether, in a case where the safety of the state thus bound depends on its evading the fulfilment of this promise, it can do so by maintaining a right to be regarded as a double person: — firstly, as sovereign and accountable to no one in the state of which that sovereign power is head; and, secondly, merely as the highest official in the service of that state, who is obliged to answer to the state for every action. And the result of this is that the state is acquitted in its second capacity of any obligation to which it has committed itself in the first.” But, if a nation or its sovereign proclaimed these maxims, the natural consequence would be that every other would flee from it, or unite with other states to oppose such pretensions. And this is a proof that politics, with all its cunning, defeats its own ends, if the test of making principles of action public, which we have indicated, be applied. Hence the maxim we have quoted must be wrong.

b. “If a state which has increased its power to a formidable extent (*potentia tremenda*) excites anxiety in its neighbours, is it right to assume that, since it has the means, it will also have the will to oppress others; and does that give less powerful states a right to unite and attack the greater nation without any definite cause of offence?” A state which would here answer openly in the affirmative would only bring the evil about more surely and speedily. For the greater power would forestall those smaller nations, and their union would be but a weak reed of defence against a state which knew how to apply the maxim,

divide et impera. This maxim of political expediency then, when openly acknowledged, necessarily defeats the end at which it aims, and is therefore wrong.

c. "If a smaller state by its geographical position breaks up the territory of a greater, so as to prevent a unity necessary to the preservation of that state, is the latter not justified in subjugating its less powerful neighbour and uniting the territory in question with its own?" We can easily see that the greater state dare not publish such a maxim beforehand; for either all smaller states would without loss of time unite against it, or other powers would contend for this booty. Hence the impracticability of such a maxim becomes evident under the light of publicity. And this is a sign that it is wrong, and that in a very great degree; for, although the victim of an act of injustice may be of small account, that does not prevent the injustice done from being very great.

3. — **Cosmopolitan Law.** We may pass over this department of right in silence, for, owing to its analogy with international law, its maxims are easily specified and estimated.

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In this principle of the incompatibility of the maxims of international law with their publicity, we have a good indication of the non-agreement between politics and morals, regarded as a science of right. Now we require to know under what conditions these maxims do agree with the law of nations. For we cannot conclude that the converse holds, and that all maxims which can bear publicity are therefore just. For anyone who has a decided supremacy has no need to make any secret about his maxims. The condition of a law of nations being possible at all is that, in the first place, there should be a law-governed state of things. If this is not so, there can be no public right, and all right which we can think of outside the law-governed state, — that is to say, in the state of nature, — is mere private right. Now we have seen above that something of the nature of a federation between nations, for the sole purpose of doing away with war, is the only rightful condition of things reconcilable with their individual freedom. Hence the agreement of politics and morals is only possible in a federative union, a union which is necessarily given *a priori*, according to the principles of right. And the lawful basis of all politics can only be the establishment of this union in its widest possible extent. Apart from this end, all political sophistry is folly and veiled injustice. Now this sham politics has a casuistry, not to be excelled in the best Jesuit school. It has its mental reservation (*reservatio mentalis*): as in the drawing up of a public treaty in such terms as we can, if we will, interpret when occasion serves to our advantage; for example, the distinction between the *status quo* in fact (*de fait*) and in right (*de droit*). Secondly, it has its probabilism; when it pretends to discover evil intentions in another, or makes, the probability of their possible future ascendency a lawful reason for bringing about the destruction of other peaceful states. Finally, it has its philosophical sin (*peccatum philosophicum*, *peccatillum*, *baggatelle*) which is that of holding it a trifle easily pardoned that a smaller state should be swallowed up, if this be to the gain of a nation much more powerful; for such an increase in power is supposed to tend to the greater prosperity of the whole world.[154*]

Duplicity gives politics the advantage of using one branch or the other of morals, just as suits its own ends. The love of our fellowmen is a duty: so too is respect for their rights. But the former is only conditional: the latter, on the other hand, an unconditional, absolutely imperative duty; and anyone who would give himself up to the sweet consciousness of well-doing must be first perfectly assured that he has not transgressed its commands. Politics has no difficulty in agreeing with morals in the first sense of the term, as ethics, to secure that men should give to superiors their rights. But when it comes to morals, in its second aspect, as the science of right before which politics must bow the knee, the politician finds it prudent to have nothing to do with compacts and rather to deny all reality to morals in this sense, and reduce all duty to mere benevolence. Philosophy could easily frustrate the artifices of a politics like this, which shuns the light of criticism, by publishing its maxims, if only statesmen would have the courage to

grant philosophers the right to ventilate their opinions.

With this end in view, I propose another principle of public right, which is at once transcendental and affirmative. Its formula would be as follows:— “All maxims which require publicity, in order that they may not fail to attain their end, are in agreement both with right and politics.”

For, if these maxims can only attain the end at which they aim by being published, they must be in harmony with the universal end of mankind, which is happiness; and to be in sympathy with this (to make the people contented with their lot) is the real business of politics. Now, if this end should be attainable only by publicity, or in other words, through the removal of all distrust of the maxims of politics, these must be in harmony with the right of the people; for a union of the ends of all is only possible in a harmony with this right.

I must postpone the further development and discussion of this principle till another opportunity. That it is a transcendental formula is quite evident from the fact that all the empirical conditions of a doctrine of happiness, or the *matter* of law, are absent, and that it has regard only to the *form* of universal conformity to law.

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If it is our duty to realise a state of public right, if at the same time there are good grounds for hope that this ideal may be realised, although only by an approximation advancing *ad infinitum,* then perpetual peace, following hitherto falsely so-called conclusions of peace, which have been in reality mere cessations of hostilities, is no mere empty idea. But rather we have here a problem which gradually works out its own solution and, as the periods in which a given advance takes place towards the realisation of the ideal of perpetual peace will, we hope, become with the passing of time shorter and shorter, we must approach ever nearer to this goal.

FOOTNOTES

[1] Cf. his *Studies in Political and Social Ethics*, p, 170.

[2] For the inconsistency between the views expressed by Rousseau on this subject in the *Discourses* and in the *Contrat Social* (Cf. I. Chs. VI., VIII.) see Ritchie's *Natural Right*, Ch. III., p, 49; Caird's essay on Rousseau in his *Essays on Literature and Philosophy*, Vol. I.; and Morley's *Rousseau*, Vol. I., Ch. V.; Vol. II., Ch. XII.

[3] The theory that the golden age was identical with the state of nature, Professor D. G. Ritchie ascribes to Locke (see *Natural Right*, Ch. II.,). Locke, he says, "has an idea of a golden age" existing even after government has come into existence — a time when people did not need "to examine the original and rights of government." *Civil Government*, II., § 111. A little confusion on the part of his readers (perhaps in his own mind) makes it possible to regard the state of nature as itself the golden age, and the way is prepared for the favourite theory of the eighteenth century: —

"Nor think in nature's state they blindly trod;

The state of nature was the reign of God:

Self-love and social at her birth began,

Union the bond of all things and of man.

Pride then was not, nor arts that pride to aid;

Man walk'd with beast, joint tenant of the shade;

The same his table, and the same his bed;

No murder cloath'd him, and no murder fed."

Essay on Man, III., 147 *seq.*

In these lines of Pope's the state of nature is identified with the golden age of the Greek and Latin poets; and "the reign of God" is an equivalent for Locke's words, "has a law of nature to govern it."

[4] Cf. *Republic*, II. 369. "A state," says Socrates, "arises out of the needs of mankind: no one is self-sufficing, but all of us have many wants."

[5] See Hume's account of the origin of government (*Treatise*, III., Part II., Sect. VIII.). There are, he says, American tribes "where men live in concord and amity among themselves without any established government; and never pay submission to any of their fellows, except in time of war, when their captain enjoys a shadow of authority, which he loses after their return from the field, and the establishment of peace with the neighbouring tribes. This authority, however, instructs them in the advantages of government, and teaches them to have recourse to it, when either by the pillage of war, by commerce, or by any fortuitous inventions, their riches and possessions have become so considerable as to make them forget, on every emergence, the interest they have in the preservation of peace and justice.... Camps are the true mothers of cities; and as war cannot be administered, by reason of the suddenness of every exigency, without some authority in a single person, the same kind of authority naturally takes place in that civil government, which succeeds the military."

Cf. Cowper: *The Winter Morning Walk*: —

"...........and ere long,

When man was multiplied and spread abroad

In tribes and clans, and had begun to call

These meadows and that range of hills his own,

The tasted sweets of property begat

Desire of more; ....

....

Thus wars began on earth. These fought for spoil,

And those in self-defence. Savage at first

The onset, and irregular. At length

One eminent above the rest, for strength,

For stratagem, or courage, or for all,

Was chosen leader. Him they served in war,

And him in peace for sake of warlike deeds

Rev'renced no less.........

....

Thus kings were first invented."

[6] "Among uncivilised nations, there is but one profession honourable, that of arms. All the ingenuity and vigour of the human mind are exerted in acquiring military skill or address." Cf. Robertson's *History of Charles V.*, (*Works*, 1813, vol. V.) Sect. I. vii.

[7] Similarly we find that the original meaning of the Latin word "*hostis*" was "a stranger."

[8] In Aristotle we find the high-water mark of Greek thinking on this subject. "The object of military training," says he, (*Politics*, Bk. IV. Ch. XIV., Welldon's translation — in older editions Bk. VII.) "should be not to enslave persons who do not deserve slavery, but firstly to secure ourselves against becoming the slaves of others; secondly, to seek imperial power not with a view to a universal despotic authority, but for the benefit of the subjects whom we rule, and thirdly, to exercise despotic power over those who are deserving to be slaves. That the legislator should rather make it his object so to order his legislation upon military and other matters as to promote leisure and peace is a theory borne out by the facts of history." ... (*loc. cit.* Ch. XV.). "War, as we have remarked several times, has its end in peace."

Aristotle strongly condemns the Lacedæmonians and Cretans for regarding war and conquest as the sole ends to which all law and education should be directed. Also in non-Greek tribes like the Scythians, Persians, Thracians and Celts he says, only military power is admired by the people and encouraged by the state. "There was formerly too a law in Macedonia that any one who had never slain an enemy should wear the halter about his neck." Among the Iberians too, a military people, "it is the custom to set around the tomb of a deceased warrior a number of obelisks corresponding to the number of enemies he has killed.... Yet ... it may well appear to be a startling paradox that it should be the function of a Statesman to succeed in devising the means of rule and mastery over neighbouring peoples whether with or against

their own will. How can such action be worthy of a statesman or legislator, when it has not even the sanction of law?” (*op. cit*., IV. Ch. 2.)

We see that Aristotle disapproves of a glorification of war for its own sake, and regards it as justifiable only in certain circumstances. Methods of warfare adopted and proved in the East would not have been possible in Greece. An act of treachery, for example, such as that of Jael, (*Judges* IV. 17) which was extolled in songs of praise by the Jews, (*loc. cit.* V. 24) the Greek people would have been inclined to repudiate. The stories of Roman history, the behaviour of Fabricius, for instance, or Regulus and the honourable conduct of prisoners on various occasions released on parole, show that this consciousness of certain principles of honour in warfare was still more highly developed in Rome.

Socrates in the *Republic* (V. 469, 470) gives expression to a feeling which was gradually gaining ground in Greece, that war between Hellenic tribes was much more serious than war between Greeks and barbarians. In such civil warfare, he considered, the defeated ought not to be reduced to slavery, nor the slain despoiled, nor Hellenic territory devastated. For any difference between Greek and Greek is to “be regarded by them as discord only — a quarrel among friends, which is not to be called war”.... “Our citizens *i.e.* in the ideal republic should thus deal with their Hellenic enemies; and with barbarians as the Hellenes now deal with one another.” (V. 471.)

The views of Plato and Aristotle on this and other questions were in advance of the custom and practice of their time.

[9] “The Lord is a man of war,” said Moses (*Exodus* XV. 3). Cf. *Psalms* XXIV. 8. He is “mighty in battle.”

[10] This was bound up with the very essence of Islam; the devout Mussulman could suffer the existence of no unbeliever. Tolerance or indifference was an attitude which his faith made impossible. “When ye encounter the unbelievers,” quoth the prophet (*Koran*, ch. 47), “strike off their heads, until ye have made a great slaughter among them.... Verily if God pleased he could take vengeance on them without your assistance; but he commandeth you to fight his battles.”

The propagation of the faith by the sword was not only commanded by the Mohammedan religion: it was that religion itself.

[11] See *Acts* X. 28:— “Ye know that it is an unlawful thing for a man that is a Jew to keep company, or come unto one of another nation.”

[12] Neither, however, is there any which regards the soldier as a murderer.

[13] In the early centuries of our era Christians seem to have occasionally refused to serve in the army from religious scruples. But soldiers were not always required to change their profession after baptism. And in

Acts X., for example, nothing is said to indicate that the centurion, Cornelius, would have to leave the Roman army. See Tertullian: *De Corona* (Anti-Nicene Christian Library), .

14 There were so-called “Sacred Wars” in Greece, but these were due mainly to disputes caused by the Amphictyonic League. They were not religious, in the sense in which we apply the epithet to the Thirty Years’ war.

15 “The administration of justice among rude illiterate people, was not so accurate, or decisive, or uniform, as to induce men to submit implicitly to its determinations. Every offended baron buckled on his armour, and sought redress at the head of his vassals. His adversary met him in like hostile array. Neither of them appealed to impotent laws which could afford them no protection. Neither of them would submit points, in which their honour and their passions were warmly interested, to the slow determination of a judicial inquiry. Both trusted to their swords for the decision of the contest.” Robertson’s *History of Charles V.*, (*Works*, vol. V.) Sect. I., .

16 Erasmus in the “Ἰχθυοφαγία” (*Colloquies*, Bailey’s ed., Vol. II., p, 56) puts forward the suggestion that a general peace might be obtained in the Christian world, if the Emperor would remit something of his right and the Pope some part of his.

17 Cf. Robertson, *op. cit.*, Sect. III., , *seq.*

18 Robertson (*op. cit.*, Note XXI.,) quotes the following statement: “flamma, ferro, caede, possessiones ecclesiarum praelati defendebant.” (Guido Abbas ap. Du Cange, .)

19 J. A. Farrar, in a pamphlet, (reprinted from the *Gentleman’s Magazine*, vol. 257, 1884) on *War and Christianity*, quotes the following passage from Wycliffe in which he protests against this blot upon the Church and Christian professions.— “Friars now say that bishops can fight best of all men, and that it falleth most properly to them, since they are lords of all this world. They say Christ bade His disciples sell their coats, and buy them swords; but whereto, if not to fight? Thus friars make a great array, and stir up many men to fight. But Christ taught not His apostles to fight with a sword of iron, but with the sword of God’s Word, and which standeth in meekness of heart and in the prudence of man’s tongue.... If man-slaying in others be odious to God, much more in priests, who should be vicars of Christ.” See also the passage where Erasmus points out that King David was not permitted to build a temple to God, because he was a man of blood. “Nolo clericos ullo sanguine contaminari. Gravis impietas!” (*Opera*, IX., 370 B.)

This question had already been considered by Thomas Aquinas, who decided that the clergy ought not to be allowed to fight, because the practices of warfare, although right and meritorious in themselves, were not in accordance with a holy calling. (*Summa*, II. 2: Qu. 40.)

Aquinas held that war — excluding private war — is justifiable in a just cause. So too did Luther, (cf. his pamphlet: *Ob Kriegsleute auch in seligem Stande sein können?*) Calvin and Zwingli, the last of whom

died sword in hand.

With regard to the question of a fighting clergy, the passage quoted from Origen (p, 15, above) has considerable interest, Origen looks upon the active participation of priests in warfare as something which everyone would admit to be impossible.

[20] See also the *Querela Pacis*, 630 B., (*Opera*, IV.):— “Whosoever preaches Christ, preaches peace.” Erasmus even goes the length of saying that the most iniquitous peace is better than the most just war (*op. cit.*, 636 C).

[21] Cf. Robertson, *op. cit.*, Note XXI. and Sect. I., .

[22] It is uncertain in what year the *De Jure Belli* of Gentilis was published — a work to which Grotius acknowledges considerable indebtedness. Whewell, in the preface to his translation of Grotius, gives the date 1598, but some writers suppose it to have been ten years earlier.

[23] This came about in two ways. The Church of Rome discouraged the growth of national sentiment. At the Reformation the independence and unity of the different nations were for the first time recognised. That is to say, the Reformation laid the foundation for a science of international law. But, from another point of view, it not only made such a code of rules possible, it made it necessary. The effect of the Reformation was not to diminish the number of wars in which religious belief could play a part. Moreover, it displaced the Pope from his former position as arbiter in Europe without setting up any judicial tribunal in his stead.

[24] Cf. Cicero: *De Officiis*, I. xi. “Belli quidem aequitas sanctissime feciali populi Romani jure perscripta est.” (See the reference to Lawrence’s comments on this subject, above.)

“Wars,” says Cicero, “are to be undertaken for this end, that we may live in peace without being injured; but when we obtain the victory, we must preserve those enemies who behaved without cruelty or inhumanity during the war: for example, our forefathers received, even as members of their state, the Tuscans, the Æqui, the Volscians, the Sabines and the Hernici, but utterly destroyed Carthage and Numantia.... And, while we are bound to exercise consideration toward those whom we have conquered by force, so those should be received into our protection who throw themselves upon the honour of our general, and lay down their arms,” (*op. cit.*, I. xi., Bohn’s Translation).... “In engaging in war we ought to make it appear that we have no other view but peace.” (*op. cit.*, I. xxiii.)

In fulfilling a treaty we must not sacrifice the spirit to the letter (*De Officiis*, I. x). “There are also rights of war, and the faith of an oath is often to be kept with an enemy.” (*op. cit.*, III. xxix.)

This is the first statement by a classical writer in which the idea of justice being due to an enemy appears.

Cicero goes further. Particular states, he says, (*De Legibus*, I. i.) are only members of a whole governed by reason.

[25] The saying is attributed to Pompey:— "Shall I, when I am preparing for war, think of the laws?"

[26] This implied, however, the idea of a united Christendom as against the infidel, with which we may compare the idea of a united Hellas against Persia. In such things we have the germ not only of international law, but of the ideal of federation.

[27] See Maine's *Ancient Law*, p-53: p-101. Grotius wrongly understood "Jus Gentium," ("a collection of rules and principles, determined by observation to be common to the institutions which prevailed among the various Italian tribes") to mean "Jus *inter* gentes." The Roman expression for International Law was not "Jus Gentium," but "Jus Feciale."

"Having adopted from the Antonine jurisconsults," says Maine, "the position that the Jus Gentium and the Jus Naturæ were identical, Grotius, with his immediate predecessors and his immediate successors, attributed to the Law of Nature an authority which would never perhaps have been claimed for it, if "Law of Nations" had not in that age been an ambiguous expression. They laid down unreservedly that Natural Law is the code of states, and thus put in operation a process which has continued almost down to our own day, the process of engrafting on the international system rules which are supposed to have been evolved from the unassisted contemplation of the conception of Nature. There is, too, one consequence of immense practical importance to mankind which, though not unknown during the early modern history of Europe, was never clearly or universally acknowledged till the doctrines of the Grotian school had prevailed. If the society of nations is governed by Natural Law, the atoms which compose it must be absolutely equal. Men under the sceptre of Nature are all equal, and accordingly commonwealths are equal if the international state be one of nature. The proposition that independent communities, however different in size and power, are all equal in the view of the Law of Nations, has largely contributed to the happiness of mankind, though it is constantly threatened by the political tendencies of each successive age. It is a doctrine which probably would never have obtained a secure footing at all if International Law had not been entirely derived from the majestic claims of Nature by the Publicists who wrote after the revival of letters." (*Op. cit.*, .)

[28] The name "International Law" was first given to the law of nations by Bentham. (*Principles of Morals and Legislation, XIX.* § xxv.)

[29] In the Peace of Westphalia, 1648, the balance of power in Europe was recognised on the basis of terms such as these.

[30] Grotius, however, is a painstaking student of Scripture, and is willing to say something in favour of peace — not a permanent peace, that is to say, the idea of which would scarcely be likely to occur to anyone in the early years of the seventeenth century — but a plea for fewer, shorter wars. "If therefore," he says, "a peace sufficiently safe can be had, it is not ill secured by the condonation of offenses, and

damages, and expenses: especially among Christians, to whom the Lord has given his peace as his legacy. And so St. Paul, his best interpreter, exhorts us to live at peace with all men.... May God write these lessons — He who alone can — on the hearts of all those who have the affairs of Christendom in their hands.” (*De Jure Belli et Pacis*, III. Ch. XXV., Whewell’s translation.)

See also *op. cit.*, II., Ch. XXIII., Sect. VIII., where Grotius recommends that Congresses of Christian Powers should be held with a view to the peaceful settlement of international differences.

[31] Puffendorf’s best known work, *De Jure Naturæ et Gentium*, was published in 1672.

[32] *Le Droit des Gens* was published in 1758 and translated into English by Joseph Chitty in 1797, (2nd ed., 1834).

[33] *Mémoires ou Œconomies Royales D’Estat, Domestiques, Politiques et Militaires de Henri le Grand, par Maximilian de Bethune, Duc de Sully.*

[34] See *International Tribunals* (1899), *seq.* Penn’s *Essay towards the Present and Future Peace of Europe* was written about 1693, but is not included in all editions of his works.

[35] *Projet de traité pour rendre la paix perpétuelle entre les souverains chrétiens*. The first two volumes of this work were published in 1713 (trans. London, 1714); a third volume followed in 1717.

[36] The main articles of this and other peace projects are to be found in *International Tribunals*, published by the Peace Society.

[37] Professor Lorimer points out that Prussia, then the Duchy of Brandenburg, is not mentioned. (*Institutes of the Law of Nations*, II. Ch. VII., .)

[38] The same objection was raised by Leibniz (see his *Observations* on St. Pierre’s *Projet*) to the scheme of Henry IV., who, says Leibniz, thought more of overthrowing the house of Austria than of establishing a society of sovereigns.

[39] *Project*, Art. VI., Eng. trans. (1714), .

[40] St. Pierre was not blind to this aspect of the question. Among the critical objections which he anticipates to his plan is this, — that it promises too great an increase of strength to the house of France, and that therefore the author would have been wiser to conceal his nationality.

[41] St. Pierre, in what may be called an apology for the wording of the title of his book (above, , *note*), justifies his confidence in these words:— "The Pilot who himself seems uncertain of the Success of his Voyage is not likely to persuade the Passenger to embark.... I am persuaded, that it is not impossible to find out Means sufficient and practicable to settle an Everlasting Peace among Christians; and even believe, that the Means which I have thought of are of that Nature." (Preface to *Project*, Eng. trans., 1714.)

[42] *Leviathan*, I. Ch. V.

[43] See too Voltaire's allusion to St. Pierre in his *Dictionary*, under "Religion."

[44] Leibniz regarded the project of St. Pierre with an indifference, somewhat tinged with contempt. In a letter to Grimarest, (*Leibnit*. *Opera*, Dutens' ed., 1768, Vol. V., p, 66: in *Epist*., ed. Kortholt., Vol. III.,) he writes:— "I have seen something of M. de St. Pierre's plan for maintaining perpetual peace in Europe. It reminds me of an inscription outside of a churchyard which ran, '*Pax Perpetua*. For the dead, it is true, fight no more. But the living, are of another mind, and the mightiest among them have little respect for tribunals.'" This is followed by the ironical suggestion that a court of arbitration should be established at Rome of which the Pope should be made president; while at the same time the old spiritual authority should be restored to the Church, and excommunication be the punishment of non-compliance with the arbitral decree. "Such plans," he adds, "are as likely to succeed as that of M. de St. Pierre. But as we are allowed to write novels, why should we find fault with fiction which would bring back the golden age?" But see also *Observations sur le Projet d'une Paix Perpétuelle de M. l'Abbé de St. Pierre* (Dutens, V., esp.) and the letter to Remond de Montmort (*ibid*. p, 21) where Leibniz considers this project rather more seriously.

[45] "C'est un livre solide et sensé," says Rousseau (*Jugement sur la Paix Perpétuelle*), "et il est très important qu'il existe." This *Jugement* is appended to Rousseau's *Extrait du Projet de Paix Perpétuelle de Monsieur l'Abbé de Saint-Pierre*, 1761.

[46] Cf. Cowper: *The Winter Morning Walk*: —

"Great princes have great playthings. Some have play'd

At hewing mountains into men, and some

At building human wonders mountain high.

....

....

Some seek diversion in the tented field,

And make the sorrows of mankind their sport.

But war’s a game, which, were their subjects wise,

Kings should not play at. Nations would do well

T’extort their truncheons from the puny hands

Of heroes, whose infirm and baby minds

Are gratified with mischief, and who spoil,

Because men suffer it, their toy the world.”

[47] “Les troupes réglées, peste et dépopulation de l’Europe, ne sont bonnes qu’a deux fins: ou pour attaquer et conquérir les voisins, ou pour enchâiner et asservir les citoyens.” (*Gouvernement de Pologne*, Ch. XII.)

[48] Hobbes realises clearly that there probably never was such a state of war all over the world nor a state of nature conforming to a common type. The case is parallel to the use of the term “original contract” as an explanation of the manner in which the civil state came to be formed. (Cf. , *note*.)

See also Hume (*Inquiry concerning the Principles of Morals*, Sect. III. Part I.). “This *poetical* fiction of the *golden age* is, in some respects, of a piece with the *philosophical* fiction of the *state of nature*; only that the former is represented as the most charming and most peaceable condition, which can possibly be imagined; whereas the latter is painted out as a state of mutual war and violence, attended with the most extreme necessity.” This fiction of a state of nature as a state of war, says Hume, (in a note to this passage) is not the invention of Hobbes. Plato (*Republic*, II. III. IV.) refutes a hypothesis very like it, and Cicero (*Pro Sext*. l. 42) regards it as a fact universally acknowledged.

Cf. also Spinoza (*Tract*. *Pol*. c. ii. § 14): “Homines ex natura hostes.” And (c. v. § 2): “Homines civiles non nascuntur sed fiunt.” These expressions are to be understood, says Bluntschli (*Theory of the State*, IV. Ch. vi., , *note* a), “rather as a logical statement of what *would be* the condition of man apart from civil society, than as distinctly implying a historical theory.”

While starting from the same premises, Spinoza carries Hobbes' political theories to their logical conclusion. If we admit that right lies with might, then right is with the people in any revolution successfully carried out. (But see Hobbes' Preface to the *Philosophical Rudiments* and Kant's *Perpetual Peace*, , *note*.) Spinoza, in a letter, thus alludes to this point of difference:— "As regards political theories, the difference which you inquire about between Hobbes and myself, consists in this, that I always preserve natural right intact, and only allot to the chief magistrates in every state a right over their subjects commensurate with the excess of their power over the power of the subjects. This is what always takes place in the state of nature." (Epistle 50, *Works*, Bohn's ed., Vol. II.)

[49] The italics are mine. — Tr.

[50] Professor Paulsen (*Immanuel Kant*, 2nd ed., 1899, — Eng. trans.,) points out that pessimism and absolutism usually go together in the doctrines of philosophers. He gives as instances Hobbes, Kant and Schopenhauer.

Hobbes (*On Dominion*, Ch. X. 3, *seq*.) regarded an absolute monarchy as the only proper form of government, while in the opinion of Locke, (*On Civil Government*, II. Ch. VII. §§ 90, 91) it was no better than a state of nature. Kant would not have gone quite so far. As a philosopher, he upheld the sovereignty of the people and rejected a monarchy which was not governed in accordance with republican principles; as a citizen, he denied the right of resistance to authority. (Cf. *Perpetual Peace*, p, 188, *note*.)

[51] We find the same rule laid down as early as the time of Dante. Cf. *De Monarchia*, Bk. II. 9:— "When two nations quarrel they are bound to try in every possible way to arrange the quarrel by means of discussion: it is only when this is hopeless that they may declare war."

[52] Rousseau (*Contrat Social*: I. vi.) regards the social contract as tacitly implied in every actual society: its articles "are the same everywhere, and are everywhere tacitly admitted and recognised, even though they may never have found formal expression" in any constitution. In the same way he speaks of a state of nature "which no longer exists, which perhaps never has existed." (Preface to the *Discourse on the Causes of Inequality*.) But Rousseau's interpretation of these terms is, on the whole, literal in spite of these single passages. He speaks throughout the *Contrat Social*, as if history could actually record the signing and drawing up of such documents. Hobbes, Hooker, (*Ecclesiastical Polity*, I. sect. 10 — see also Ritchie: *Darwin and Hegel*, *seq*.) Hume and Kant use more careful language. "It cannot be denied," writes Hume, (*Of the Original Contract*) "that all government is, at first, founded on a contract and that the most ancient rude combinations of mankind were formed chiefly by that principle. In vain are we asked in what records this charter of our liberties is registered. It was not written on parchment, nor yet on leaves or barks of trees. It preceded the use of writing and all the other civilised arts of life. But we trace it plainly in the nature of man, and in the equality, or something approaching equality, which we find in all the individuals of that species."

This fine passage expresses admirably the views of Kant on this point. Cf. *Werke*, (Rosenkranz) IX. 160.

The original contract is merely an idea of reason, one of those ideas which we think into things in order to explain them.

Hobbes does not professedly make the contract historical, but in Locke's *Civil Government* (II. Ch. VIII. § 102) there is some attempt made to give it a historical basis. — By consent all were equal, "till by the same consent they set rulers over themselves. So that their politic societies all began from a voluntary union, and the mutual agreement of men freely acting in the choice of their governors, and forms of government."

Bluntschli points out (*Theory of the State*, IV. ix., and *note*) that the same theory of contract on which Hobbes' doctrine of an absolute government was based was made the justification of violent resistance to the government at the time of the French Revolution. The theory was differently applied by Hobbes, Locke and Rousseau. According to the first, men leave the "state of nature" when they surrender their rights to a sovereign, and return to that state during revolution. But, for Rousseau, this sovereign authority is the people: a revolution would be only a change of ministry. (See *Cont. Soc.*, III. Ch. xviii.) Again Locke holds revolution to be justifiable in all cases where the governments have not fulfilled the trust reposed by the people in them. (Cf. Kant's *Perpetual Peace*, , *note*).

[53] "If you unite many men," writes Rousseau, (*Cont. Soc.*, IV. I.) "and consider them as one body, they will have but one will; and that will must be to promote the common safety and general well-being of all." This *volonté générale*, the common element of all particular wills, cannot be in conflict with any of them. (*Op. cit.*, II. iii.)

[54] In Eng. trans., see .

[55] See .

[56] See .

[57] Unlike Hegel whose ideal was the Prussian state, as it was under Frederick the Great. An enthusiastic supporter of the power of monarchy, he showed himself comparatively indifferent to the progress of constitutional liberty.

[58] Isolated passages are sometimes quoted from Kant in support of a theory that the present treatise is at least half ironicalA and that his views on the question of perpetual peace did not essentially differ from those of Leibniz. "Even war," he says, (*Kritik d. Urteilskraft*, I. Book ii. § 28.) "when conducted in an orderly way and with reverence for the rights of citizens has something of the sublime about it, and the more dangers a nation which wages war in this manner is exposed to and can courageously overcome, the nobler does its character grow. While, on the other hand, a prolonged peace usually has the effect of giving free play to a purely commercial spirit, and side by side with this, to an ignoble self-seeking, to cowardice and effeminacy; and the result of this is generally a degradation of national character."

This is certainly an admission that war which does not violate the Law of Nations has a good side as well as a bad. We could look for no less in so clear-sighted and unprejudiced a thinker. Kant would have been the first to admit that under certain conditions a nation can have no higher duty than to wage war. War is necessary, but it is in contradiction to reason and the spirit of right. The "scourge of mankind," "making more bad men than it takes away," the "destroyer of every good," Kant calls it elsewhere. (*Theory of Ethics*, Abbott's trans., 4th ed., , *note*.)

A Cf. K. v. Stengel: *Der Ewige Friede*, Munich, 1899; also Vaihinger: *Kantstudien*, Vol. IV., .

[59] Cf. *Idea for a Universal History*, Pro; *Perpetual Peace*, p, 157.

[60] The immediate stimulus to Kant's active interest in this subject as a practical question was the Peace of Basle (1795) which ended the first stage in the series of wars which followed the French Revolution.

[61] It is *eine unausführbare Idee*. See the passage quoted from the *Rechtslehre*, , *note*.

[62] *Geschichte der neueren Philosophie*, (4th ed., 1899), Vol. V., I. Ch. 12, *seq*.

[63] See .

[64] See .

[65] See .

[66] See .

[67] See .

[68] See .

[69] A large part of Kant's requirements as they are expressed in these Preliminary Articles has already been fulfilled. The first (Art. 1) is recognised in theory at least by modern international law. More cannot be said. A treaty of this kind is of necessity more or less forced by the stronger on the weaker. The formal ratification of peace in 1871 did not prevent France from longing for the day when she might win back Alsace-Lorraine and be revenged on Prussia. Not the treaty nor a consciousness of defeat has kept the peace west of the Rhine, but a reluctant respect for the fortress of Metz and the mighty army of united

Germany.

Articles 2 and 6 are already commonplaces of international law. Article 2 refers to practices which have not survived the gradual disappearance of dynastic war. Art. 6 is the basis of our modern law of war. Art. 3 has been fulfilled in the literal sense that the standing armies composed of mercenary troops to which Kant alludes exist no longer. But it is to be feared that Kant would not think that we have made things much better, nor regard our present system of progressive armaments as a step in the direction of perpetual peace. Art. 4 is not likely to be fulfilled in the near future. It is long since Cobden denounced the institution of National Debts — an institution which, as Kant points out, owes its origin to the English, the “commercial people” referred to in the text. Art. 5 no doubt came to Kant through Vattel. “No nation,” says the Swiss publicist, (*Law of Nations*, II. Ch. iv. § 54) “has the least right to interfere with the government of another,” unless, he adds, (Ch. v. § 70) in a case of anarchy or where the well-being of the human race demands it. This is a recognised principle of modern international law. Intervention is held to be justifiable only where the obligation to respect another’s freedom of action comes into conflict with the duty of self-preservation.

Puffendorf leaves much more room for the exercise of benevolence. The natural affinity and kinship between men is, says he, (*Les Devoirs de l’homme et du citoien*, II. Ch. xvi. § xi.) “a sufficient reason to authorise us to take up defence of every person whom one sees unjustly oppressed, when he implores our aid *and when we can do it conveniently*.” (The italics are mine. — Tr.)

[70] See . The main principle involved in this passage comes from Vattel (*op. cit*., II. Ch. viii. §§ 104, 105: Ch. ix. §§ 123, 125). A sovereign, he says, cannot object to a stranger entering his state who at the same time respects its laws. No one can be quite deprived of the right of way which has been handed down from the time when the whole earth was common to all men.

[71] See .

[72] Kant believed that, in the newly formed constitution of the United States, his ideal with regard to the external forms of the state as conforming to the spirit of justice was most nearly realised. Professor Paulsen draws attention, in the following passage, to the fact that Kant held the English government of the eighteenth century in very low esteem. (*Kant*, , *note*. See Eng. trans., , *note*.) It was not the English state, he says, which furnished Kant with an illustration of his theory:— “Rather in it he sees a form of despotism only slightly veiled, not Parliamentary despotism, as some people have thought, but monarchical despotism. Through bribery of the Commons and the Press, the King had actually absolute power, as was evident, above all, from the fact that he had often waged war without, and in defiance of, the will of the people. Kant has a very unfavourable opinion of the English state in every way. Among the collected notes written by him in the last ten years of the century and published by Reicke (*Lose Blätter*, I. 129) the following appears:— ‘The English nation (*gens*) regarded as a people (*populus*) and looked upon side by side with other races is, as a collection of individuals, of all mankind the most highly to be esteemed. But as a state, compared with other states, it is the most destructive, high-handed and tyrannical, and the most provocative of war among them all.’”

Kuno Fischer (*op. cit.*, Vol. V., I. Ch. 11, p, 151) to whom Professor Paulsen's reference may here perhaps allude, states that Kant's objection to the English constitution is that it was an oligarchy, Parliament being not only a legislative body, but through its ministers also executive in the interests of the ruling party or even of private individuals in that party. It seems more likely that what most offended a keen observer of the course of the American War of Independence was the arbitrary and ill-directed power of the king. But see the passage quoted by Fischer (p, 153) from the *Rechtslehre* (Part II. Sect. I.) which is, he says, unmistakeably directed against the English constitution and certain temporary conditions in the political history of the country.

[73] St. Pierre actually thought that his federation would prevent civil war. See *Project* (1714), .

[74] See .

[75] This was the ideal of Dante. Cf. *De Monarchia*, Bk. I. 54:— "We shall not find at any time except under the divine monarch Augustus, when a perfect monarchy existed, that the world was everywhere quiet."

Bluntschli (*Theory of the State*, I. Ch. ii., *seq.*) gives an admirable account of the different attempts made to realise a universal empire in the past — the Empire of Alexander the Great, based upon a plan of uniting the races of east and west; the Roman Empire which sought vainly to stamp its national character upon mankind; the Frankish Monarchy; the Holy Roman Empire which fell to pieces through the want of a central power strong enough to overcome the tendency to separation and nationalisation; and finally the attempt of Napoleon I., whose mistake was the same as that which wrecked the Roman Empire — a neglect of the strength of foreign national sentiment.

[76] Reason requires a State of nations. This is the ideal, and Kant's proposal of a federation of states is a practical substitute from which we may work to higher things. Kant, like Fichte, (*Werke*, VII. 467) strongly disapproves of a universal monarchy such as that of which Dante dreamed — a modern Roman Empire. The force of necessity, he says, will bring nations at last to become members of a cosmopolitan state, "or if such a state of universal peace proves (as has often been the case with too great states) a greater danger to freedom from another point of view, in that it introduces despotism of the most terrible kind, then this same necessity must compel the nations to enter a state which indeed has the form not of a cosmopolitan commonwealth under one sovereign, but of a federation regulated by legal principles determined by a common code of international law." (*Das mag in d. Theorie richtig sein*, *Werke*, (Rosenkranz) VII.,). Cf. also *Theory of Ethics*, (Abbott), , *note*; *Perpetual Peace*, p, 156.

[77] See the *Philosophie d. Rechts*, (*Werke*, Vol. VIII.) Part iii. § 324 and appendix.

[78] Cf. *Die Braut von Messina*: —

"Denn der Mensch verkümmert im Frieden,

Müssige Ruh' ist das Grab des Muths.

Das Gesetz ist der Freund des Schwachen,

Alles will es nur eben machen,

Möchte gerne die Welt verflachen;

Aber der Krieg lässt die Kraft erscheinen,

Alles erhebt er zum Ungemeinen,

Selber dem Feigen erzeugt er den Muth."

This passage perhaps scarcely gives a fair representation of Schiller's views on the question, which, if we judge from *Wilhelm Tell*, must have been very moderate. War, he says, in this oft-quoted passage, is sometimes a necessity. There is a limit to the power of tyranny and, when the burden becomes unbearable, an appeal to Heaven and the sword.

Wilhelm Tell: Act. II. Sc. 2.

"Nein, eine Grenze hat Tyrannenmacht.

Wenn der Gedrückte nirgends Recht kann finden,

Wenn unerträglich wird die Last greift er

Hinauf getrosten Muthes in den Himmel

Und holt herunter seine ew'gen Rechte,

Die droben hangen unveräusserlich

Und unzerbrechlich, wie die Sterne selbst —

Der alte Urstand der Natur kehrt wieder,

Wo Mensch dem Menschen gegenüber steht —

Zum letzten Mittel, wenn kein andres mehr

Verfangen will, ist ihm das Schwert gegeben.”

[79] Letter to Bluntschli, dated Berlin, 11th Dec., 1880 (published in Bluntschli’s *Gesammelte Kleine Schriften*, Vol. II.,).

[80] Cf. Tennyson’s *Maud*: Part I., vi. and xiii.

“Why do they prate of the blessings of Peace? we have made them a curse,

Pickpockets, each hand lusting for all that is not its own;

And lust of gain, in the spirit of Cain, is it better or worse

Than the heart of the citizen hissing in war on his own hearthstone?

For I trust if an enemy’s fleet came yonder round by the hill,

And the rushing battle-bolt sang from the three-decker out of the foam,

That the smooth-faced snub-nosed rogue would leap from his counter and till,

And strike, if he could, were it but with his cheating yardwand, home.”

See too Part III., ii. and iv.

“And it was but a dream, yet it lighten’d my despair

When I thought that a war would arise in defence of the right,

That an iron tyranny now should bend or cease,

The glory of manhood stand on his ancient height,

Nor Britain’s one sole God be the millionaire:

No more shall commerce be all in all, and Peace

Pipe on her pastoral hillock a languid note,

And watch her harvest ripen, her herd increase,

Nor the cannon-bullet rest on a slothful shore,

And the cobweb woven across the cannon’s throat

Shall shake its threaded tears in the wind no more.

Let it go or stay, so I wake to the higher aims

Of a land that has lost for a little her lust of gold,

And love of a peace that was full of wrongs and shames,

Horrible, hateful, monstrous, not to be told;

And hail once more to the banner of battle unroll’d!

Tho’ many a light shall darken, and many shall weep

For those that are crush’d in the clash of jarring claims,

For God's just wrath shall be wreak'd on a giant liar;

And many a darkness into the light shall leap,

And shine in the sudden making of splendid names,

And noble thought be freer under the sun,

And the heart of a people beat with one desire."

[81] Moltke strangely enough was, at an earlier period, of the opinion that war, even when it is successful, is a national misfortune. Cf. Kehrbach's preface to Kant's essay, *Zum Ewigen Frieden*, p. XVII.

[82] See his discussion on constitutional monarchy in Germany. (*Hist. u. Pol. Aufsätze*, Bd. III., *seq.*)

[83] See *Die Piccolomini*: Act. I. Sc. 4.

[84] An admirable short account of popular feeling on this matter is to be found in Lawrence's *Principles of International Law*, § 240.

[85] The first Peace Society was founded in London in 1816, and the first International Peace Congress held in 1843.

[86] In Eng. trans. see .

[87] See "A Plan for a Universal and Perpetual Peace" in the *Principles of International Law* (*Works*, Vol. II). One of the main principles advocated by Bentham in this essay (written between 1787 and 1789) is that every state should give up its colonies.

[88] See his *Kleine Schriften*.

[89] *Institutes of the Law of Nations* (1884), Vol. II., Ch. XIV.

[90] John Stuart Mill holds that the multiplication of federal unions would be a benefit to the world. See his *Considerations on Representative Government* (1865), Ch. XVII., where he discusses the conditions necessary to render such unions successful. But the Peace Society is scarcely justified, on the strength of

what is here, in including Mill among writers who have made definite proposals of peace or federation. (See *Inter. Trib.*)

[91] See what Lawrence says (*op. cit.*, § 241) of neutralisation and the limits of its usefulness as a remedy for war.

[92] Montesquieu: *Esprit des Lois*, X. Ch. 2. “The life of governments is like that of man. The latter has a right to kill in case of natural defence: the former have a right to wage war for their own preservation.”

See also Vattel (*Law of Nations*, II. Ch. XVIII. § 332):— “But if anyone would rob a nation of one of her essential rights, or a right without which she could not hope to support her national existence, — if an ambitious neighbour threatens the liberty of a republic, if he attempts to subjugate and enslave her, — she will take counsel only from her own courage. She will not even attempt the method of conferences, in the case of a contention so odious as this. She will, in such a quarrel, exert her utmost efforts, exhaust every resource and lavish her blood to the last drop if necessary. To listen to the slightest proposal in a matter of this kind is to risk everything.”

[93] The difficulties in the way of hard and fast judgments on a complicated problem of this kind are convincingly demonstrated in a recent essay by Professor D. G. Ritchie (*Studies in Political and Social Ethics*, Sonnenschein, 1902). Professor Ritchie considers in detail a number of concrete cases which occurred in the century between 1770 and 1870. “Let any one take the judgments he would pass on these or any similarly varied cases, and I think he will find that we do not restrict our approval to wars of self-defence, that we do not approve self-defence under all circumstances, that there are some cases in which we approve of absorption of smaller states by larger, that there are cases in which we excuse intervention of third parties in quarrels with which at first they had nothing to do, and that we sometimes approve war even when begun without the authority of any already existing sovereign. Can any principles be found underlying such judgments? In the first place we ought not to disguise from ourselves the fact that our judgments after the result are based largely on success. ... I think it will be found that our judgments on the wars of the century from 1770 to 1870 turn very largely on the question, Which of the conflicting forces was making for constitutional government and for social progress? or, to put it in wider terms, Which represented the higher civilisation? And thus it is that we may sometimes approve the rise of a new state and sometimes the absorption of an old.” (*Op. cit.*, p, 155.)

[94] See Fred. W. Holls: *The Peace Conference at the Hague*, Macmillan, 1900.

[95] The feeling of the Congress expressed itself thus cautiously:— “Messieurs les plénipotentiaires n’hésitent pas à exprimer, au nom de leur gouvernements, le voeu, que les Etats entre lesquels s’éléverait un dissentiment sérieux, avant d’en appeler aux armes, eussent recours, en tant que les circonstances l’admettraient, aux bons offices d’une puissance amie.”

[96] *Esprit des Lois*, XIII. Cha. “A new distemper has spread itself over Europe: it has infected our princes, and induces them to keep up an exorbitant number of troops. It has its redoublings, and of necessity

becomes contagious. For as soon as one prince augments what he calls his troops, the rest of course do the same: so that nothing is gained thereby but the public ruin. Each monarch keeps as many armies on foot as if his people were in danger of being exterminated: and they give the name of Peace to this general effort of all against all."

Montesquieu is of course writing in the days of mercenary troops; but the cost to the nation of our modern armies, both in time of peace and of war, is incomparably greater.

[97] Even St. Pierre was alive to this danger (*Projet*, Art. VIII: in the English translation of 1714,):— "The *European* Union shall endeavour to obtain in *Asia*, a *permanent* society like that of *Europe*, that Peace may be maintain'd There also; and especially that it may have no cause to fear any *Asiatic* Sovereign, either as to its tranquillity, or its Commerce in *Asia*."

[98] Bentham's suggestion would be useful here! See above, , *note*.

[99] The best thing for Europe might be that Russia (perhaps including China) should be regarded as a serious danger by all the civilised powers of the West. *That* would bring us nearer to the United States of Europe *and* America (for the United States, America, is Russia's neighbour on the East) than anything else.

[100] Trade in barbarous or savage countries is still increased by war, especially on the French and German plan which leaves no open door to other nations. Here the trade follows the flag. And war, of course, among civilised races causes small nations to disappear and their tariffs with them. *This* is beneficial to trade, but to a degree so trifling that it may here be neglected.

[101] Cf. also the civil war of 1847 in Switzerland.

[102] See *Werke*, VII., .

[103] The other he knew was impossible. Peace within the state meant decay and death. In the antagonism of nations, he saw nature's means of educating the race: it was a law of existence, a law of progress, and, as such, eternal.

[104] For a vivid picture of the material advantages offered by such a union and of the dismal future that may lie before an unfederated Europe, we cannot do better than read Mr. Andrew Carnegie's recent Rectorial Address to the students of St. Andrews University (Oct 1902). Unfortunately, Mr. Carnegie's enthusiasm stops here: he does not tell us by what means the difficulties at present in the way of a federation, industrial or political, are to be overcome.

[105] Professor D. G. Ritchie remarks that it is less an over-estimation of the value of peace than a too easy-going acceptance of abstract and unanalysed phrases about the rights of nations that injures the work of the Peace Society. Cf. his note on the principles of the Peace Congresses (*op. cit.*,).

[106] The day is past, when a nation could enjoy the exclusive advantages of its own inventions. Vattel naively recommends that we should keep the knowledge of certain kinds of trade, the building of war-ships and the like, to ourselves. Prudence, he says, prevents us from making an enemy stronger and the care of our own safety forbids it. (*Law of Nations*, II. Ch. I. § 16.)

[107] The text used in this translation is that edited by Kehrbach. Tr.

[108] I have seen something of M. de St. Pierre's plan for maintaining perpetual peace in Europe. It reminds me of an inscription outside of a churchyard, which ran "*Pax Perpetua*. For the dead, it is true, fight no more. But the living are of another mind, and the mightiest among them have little respect for tribunals." (Leibniz: *Letter to Grimarest*, quoted above, , note 44.) Tr.

[109] On the honourable interpretation of treaties, see Vattel (*op. cit.*, II. Ch. XVII., esp. §§ 263-296, 291). See also what he says of the validity of treaties and the necessity for holding them sacred (II. Ch. XII. §§ 157, 158: II. Ch. XV). Tr.

[110] "Even the smoothest way," says Hume, (*Of the Original Contract*) "by which a nation may receive a foreign master, by marriage or a will, is not extremely honourable for the people; but supposes them to be disposed of, like a dowry or a legacy, according to the pleasure or interest of their rulers." Tr.

[111] An hereditary kingdom is not a state which can be inherited by another state, but one whose sovereign power can be inherited by another physical person. The state then acquires a ruler, not the ruler as such (that is, as one already possessing another realm) the state.

[112] This has been one of the causes of the extraordinary admixture of races in the modern Austrian empire. Cf. the lines of Matthias Corvinus of Hungary (quoted in Sir W. Stirling Maxwell's *Cloister Life of Charles the Fifth*, Ch. I., *note*): —

"Bella gerant alii, tu, felix Austria, nube!

Nam quae Mars aliis, dat tibi regna Venus." Tr.

[113] A Bulgarian Prince thus answered the Greek Emperor who magnanimously offered to settle a quarrel with him, not by shedding the blood of his subjects, but by a duel:— "A smith who has tongs will not take the red-hot iron from the fire with his hands."

(This note is a-wanting in the second Edition of 1796. It is repeated in Art. II., see .) Tr.

[114] See Vattel: *Law of Nations*, II. Ch. IV. § 55. No foreign power, he says, has a right to judge the conduct and administration of any sovereign or oblige him to alter it. “If he loads his subjects with taxes, or if he treats them with severity, the nation alone is concerned; and no other is called upon to offer redress for his behaviour, or oblige him to follow more wise and equitable maxims.... But (*loc. cit.* § 56) when the bands of the political society are broken, or at least suspended, between the sovereign and his people, the contending parties may then be considered at two distinct powers; and, since they are both equally independent of all foreign authority, nobody has a right to judge them. Either may be in the right; and each of those who grant their assistance may imagine that he is giving his support to the better cause.” Tr.

[115] It has been hitherto doubted, not without reason, whether there can be laws of permission (*leges permissivæ*) of pure reason as well as commands (*leges præceptivæ*) and prohibitions (*leges prohibitivæ*). For law in general has a basis of objective practical necessity: permission, on the other hand, is based upon the contingency of certain actions in practice. It follows that a law of permission would enforce what cannot be enforced; and this would involve a contradiction, if the object of the law should be the same in both cases. Here, however, in the present case of a law of permission, the presupposed prohibition is aimed merely at the future manner of acquisition of a right — for example, acquisition through inheritance: the exemption from this prohibition (*i.e.* the permission) refers to the present state of possession. In the transition from a state of nature to the civil state, this holding of property can continue as a *bona fide*, if usurpatory, ownership, under the new social conditions, in accordance with a permission of the Law of Nature. Ownership of this kind, as soon as its true nature becomes known, is seen to be mere nominal possession (*possessio putativa*) sanctioned by opinion and customs in a natural state of society. After the transition stage is passed, such modes of acquisition are likewise forbidden in the subsequently evolved civil state: and this power to remain in possession would not be admitted if the supposed acquisition had taken place in the civilized community. It would be bound to come to an end as an injury to the right of others, the moment its illegality became patent.

I have wished here only by the way to draw the attention of teachers of the Law of Nature to the idea of a *lex permissiva* which presents itself spontaneously in any system of rational classification. I do so chiefly because use is often made of this concept in civil law with reference to statutes; with this difference, that the law of prohibition stands alone by itself, while permission is not, as it ought to be, introduced into that law as a limiting clause, but is thrown among the exceptions. Thus “this or that is forbidden”, — say, Nos. 1, 2, 3, and so on in an infinite progression, — while permissions are only added to the law incidentally: they are not reached by the application of some principle, but only by groping about among cases which have actually occurred. Were this not so, qualifications would have had to be brought into the formula of laws of prohibition which would have immediately transformed them into laws of permission. Count von Windischgrätz, a man whose wisdom was equal to his discrimination, urged this very point in the form of a question propounded by him for a prize essay. One must therefore regret that this ingenious problem has been so soon neglected and left unsolved. For the possibility of a formula similar to those of mathematics is the sole real test of a legislation that would be consistent. Without this, the so-called *jus certum* will remain forever a mere pious wish: we can have only general laws valid on the whole; no general laws possessing the universal validity which the concept law seems to demand.

[116] "From this diffidence of one another, there is no way for any man to secure himself, so reasonable, as anticipation; that is, by force, or wiles, to master the persons of all men he can, so long, till he see no other power great enough to endanger him: and this is no more than his own conservation requireth, and is generally allowed." (Hobbes: *Lev.* I. Ch. XIII.) Tr.

[117] Hobbes thus describes the establishment of the state. "A *commonwealth* is said to be *instituted*, when a *multitude* of men do agree, and *covenant, every one, with every one*, that to whatsoever *man*, or *assembly of men*, shall be given by the major part, the *right* to *present* the person of them all, that is to say, to be their *representative*; everyone, as well he that *voted for it*, as he that *voted against it*, shall *authorize* all the actions and judgments, of that man, or assembly of men, in the same manner, as if they were his own, to the end, to live peaceably amongst themselves, and be protected against other men." (*Lev.* II. Ch. XVIII.)

There is a covenant between them, "as if every man should say to every man, *I authorise and give up my right of governing myself, to this man, or to this assembly of men, on this condition, that thou give up thy right to him, and authorize all his actions in like manner*." (*Lev.* II. Ch. XVII.) Tr.

[118] It is usually accepted that a man may not take hostile steps against any one, unless the latter has already injured him by act. This is quite accurate, if both are citizens of a law-governed state. For, in becoming a member of this community, each gives the other the security he demands against injury, by means of the supreme authority exercising control over them both. The individual, however, (or nation) who remains in a mere state of nature deprives me of this security and does me injury, by mere proximity. There is perhaps no active (*facto*) molestation, but there is a state of lawlessness, (*status injustus*) which, by its very existence, offers a continual menace to me. I can therefore compel him, either to enter into relations with me under which we are both subject to law, or to withdraw from my neighbourhood. So that the postulate upon which the following articles are based is:— "All men who have the power to exert a mutual influence upon one another must be under a civil government of some kind."

A legal constitution is, according to the nature of the individuals who compose the state: —

(1) A constitution formed in accordance with the right of citizenship of the individuals who constitute a nation (*jus civitatis*).

(2) A constitution whose principle is international law which determines the relations of states (*jus gentium*).

(3) A constitution formed in accordance with cosmopolitan law, in as far as individuals and states, standing in an external relation of mutual reaction, may be regarded as citizens of one world-state (*jus cosmopoliticum*).

This classification is not an arbitrary one, but is necessary with reference to the idea of perpetual peace. For, if even one of these units of society were in a position physically to influence another, while yet remaining a member of a primitive order of society, then a state of war would be joined with these primitive conditions; and from this it is our present purpose to free ourselves.

[119] Lawful, that is to say, external freedom cannot be defined, as it so often is, as the right *Befugniss* "to do whatever one likes, so long as this does not wrong anyone else."B For what is this right? It is the possibility of actions which do not lead to the injury of others. So the explanation of a "right" would be something like this:— "Freedom is the possibility of actions which do not injure anyone. A man does not wrong another — whatever his action — if he does not wrong another": which is empty tautology. My external (lawful) freedom is rather to be explained in this way: it is the right through which I require not to obey any external laws except those to which I could have given my consent. In exactly the same way, external (legal) equality in a state is that relation of the subjects in consequence of which no individual can legally bind or oblige another to anything, without at the same time submitting himself to the law which ensures that he can, in his turn, be bound and obliged in like manner by this other.

The principle of lawful independence requires no explanation, as it is involved in the general concept of a constitution. The validity of this hereditary and inalienable right, which belongs of necessity to mankind, is affirmed and ennobled by the principle of a lawful relation between man himself and higher beings, if indeed he believes in such beings. This is so, because he thinks of himself, in accordance with these very principles, as a citizen of a transcendental world as well as of the world of sense. For, as far as my freedom goes, I am bound by no obligation even with regard to Divine Laws — which are apprehended by me only through my reason — except in so far as I could have given my assent to them; for it is through the law of freedom of my own reason that I first form for myself a concept of a Divine Will. As for the principle of equality, in so far as it applies to the most sublime being in the universe next to God — a being I might perhaps figure to myself as a mighty emanation of the Divine spirit, — there is no reason why, if I perform my duty in the sphere in which I am placed, as that aeon does in his, the duty of obedience alone should fall to my share, the right to command to him. That this principle of equality, (unlike the principle of freedom), does not apply to our relation to God is due to the fact that, to this Being alone, the idea of duty does not belong.

As for the right to equality which belongs to all citizens as subjects, the solution of the problem of the admissibility of an hereditary nobility hinges on the following question:— "Does social rank — acknowledged by the state to be higher in the case of one subject than another — stand above desert, or does merit take precedence of social standing?" Now it is obvious that, if high position is combined with good family, it is quite uncertain whether merit, that is to say, skill and fidelity in office, will follow as well. This amounts to granting the favoured individual a commanding position without any question of desert; and to that, the universal will of the people — expressed in an original contract which is the fundamental principle of all right — would never consent. For it does not follow that a nobleman is a man of noble character. In the case of the official nobility, as one might term the rank of higher magistracy — which one must acquire by merit — the social position is not attached like property to the person but to his office, and equality is not thereby disturbed; for, if a man gives up office, he lays down with it his official rank and falls back into the rank of his fellows.

B Hobbes' definition of freedom is interesting. See *Lev.* II. Ch. XXI.:— "A Freeman, *is he, that in those things, which by his strength and wit he is able to do, is not hindered to do what he has a will to.*" Tr.

[120] Cf. Cowper: *The Winter Morning Walk*: —

"But is it fit, or can it bear the shock

Of rational discussion, that a man,

Compounded and made up like other men

Of elements tumultuous, ...

....

Should when he pleases, and on whom he will,

Wage war, with any or with no pretence

Of provocation giv'n or wrong sustain'd,

And force the beggarly last doit, by means

That his own humour dictates, from the clutch

Of poverty, that thus he may procure

His thousands, weary of penurious life,

A splendid opportunity to die?"

....

....

“He deems a thousand or ten thousand lives

Spent in the purchase of renown for him,

An easy reckoning.” Tr.

[121] Cf. Hobbes: *On Dominion*, Ch. VII. § 1. “As for the difference of cities, it is taken from the difference of the persons to whom the supreme power is committed. This power is committed either to *one man*, or *council*, or some *one court* consisting of many men.” Tr.

[122] The lofty appellations which are often given to a ruler — such as the Lord’s Anointed, the Administrator of the Divine Will upon earth and Vicar of God — have been many times censured as flattery gross enough to make one giddy. But it seems to me without cause. Far from making a prince arrogant, names like these must rather make him humble at heart, if he has any intelligence — which we take for granted he has — and reflects that he has undertaken an office which is too great for any human being. For, indeed, it is the holiest which God has on earth — namely, the right of ruling mankind: and he must ever live in fear of injuring this treasure of God in some respect or other.

[123] Mallet du Pan boasts in his seemingly brilliant but shallow and superficial language that, after many years experience, he has come at last to be convinced of the truth of the well known saying of Pope *Essay on Man*, III. 303: —

“For Forms of Government let fools contest;

Whate’er is best administered is best.”

If this means that the best administered government is best administered, then, in Swift’s phrase, he has cracked a nut to find a worm in it. If it means, however, that the best conducted government is also the best kind of government, — that is, the best form of political constitution, — then it is utterly false: for examples of wise administration are no proof of the kind of government. Who ever ruled better than Titus and Marcus Aurelius, and yet the one left Domitian, the other Commodus, as his successor? This could not have happened where the constitution was a good one, for their absolute unfitness for the position was early enough known, and the power of the emperor was sufficiently great to exclude them.

[124] “For as amongst masterless men, there is perpetual war, of every man against his neighbour; no inheritance, to transmit to the son, nor to expect from the father; no propriety of goods, or lands; no security; but a full and absolute liberty in every particular man: so in states, and commonwealths not dependent on one another, every commonwealth, not every man, has an absolute liberty, to do what it shall judge, that is to say, what that man, or assembly that representeth it, shall judge most conducing to their benefit. But withal, they live in the condition of a perpetual war, and upon the confines of battle, with their

frontiers armed, and cannons planted against their neighbours round about.” (Hobbes: *Leviathan*, II. Ch. XXI.) Tr.

[125] But see , where Kant seems to speak of a State of nations as the ideal. Kant expresses himself, on this point, more clearly in the *Rechtslehre*, Part. II. § 61:— “The natural state of nations,” he says here, “like that of individual men, is a condition which must be abandoned, in order that they may enter a state regulated by law. Hence, before this can take place, every right possessed by these nations and every external “mine” and “thine” *id est*, symbol of possession which states acquire or preserve through war are merely *provisional*, and can become *peremptorily* valid and constitute a true state of peace only in a universal *union of states*, by a process analogous to that through which a people becomes a state. Since, however, the too great extension of such a State of nations over vast territories must, in the long run, make the government of that union — and therefore the protection of each of its members — impossible, a multitude of such corporations will lead again to a state of war. So that *perpetual peace*, the final goal of international law as a whole, is really an impracticable idea *eine unausführbare Idee*. The political principles, however, which are directed towards this end, (that is to say, towards the establishment of such unions of states as may serve as a continual approximation to that ideal), are not impracticable; on the contrary, as this approximation is required by duty and is therefore founded also upon the rights of men and of states, these principles are, without doubt, capable of practical realization.” Tr.

[126] A Greek Emperor who magnanimously volunteered to settle by a duel his quarrel with a Bulgarian Prince, got the following answer:— “A smith who has tongs will not pluck the glowing iron from the fire with his hands.”

[127] “Both sayings are very true: that *man to man is a kind of God*; and that *man to man is an arrant wolf*. The first is true, if we compare citizens amongst themselves; and the second, if we compare cities. In the one, there is some analogy of similitude with the Deity; to wit, justice and charity, the twin sisters of peace. But in the other, good men must defend themselves by taking to them for a sanctuary the two daughters of war, deceit and violence: that is, in plain terms, a mere brutal rapacity.” (Hobbes: Epistle Dedicatory to the *Philosophical Rudiments concerning Government and Society*.) Tr.

[128] “The strongest are still never sufficiently strong to ensure them the continual mastership, unless they find means of transforming force into right, and obedience into duty.

From the right of the strongest, right takes an ironical appearance, and is rarely established as a principle.” (*Contrat Social*, I. Ch. III.) Tr.

[129] “The natural state,” says Hobbes, (*On Dominion*, Ch. VII. § 18) “hath the same proportion to the civil, (I mean, liberty to subjection), which passion hath to reason, or a beast to a man.”

Locke speaks thus of man, when he puts himself into the state of war with another:— “having quitted reason, which God hath given to be the rule betwixt man and man, and the common bond whereby human kind is united into one fellowship and society; and having renounced the way of peace which that teaches,

and made use of the force of war, to compass his unjust ends upon another, where he has no right; and so revolting from his own kind to that of beasts, by making force, which is theirs, to be his rule of right, he renders himself liable to be destroyed by the injured person, and the rest of mankind that will join with him in the execution of justice, as any other wild beast, or noxious brute, with whom mankind can have neither society nor security." (*Civil Government*, Ch. XV. § 172.) Tr.

[130] Cf. Rousseau: *Gouvernement de Pologne*, Ch. V. Federate government is "the only one which unites in itself all the advantages of great and small states." Tr.

[131] On the conclusion of peace at the end of a war, it might not be unseemly for a nation to appoint a day of humiliation, after the festival of thanksgiving, on which to invoke the mercy of Heaven for the terrible sin which the human race are guilty of, in their continued unwillingness to submit (in their relations with other states) to a law-governed constitution, preferring rather in the pride of their independence to use the barbarous method of war, which after all does not really settle what is wanted, namely, the right of each state in a quarrel. The feasts of thanksgiving during a war for a victorious battle, the hymns which are sung — to use the Jewish expression— "to the Lord of Hosts" are not in less strong contrast to the ethical idea of a father of mankind; for, apart from the indifference these customs show to the way in which nations seek to establish their rights — sad enough as it is — these rejoicings bring in an element of exultation that a great number of lives, or at least the happiness of many, has been destroyed.

[132] Cf. *Aeneidos*, I. 294 *seq*.

"Furor impius intus,

Saeva sedens super arma, et centum vinctus aënis

Post tergum nodis, fremet horridus ore cruento." Tr.

[133] Cf. Vattel (*op. cit.*, II. ch. IX. § 123):— "The right of passage is also a remnant of the primitive state of communion, in which the entire earth was common to all mankind, and the passage was everywhere free to each individual according to his necessities. Nobody can be entirely deprived of this right." See also above, , *note*. Tr.

[134] In order to call this great empire by the name which it gives itself — namely, China, not Sina or a word of similar sound — we have only to look at Georgii: *Alphab. Tibet.*, p-654, particularly *note* b., below. According to the observation of Professor Fischer of St. Petersburg, there is really no particular name which it always goes by: the most usual is the word *Kin*, *i.e.* gold, which the inhabitants of Tibet call *Ser*. Hence the emperor is called the king of gold, *i.e.* the king of the most splendid country in the world. This word *Kin* may probably be *Chin* in the empire itself, but be pronounced *Kin* by the Italian missionaries on account of the gutturals. Thus we see that the country of the Seres, so often mentioned by the Romans, was China: the silk, however, was despatched to Europe across Greater Tibet, probably

through Smaller Tibet and Bucharia, through Persia and then on. This leads to many reflections as to the antiquity of this wonderful state, as compared with Hindustan, at the time of its union with Tibet and thence with Japan. On the other hand, the name Sina or Tschina which is said to be given to this land by neighbouring peoples leads to nothing.

Perhaps we can explain the ancient intercourse of Europe with Tibet — a fact at no time widely known — by looking at what Hesychius has preserved on the matter. I refer to the shout, Κουξ Ομπαξ (*Konx Ompax*), the cry of the Hierophants in the Eleusinian mysteries (cf. *Travels of Anacharsis the Younger*, Part V., , *seq.*). For, according to Georgii *Alph. Tibet.*, the word *Concioa* which bears a striking resemblance to *Konx* means God. *Pak-cio* (*ib.*) which might easily be pronounced by the Greeks like *pax* means *promulgator legis*, the divine principle permeating nature (called also, on , *Cencresi*). *Om*, however, which La Croze translates by *benedictus*, *i.e.* blessed, can when applied to the Deity mean nothing but beatified . Now P. Franc. Horatius, when he asked the Lhamas of Tibet, as he often did, what they understood by God (*Concioa*) always got the answer:— "it is the assembly of all the saints," *i.e.* the assembly of those blessed ones who have been born again according to the faith of the Lama and, after many wanderings in changing forms, have at last returned to God, to Burchane: that is to say, they are beings to be worshipped, souls which have undergone transmigration . So the mysterious expression *Konx Ompax* ought probably to mean the holy (*Konx*), blessed, (*Om*) and wise (*Pax*) supreme Being pervading the universe, the personification of nature. Its use in the Greek mysteries probably signified monotheism for the Epoptes, in distinction from the polytheism of the people, although elsewhere P. Horatius scented atheism here. How that mysterious word came by way of Tibet to the Greeks may be explained as above; and, on the other hand, in this way is made probable an early intercourse of Europe with China across Tibet, earlier perhaps than the communication with Hindustan. (There is some difference of opinion as to the meaning of the words κόγξ ὄμπαξ — according to Liddell and Scott, a corruption of κόγξ, ὁμοίως πάξ. Kant's inferences here seem to be more than far-fetched. Lobeck, in his *Aglaophamus* , gives a quite different interpretation which has, he says, been approved by scholars. And Whately (*Historic Doubts relative to Napoleon Bonaparte*, 3rd. ed., Postscript) uses Konx Ompax as a pseudonym. Tr.)

[135] In the mechanical system of nature to which man belongs as a sentient being, there appears, as the underlying ground of its existence, a certain *form* which we cannot make intelligible to ourselves except by thinking into the physical world the idea of an end preconceived by the Author of the universe: this predetermination of nature on the part of God we generally call Divine Providence. In so far as this providence appears in the origin of the universe, we speak of Providence as founder of the world (*providentia conditrix; semel jussit, semper parent*. Augustine). As it maintains the course of nature, however, according to universal laws of adaptation to preconceived ends, *i.e.* teleological laws we call it a ruling providence (*providentia gubernatrix*). Further, we name it the guiding providence (*providentia directrix*), as it appears in the world for special ends, which we could not foresee, but suspect only from the result. Finally, regarding particular events as divine purposes, we speak no longer of providence, but of dispensation (*directio extraordinaria*). As this term, however, really suggests the idea of miracles, although the events are not spoken of by this name, the desire to fathom dispensation, as such, is a foolish presumption in men. For, from one single occurrence, to jump at the conclusion that there is a particular principle of efficient causes and that this event is an end and not merely the natural *naturmechanische* sequence of a design quite unknown to us is absurd and presumptuous, in however pious and humble a spirit we may speak of it. In the same way to distinguish between a universal and a particular providence when regarding it *materialiter*, in its relation to actual objects in the world (to say, for instance, that there

may be, indeed, a providence for the preservation of the different species of creation, but that individuals are left to chance) is false and contradictory. For providence is called universal for the very reason that no single thing may be thought of as shut out from its care. Probably the distinction of two kinds of providence, *formaliter* or subjectively considered, had reference to the manner in which its purposes are fulfilled. So that we have ordinary providence (*e.g.* the yearly decay and awakening to new life in nature with change of season) and what we may call unusual or special providence (*e.g.* the bringing of timber by ocean currents to Arctic shores where it does not grow, and where without this aid the inhabitants could not live). Here, although we can quite well explain the physico-mechanical cause of these phenomena — in this case, for example, the banks of the rivers in temperate countries are over-grown with trees, some of which fall into the water and are carried along, probably by the Gulf Stream — we must not overlook the teleological cause which points to the providential care of a ruling wisdom above nature. But the concept, commonly used in the schools of philosophy, of a co-operation on the part of the Deity or a concurrence (*concursus*) in the operations going on in the world of sense, must be dropped. For it is, firstly, self-contradictory to couple the like and the unlike together (*gryphes jungere equis*) and to let Him who is Himself the entire cause of the changes in the universe make good any shortcomings in His own predetermining providence (which to require this must be defective) during the course of the world; for example, to say that the physician has restored the sick with the help of God — that is to say that He has been present as a support. For *causa solitaria non juvat*. God created the physician as well as his means of healing; and we must ascribe the result wholly to Him, if we will go back to the supreme First Cause which, theoretically, is beyond our comprehension. Or we can ascribe the result entirely to the physician, in so far as we follow up this event, as explicable in the chain of physical causes, according to the order of nature. Secondly, moreover, such a way of looking at this question destroys all the fixed principles by which we judge an effect. But, from the ethico-practical point of view which looks entirely to the transcendental side of things, the idea of a divine concurrence is quite proper and even necessary: for example, in the faith that God will make good the imperfection of our human justice, if only our feelings and intentions are sincere; and that He will do this by means beyond our comprehension, and therefore we should not slacken our efforts after what is good. Whence it follows, as a matter of course, that no one must attempt to explain a good action as a mere event in time by this *concursus*; for that would be to pretend a theoretical knowledge of the supersensible and hence be absurd.

[136] *Id est*, which we cannot dissever from the idea of a creative skill capable of producing them. Tr.

[137] See preface, p. ix. above.

[138] Of all modes of livelihood the life of the hunter is undoubtedly most incompatible with a civilised condition of society. Because, to live by hunting, families must isolate themselves from their neighbours, soon becoming estranged and spread over widely scattered forests, to be before long on terms of hostility, since each requires a great deal of space to obtain food and raiment.

God’s command to Noah not to shed blood (I. *Genesis*, IX. 4-6)

4. “But flesh with the life thereof, which is the blood thereof, shall ye not eat.

5. And surely your blood of your lives will I require; at the hand of every beast will I require it, and at the hand of man; at the hand of every man's brother will I require the life of man.

6. Whoso sheddeth man's blood, by man shall his blood be shed: for in the image of God made he man."

is frequently quoted, and was afterwards — in another connection it is true — made by the baptised Jews a condition to which Christians, newly converted from heathendom, had to conform. Cf. *Acts* XV. 20; XXI. 25. This command seems originally to have been nothing else than a prohibition of the life of the hunter; for here the possibility of eating raw flesh must often occur, and, in forbidding the one custom, we condemn the other.

[139] About 1000 English miles.

[140] The question might be put:— "If it is nature's will that these Arctic shores should not remain unpopulated, what will become of their inhabitants, if, as is to be expected, at some time or other no more driftwood should be brought to them? For we may believe that, with the advance of civilisation, the inhabitants of temperate zones will utilise better the wood which grows on the banks of their rivers, and not let it fall into the stream and so be swept away." I answer: the inhabitants of the shores of the River Obi, the Yenisei, the Lena will supply them with it through trade, and take in exchange the animal produce in which the seas of Arctic shores are so rich — that is, if nature has first of all brought about peace among them.

[141] Cf. *Enc. Brit.* (9th ed.), art. "Indians", in which there is an allusion to "Fuegians, the *Pescherais*" of some writers. Tr.

[142] Rousseau uses these terms in speaking of democracy. (*Cont. Soc.*, III. Ch. 4.) "If there were a nation of Gods, they might be governed by a democracy: but so perfect a government will not agree with men."

But he writes elsewhere of republican governments (*op. cit.*, II. Ch. 6):— "All lawful governments are republican." And in a footnote to this passage:— "I do not by the word 'republic' mean an aristocracy or democracy only, but in general all governments directed by the public will which is the law. If a government is to be lawful, it must not be confused with the sovereign power, but be considered as the administrator of that power: and then monarchy itself is a republic." This language has a close affinity with that used by Kant. (Cf. above, .) Tr.

[143] See above, , *note*, esp. reference to *Theory of Ethics*. Tr.

[144] Difference of religion! A strange expression, as if one were to speak of different kinds of morality. There may indeed be different historical forms of belief, — that is to say, the various means which have been used in the course of time to promote religion, — but they are mere subjects of learned investigation, and do not really lie within the sphere of religion. In the same way there are many religious works — the

Zendavesta, *Veda*, *Koran* etc. — but there is only one religion, binding for all men and for all times. These books are each no more than the accidental mouthpiece of religion, and may be different according to differences in time and place.

[145] Montesquieu speaks thus in praise of the English state:— "As the enjoyment of liberty, and even its support and preservation, consists in every man's being allowed to speak his thoughts and to lay open his sentiments, a citizen in this state will say or write whatever the laws do not expressly forbid to be said or written." (*Esprit des Lois*, XIX. Ch. 27.) Hobbes is opposed to all free discussion of political questions and to freedom as a source of danger to the state. Tr.

[146] Kant is thinking here not of the sword of justice, in the moral sense, but of a sword which is symbolical of the executive power of the actual law. Tr.

[147] Cf. Aristotle: *Politics*, (Welldon's trans.) IV. Ch. XIV. "The same principles of morality are best both for individuals and States."

Among the ancients the connection between politics and morals was never questioned, although there were differences of opinion as to which science stood first in importance. Thus, while Plato put politics second to morals, Aristotle regarded politics as the chief science and ethics as a part of politics. This connection between the sciences was denied by Machiavelli, who lays down the dictum that, in the relations of sovereigns and states, the ordinary rules of morality do not apply. See *The Prince*, Ch. XVIII. "A Prince," he says, "and most of all a new Prince, cannot observe all those rules of conduct in respect of which men are accounted good, being frequently obliged, in order to preserve his Princedom, to act in opposition to good faith, charity, humanity, and religion. He must therefore keep his mind ready to shift as the winds and tides of Fortune turn, and, as I have already said, he ought not to quit good courses if he can help it, but should know how to follow evil courses if he must."

Hume thought that laxer principles might be allowed to govern states than private persons, because intercourse between them was not so "necessary and advantageous" as between individuals. "There is a system of morals," he says, "calculated for princes, much more free than that which ought to govern private persons," (*Treatise*, III., Part II., Sect. IX.) Tr.

[148] These are *permissive* laws of reason which allow us to leave a system of public law, when it is tainted by injustice, to remain just as it is, until everything is entirely revolutionised through an internal development, either spontaneous, or fostered and matured by peaceful influences. For any legal constitution whatsoever, even although it conforms only slightly with the spirit of law is better than none at all — that is to say, anarchy, which is the fate of a precipitate reform. Hence, as things now are, the wise politician will look upon it as his duty to make reforms on the lines marked out by the ideal of public law. He will not use revolutions, when these have been brought about by natural causes, to extenuate still greater oppression than caused them, but will regard them as the voice of nature, calling upon him to make such thorough reforms as will bring about the only lasting constitution, a lawful constitution based on the principles of freedom.

[149] It is still sometimes denied that we find, in members of a civilised community, a certain depravity rooted in the nature of man;C and it might, indeed, be alleged with some show of truth that not an innate corruptness in human nature, but the barbarism of men, the defect of a not yet sufficiently developed culture, is the cause of the evident antipathy to law which their attitude indicates. In the external relations of states, however, human wickedness shows itself incontestably, without any attempt at concealment. Within the state, it is covered over by the compelling authority of civil laws. For, working against the tendency every citizen has to commit acts of violence against his neighbour, there is the much stronger force of the government which not only gives an appearance of morality to the whole state (*causae non causae*), but, by checking the outbreak of lawless propensities, actually aids the moral qualities of men considerably, in their development of a direct respect for the law. For every individual thinks that he himself would hold the idea of right sacred and follow faithfully what it prescribes, if only he could expect that everyone else would do the same. This guarantee is in part given to him by the government; and a great advance is made by this step which is not deliberately moral, towards the ideal of fidelity to the concept of duty for its own sake without thought of return. As, however, every man's good opinion of himself presupposes an evil disposition in everyone else, we have an expression of their mutual judgment of one another, namely, that when it comes to hard facts, none of them are worth much; but whence this judgment comes remains unexplained, as we cannot lay the blame on the nature of man, since he is a being in the possession of freedom. The respect for the idea of right, of which it is absolutely impossible for man to divest himself, sanctions in the most solemn manner the theory of our power to conform to its dictates. And hence every man sees himself obliged to act in accordance with what the idea of right prescribes, whether his neighbours fulfil their obligation or not.

C This depravity of human nature is denied by Rousseau, who held that the mind of man was naturally inclined to virtue, and that good civil and social institutions are all that is required. (*Discourse on the Sciences and Arts*, 1750.) Kant here takes sides with Hobbes against Rousseau. See Kant's *Theory of Ethics*, Abbott's trans. (4th ed., 1889), *seq.* — esp. and *note*. Cf. also Hooker's *Ecclesiastical Polity*, I. § 10:— "Laws politic, ordained for external order and regiment amongst men, are never framed as they should be, unless presuming the will of man to be inwardly obstinate, rebellious, and averse from all obedience to the sacred laws of his nature; in a word, unless presuming man to be, in regard of his depraved mind, little better than a wild beast, they do accordingly provide, notwithstanding, so to frame his outward actions, that they be no hindrance unto the common good, for which societies are instituted." Tr.

[150] With regard to the meaning of the moral law and its significance in the Kantian system of ethics, see Abbott's translation of the *Theory of Ethics* (1889), p, 45, 54, 55, 119, 282. Tr.

[151] See Abbott's trans., p, 34. Tr.

[152] Matthew Arnold defines politics somewhere as the art of "making reason and the will of God prevail" — an art, one would say, difficult enough. Tr.

[153] "When a king has dethroned himself," says Locke, (*On Civil Government*, Ch. XIX. § 239) "and put himself in a state of war with his people, what shall hinder them from prosecuting him who is no king, as they would any other man, who has put himself into a state of war with them?" ... "The legislative being only a fiduciary power to act for certain ends, there remains still *in the people a supreme power to remove or alter the legislative*." (*Op. cit.*, Ch. XIII. § 149.) And again, (*op. cit.*, Ch. XI. § 134.) we find the words, "... over whom *i.e.* society no body can have a power to make laws, but by their own consent, and by authority received from them." Cf. also Ch. XIX. § 228 *seq*.

Hobbes represents the opposite point of view. "How many kings," he wrote, (Preface to the *Philosophical Rudiments concerning Government and Society*) "and those good men too, hath this one error, that a tyrant king might lawfully be put to death, been the slaughter of! How many throats hath this false position cut, that a prince for some causes may by some certain men be deposed! And what bloodshed hath not this erroneous doctrine caused, that kings are not superiors to, but administrators for the multitude!" This "erroneous doctrine" Kant received from Locke through Rousseau. He advocated, or at least practised as a citizen, a doctrine of passive obedience to the state. A free press, he held, offered the only lawful outlet for protest against tyranny. But, in theory, he was an enemy to absolute monarchy. Tr.

[154] We can find the voucher for maxims such as these in Herr Hofrichter Garve's essay, *On the Connection of Morals with Politics*, 1788. This worthy scholar confesses at the very beginning that he is unable to give a satisfactory answer to this question. But his sanction of such maxims, even when coupled with the admission that he cannot altogether clear away the arguments raised against them, seems to be a greater concession in favour of those who shew considerable inclination to abuse them, than it might perhaps be wise to admit.

METAPHYSICS OF MORALS: THE PHILOSOPHY OF LAW

Translated by William Hastie

CONTENTS

TRANSLATOR'S PREFACE.
BIBLIOGRAPHICAL NOTE.
PREFATORY EXPLANATIONS.
PROLEGOMENA. GENERAL INTRODUCTION TO THE METAPHYSIC OF MORALS.
GENERAL DIVISIONS OF THE METAPHYSIC OF MORALS.

PART FIRST. PRIVATE RIGHT.
CHAPTER FIRST. Of the Mode of having anything External as one's own.
CHAPTER SECOND. The Mode of acquiring anything External.
CHAPTER THIRD. Acquisition conditioned by the Sentence of a Public Judicatory.

PART SECOND. PUBLIC RIGHT.
PUBLIC RIGHT. THE PRINCIPLES OF RIGHT IN CIVIL SOCIETY.
I.: Right of The State and Constitutional Law.
II.: The Right of Nations and International Law.
III.: The Universal Right of Mankind.

SUPPLEMENTARY EXPLANATIONS of the PRINCIPLES OF RIGHT.
APOLOGIA. KANT'S VINDICATION OF HIS PHILOSOPHICAL STYLE.

Metaphysische Anfangsgründe

der

Rechtslehre

von

Immanuel Kant.

Königsberg,
bey Friedrich Nicolovius.
1797.

The first edition's title page

‘But next to a new History of Law, what we most require is a new Philosophy of Law.’

— Sir Henry Sumner Maine.

TRANSLATOR'S PREFACE.

Kant's Science of Right is a complete exposition of the Philosophy of Law, viewed as a rational investigation of the fundamental Principles of Jurisprudence. It was published in 1796, as the First Part of his Metaphysic of Morals, the promised sequel and completion of the Foundation for a Metaphysic of Morals, published in 1785. The importance and value of the great thinker's exposition of the Science of Right, both as regards the fundamental Principles of his own Practical Philosophy and the general interest of the Philosophy of Law, were at once recognised. A second Edition, enlarged by an Appendix, containing Supplementary Explanations of the Principles of Right, appeared in 1798. The work has since then been several times reproduced by itself, as well as incorporated in all the complete editions of Kant's Works. It was immediately rendered into Latin by Born in 1798, and again by König in 1800. It was translated into French by Professor Tissot in 1837, of which translation a second revised Edition has appeared. It was again translated into French by M. Barni, preceded by an elaborate analytical introduction, in 1853. With the exception of the Preface and Introductions, the work now appears translated into English for the first time.

Kant's Science of Right was his last great work of an independent kind in the department of pure Philosophy, and with it he virtually brought his activity as a master of thought to a close. It fittingly crowned the rich practical period of his later philosophical teaching, and he shed into it the last effort of his energy of thought. Full of years and honours he was then deliberately engaged, in the calm of undisturbed and unwearied reflection, in gathering the finally matured fruit of all the meditation and learning of his life. His three immortal Critiques of the Pure Reason (1781), the Practical Reason (1788), and the Judgment (1790), had unfolded all the theoretical Principles of his Critical Philosophy, and established his claim to be recognised as at once the most profound and the most original thinker of the modern world. And as the experience of life deepened around and within him, towards the sunset, his interest had been more and more absorbed and concentrated in the Practical. For to him, as to all great and comprehensive thinkers, Philosophy has only its beginning in the theoretical explanation of things; its chief end is the rational organization and animation and guidance of the higher life in which all things culminate. Kant had carried with him through all his struggle and toil of thought, the cardinal faith in God, Freedom, and Immortality, as an inalienable possession of Reason, and he had beheld the human Personality transfigured and glorified in the Divine radiance of the primal Ideas. But he had further to contemplate the common life of Humanity in its varied ongoings and activities, rising with the innate right of mastery from the bosom of Nature and asserting its lordship in the arena of the mighty world that it incessantly struggles to appropriate and subdue to itself. In the natural chaos and conflict of the social life of man, as presented in the multitudinous and ever-changing mass of the historic organism, he had also to search out the Principles of order and form, to vindicate the rationality of the ineradicable belief in human Causation, and to quicken anew the lively hope of a higher issue of History. The age of the Revolution called and inspired him to his task. With keen vision he saw a new world suddenly born before him, as the blood-stained product of a motion long toiling in the gloom, and all old things thus passing away; and he knew that it was only the pure and the practical Reason, in that inmost union which constitutes the birthright of Freedom, that could regulate and harmonize the future order of this strongest offspring of time. And if it was not given to him to work out the whole cycle of the new rational ideas, he at least touched upon them all, and he has embodied the cardinal Principle of the System in his Science of Right as the philosophical Magna Charta of the age of political Reason and the permanent foundation of all true Philosophy of Law.

Thus produced, Kant's Science of Right constituted an epoch in jural speculation, and it has

commanded the homage of the greatest thinkers since. Fichte, with characteristic ardour and with eagle vision, threw his whole energy of soul into the rational problem of Right, and if not without a glance of scorn at the sober limitations of the 'old Lectures' of the aged professor, he yet acknowledges in his own more aerial flight the initial safety of this more practical guidance. In those early days of eager search and high aspiration, Hegel, stirred to the depths by Kant, and Fichte, and Schelling, wrote his profound and powerful essay on the Philosophy of Right, laden with an Atlantean burden of thought and strained to intolerable rigidity and severity of form, but his own highest achievement only aimed at a completer integration of the Principles differentiated by Kant. It was impossible that the rational evangel of universal freedom and the seer-like vision of a world, hitherto groaning and travailing in pain but now struggling into the perfection of Eternal Peace and Good-will, should find a sympathetic response in Schopenhauer, notwithstanding all his admiration of Kant; but the racy cynicism of the great Pessimist rather subsides before him into mild lamentation than seeks the usual refuge from its own vacancy and despair in the wilful caustic of scorching invective and reproach. Schleiermacher, the greatest theologian and moralist of the Century, early discerned the limitations of the à priori formalism, and supplemented it by the comprehensive conceptions of the primal dominion and the new order of creation, but he owed his critical and dialectical ethicality mainly to Kant. Krause, the leader of the latest and largest thought in this sphere — at once intuitive, radical, and productive in his faculty, analytic, synthetic, and organic in his method, and real, ideal, and historic in his product — caught again the archetypal perfectibility of the human reflection of the Divine, and the living conditions of the true progress of humanity. The dawn of the thought of the new age in Kant rises above the horizon to the clear day, full-orbed and vital, in Krause. All the continental thinkers and schools of the century in this sphere of Jurisprudence, whatever be their distinctive characteristics or tendencies, have owned or manifested their obligations to the great master of the Critical Philosophy.

The influence of the Kantian Doctrine of Right has thus been vitally operative in all the subsequent progress of jural and political science. Kant, here as in every other department of Philosophy, summed up the fragmentary and critical movement of the Eighteenth Century, and not only spoke its last word, but inaugurated a method which was to guide and stimulate the highest thought of the future. With an unwonted blending of speculative insight and practical knowledge, an ideal universality of conception and a sure grasp of the reality of experience, his effort, in its inner depth, vitality, and concentration, contrasts almost strangely with the trivial formalities of the Leibnitzio-Wolffian Rationalists on the one hand, and with the pedantic tediousness of the Empiricists of the School of Grotius on the other. Thomasius and his School, the expounders of the Doctrine of Right as an independent Science, were the direct precursors of the formal method of Kant's System. Its firm and clear outline implies the substance of many an operose and now almost unreadable tome; and it is alive throughout with the quick, keen spirit of the modern world. Kant's unrivalled genius for distinct division and systematic form, found full and appropriate scope in this sphere of thought. He had now all his technical art as an expounder of Philosophy in perfect control, and after the hot rush through the first great Critique he had learned to take his time. His exposition thus became simplified, systematized, and clarified throughout to utmost intelligibility. Here, too, the cardinal aim of his Method was to wed speculative thought and empirical fact, to harmonize the abstract universality of Reason with the concrete particularities of Right, and to reconcile the free individuality of the citizen with the regulated organism of the State. And the least that can be said of his execution is, that he has rescued the essential principle of Right from the debasement of the antinomian naturalism and arbitrary politicality of Hobbes as well as from the extravagance of the lawless and destructive individualism of Rousseau, while conceding and even adopting what is substantially true in the antagonistic theories of these epochal thinkers; and he has thereby given the birthright of Freedom again, full-reasoned and certiorated, as 'a possession for ever' to modern scientific thought. With widest and

furthest vision, and with a wisdom incomparably superior to the reactionary excitement of the great English Orator, he looked calmly beyond ‘the red fool-fury of the Seine’ and all the storm and stress of the time, to the sure realization of the one increasing purpose that runs through the ages. The burden of years chilled none of his sympathies nor dimmed any of his hopes for humanity; nor did any pessimistic shadow or murmur becloud his strong poetic thought, or disturb ‘the mystical lore’ of his eventide. And thus at the close of all his thinking, he made the Science of Right the very corner-stone of the social building of the race, and the practical culmination of all Religion and all Philosophy.

It is not meant that everything presented here by Kant is perfect or final. On the contrary, there is probably nothing at all in his whole System of Philosophy — whose predominant characteristics are criticism, initiation, movement — that could be intelligently so regarded; and the admitted progress of subsequent theories of Right, as briefly indicated above, may be considered as conceding so much. It must be further admitted of Kant’s Science of Right that it presents everywhere abundant opening and even provocation for ‘Metacriticism’ and historical anticriticism, which have certainly not been overlooked or neglected. But it is meant withal that the Philosophy of Jurisprudence has really flourished in the Nineteenth Century only where Kant’s influence has been effective, and that the higher altitudes of jural science have only come into sight where he has been taken as a guide. The great critical thinker set the problem of Right anew to the pure Speculative Reason, and thus accomplished an intellectual transformation of juridical thought corresponding to the revolutionary enthusiasm of liberty in the practical sphere. It is only from this point of view that we can rightly appreciate or estimate his influence and significance. The all-embracing problem of the modern metamorphosis of the institutions of Society in the free State, lies implicitly in his apprehension. And in spite of his negative aspect, which has sometimes entirely misled superficial students, his solution, although betimes tentative and hesitating, is in the main faithful to the highest ideal of humanity, being foundationed on the eternity of Right and crowned by the universal security and peace of the gradually realized Freedom of mankind. As Kant saved the distracted and confused thought of his time from utter scepticism and despair, and set it again with renewed youth and enthusiasm on its way, so his spirit seems to be rising again upon us in this our hour of need, with fresh healing in his wings. Our Jurists must therefore also join the ever increasing throng of contemporary thinkers in the now general return to Kant. Their principles are even more conspicuously at hazard than any others, and the whole method of their science, long dying of intellectual inanition and asphyxia, must seek the conditions of a complete renovation. It is only thus, too, that the practical Politician will find the guidance of real principle in this agitated and troubled age in which the foundations of Government as well as of Right are so daringly scrutinised and so manifestly imperilled, and in which he is driven by the inherent necessary implication of local politics to face the inevitable issue of world-wide complications and the universal problem of human solidarity. And thus only, as it now appears, will it be possible to find a Principle that will at once be true to the most liberal tendency of the time, and yet do justice to its most conservative necessities.

Of criticism and comment, blind adulation and unjust depreciation of Kant’s system of Right, there has been, as already hinted, abundance and even more than enough. Every philosophical Jurist has had to define more or less explicitly his attitude towards the Kantian standpoint. The original thinkers of the dogmatic Schools — Fichte, Schelling, Hegel, and Krause, — have made it the starting-point of their special efforts, and have elaborated their own conceptions by positive or negative reference to it. The recent Theological School of Stahl and Baader, De Maistre and Bonald, representing the Protestant and Papal reaction from the modern autonomy of Reason, has yet left the Kantian principle unshaken, and has at the best only formulated its doctrine of a universal Divine order in more specific Christian terms. The Historical School of Hugo and Savigny and Puchta, — which is also that of Bentham, Austin and Buckle, Sir George C. Lewis and Sir Henry Sumner Maine, and Herbert Spencer, — with all its apparent antagonism, has only so far supplemented the rational universality of Kant by the necessary counterpart of

an historical Phenomenology of the rise and development of the positive legal institutions, as the natural evolution and verification in experience of the juridical conceptions. The conspicuous want of a criterion of Right in the application of the mere historical Method to the manifold, contingent, and variable institutions of human society, has been often signalized; and the representatives of the School have been driven again, especially in their advocacy of political liberalism, upon the rational principles of Freedom.

The Civil Jurists who have carried the unreasoning admiration of the Roman Law almost to the idolatry of its letter, and who are too apt to ignore the movement of two thousand years and all the aspirations of the modern Reason, could not be expected to be found in sympathy with the Rational Method of Kant. Their multiplied objections to the details of his exposition, from Schmitthenner to the present day, are, however, founded upon an entire misapprehension of the purpose of his form. For while Kant rightly recognised the Roman Law as the highest embodiment of the juridical Reason of the ancient world, and therefore expounded his own conceptions by constant reference to it, he clearly discerned its relativity and its limitations; and he accordingly aims at unfolding everywhere through its categories the juridical idea in its ultimate purity. In Kant the juridical Idea first attains its essential self-realization and productivity, and his system of Private Right is at once freer and more concrete than the Systems of Hobbes and Rousseau, because it involves the ancient civil system, corrected and modernized by regard to its rational and universal principles. This consideration alone will meet a host of petty objections, and guard the student against expecting to find in this most philosophical exposition of the Principles of Right a mere elementary text-book of the Roman Law.

In England, Kant’s Science of Right seems as yet to have been little studied, and it has certainly exerted but little influence on English Juridical Science. This has no doubt been mainly due to the traditional habit of the national mind, and the complete ascendancy during the present century of the Utilitarian School of Bentham. The criterion of Utility found a ready application to the more pressing interests of Political and Legal Reform, and thus responding to the practical legislative spirit of the time, its popular plausibilities completely obscured or superseded all higher rational speculation. By Austin the system was methodically applied to the positive determination of the juridical conceptions; under aid of the resources of the German Historical School, with the result that Right was made the mere ‘creature’ of positive law, and the whole Rational Method pretentiously condemned as irrational ‘jargon.’ In Austin we have only the positive outcome of Hobbes and Hume and Bentham. The later forms of this legal positivism have not been fruitful in scientific result, and the superficiality and infutility of the standpoint are becoming more and more apparent. Nor does the Utilitarian Principle, with all its seeming justice and humanity, appear capable of longer satisfying the popular mind with its deepening Consciousness of Right, or of resolving the more fundamental political problems that are again coming into view. In this connection we may quote and apply the authority of Sir Henry Sumner Maine when he says: ‘There is such widespread dissatisfaction with existing theories of jurisprudence, and so general a conviction that they do not really solve the questions they pretend to dispose of, as to justify the suspicion that some line of inquiry necessary to a perfect result has been incompletely followed, or altogether omitted by their authors.’ The present unsatisfactory condition of the Science of Right in England — if not in Scotland — could not be better indicated.

In these circumstances, no other alternative is left for us but a renewed and deepened appeal to the universal principle of Reason, as the essential condition of all true progress and certainty. And in the present dearth of philosophical origination and the presence of the unassimilated products of well-nigh a century of thought, it seems as if the prosecution of this Method of all methods can only now be fruitfully carried on by a return to Kant and advance through his System. Enough has perhaps already been said to indicate the recognised importance of the Kantian standpoint, and even to point to the rich fields of

thought and inquiry that open everywhere around it to the student. Into these fields it was the original intention of the translator to attempt to furnish some more definite guidance by illustrative comment and historical reference in detail, but this intention must be abandoned meanwhile, and all the more readily as it must be reckoned at the most but a duty of subordinate obligation and of secondary importance. The Translation is therefore sent forth by itself in reliance upon its intelligibility as a faithful rendering of the original, and in the hope that it will prove at once a help to the Students and an auxiliary to the Masters of our present juridical science.

W. H.

Edinburgh, January 1887.

BIBLIOGRAPHICAL NOTE.

Röder remarks (i. 254) that by far the most of the later philosophical writers on Natural Right— 'nomen illis legio!' — follow the system of Kant and Fichte, which is in the main identical in principle with that of Thomasius. It was impossible to refer to them in detail in these prefatory remarks, but it may be useful to quote the following as the more important works on the subject from this standpoint since the appearance of Kant's Rechtslehre: —

Mellin, Grundlegung zur Metaphysik der Rechte, 1796.

P. J. A. Feuerbach, Kritik des natürlichen Rechts, 1796.

H. Stephani, Grundlinien der Rechtswissenschaft, 1797.

Ph. Schmutz, Erklärung der Rechte des Menschen u. des Bürgers, 1798. Handbuch der Rechtsphilosophie, 1807.

R. Gerstäcker, Metaphysik des Rechts, 1802.

L. Bendavid, Versuch einer Rechtslehre, 1802.

K. H. v. Gros, Lehrbuch des Naturrechts, 1802. 6 Ausg. 1841.

Friès, Philosophische Rechtslehre u. Kritik aller positiven Gesetz Gebung, 1803.

L. N. Jacob, Philosophische Rechtslehre, 2 A. 1802.

K. S. Zachariä, Anfangsgründe der Philosoph. Privatrechts, 1804. Philosophische Rechtslehre o. Naturrecht u. Staatslehre, 1819. Vierzig Bucher vom Staate, 1839-43.

Chr. Weiss, Lehrbuch der Philosophie des Rechts, 1804.

Bauer, Lehrbuch des Naturrechts, 1808. 3 Ausg. 1825.

J. C. F. Meister, Lehrbuch des Naturrechts, 1809.

Dresch, Systematische Entwickelung der Grundbegriffe u. Grundprinzipien des gesammten Privatrechts, Staatsrechts, und Volkerrechts, 1810, 1822.

V. Zeiller, Naturrecht, 1813.

W. F. Krug, Dikäologie oder philosophische Rechtslehre, 1817, 1830.

Eschenmeyer, Normalrecht, 2 Thle. 1819.

S. Beck, Lehrbuch des Naturrechts, 1820.

V. Droste-Hülshoff, Lehrbuch des Naturrechts o. der Rechtsphilosophie, 1823, 1831.

Pölitz, Natur- und Volkerrecht, Staats- und Staatenrecht, 1823, 1825.

J. Haus, Elementa doctrinæ philosophiæ sive juris naturalis. Gondavi, 1824.

K. von Rotteck, Lehrbuch des Vernunftrechts und der Staatswissenschaft, 4 Bde. 1829-34, 1841.

Ant. Virozsil, Epitome juris naturalis. Pesthini, 1839.

F. Fischer, Naturrecht und natürliche Staatslehre, 1848.

G. Schilling, Lehrbuch des Naturrechts, 1859.

Besides these a considerable number of similar German works might be referred to by Schaumann, Heydenreich, Klein, A. Thomas, Weiss, J. K. Schmid, T. M. Zachariä, Stöckhardt, E. Reinhold, Schnabel, Pfitzer, and others.

Of the French works, from the Kantian standpoint, may be quoted (Ahrens, i. 326): —

M. Bussart, Elements de droit naturel privé. Fribourg en Suisse, 1836.

V. Belime, Philosophie du droit. Paris, 1844, 4 ed. 1881.

In Italy, where the Philosophy of Law has been cultivated ‘with great zeal and intelligence’ (Ahrens, i. 327; Röder, Krit. Zeitschrift für Rechtswiss. xv. 1, 2, 3), the Kantian system has been ably discussed by Mancini, Mamiani, Rosmini, Poli, and others. Its chief representatives have been —

Baroli, Diritto naturale privato e publico, 6 vol. Cremona, 1837.

Tolomei, Corso elementare di diritto naturale, 2 ed. Padova, 1855.

Soria di Crispan, Filosofia di diritto publico. (Philosophie du droit public. Brux. 1853-4.) Transl. into French.

Rosmini-Serbati, Filosofia del diritto, 1841. (In part Kantian.)

[Since writing the foregoing Preface there has come to hand the important work, ‘La Vita del Diritto, nei suoi rapporti colla Vita Sociale: Studio comparativo di Filosofia Giuridica. Per Giusseppe Carle, Professore ordinario di Filosofia de Diritto nella R. Universita di Torino.’ Its comprehensive method and profound insight add to the already ample evidence of the ‘great zeal and intelligence’ with which the Philosophy of Law is now being cultivated by the countrymen of Vico, the natural successors of Antistius Labeo, and Papinian. Professor Carle points out the relation of Kant not only to Rosmini, but also to Mamiani and others. His view of the importance and influence of the Kantian System is in accord with the brief indications ventured in these Prefatory hints. It is impossible to quote his exposition here, but attention may be directed to P. ii. L. i. Cap. ii. § 3, ‘Emmanuele Kant come iniziatore del metodo rationale nello studio del diritto naturale;’ and L. ii. Cap. v. ‘Ulteriore svolgimento,’ etc. — Tr.]

PREFATORY EXPLANATIONS.

The Metaphysic of Morals, as constituting the System of Practical Philosophy, was to follow the 'Critique of the Practical Reason,' as it now does. It falls into two parts: (1) The Metaphysical Principles of Jurisprudence as the Science of Right, and (2) The Metaphysical Principles of Ethics as the Science of Virtue. The whole System forms a counterpart to the 'Metaphysical Principles of the Science of Nature,' which have been already discussed in a separate work (1786). The General Introduction to the 'Metaphysic of Morals' bears mainly on its form in both the Divisions; and the Definitions and Explanations it contains exhibit and, to some extent, illustrate the formal Principles of the whole System.

The Science of Right as a philosophical exposition of the fundamental Principles of Jurisprudence, thus forms the First Part of the Metaphysic of Morals. Taken here by itself — apart from the special Principles of Ethics as the Science of Virtue which follows it — it has to be treated as a System of Principles that originate in Reason; and, as such, it might be properly designated 'The Metaphysic of Right.' But the conception of Right, purely rational in its origin though it be, is also applicable to cases presented in experience; and, consequently, a Metaphysical System of Rights must take into consideration the empirical variety and manifoldness of these cases in order that its Divisions may be complete. For completeness and comprehensiveness are essential and indispensable to the formation of a rational system. But, on the other hand, it is impossible to obtain a complete survey of all the details of experience, and where it may be attempted to approach this, the empirical conceptions embracing those details cannot form integral elements of the system itself, but can only be introduced in subordinate observations, and mainly as furnishing examples illustrative of the General Principles. The only appropriate designation for the First Part of a Metaphysic of Morals, will, therefore, be The Metaphysical Principles of the Science of Right. And, in regard to the practical application to cases, it is manifest that only an approximation to systematic treatment is to be expected, and not the attainment of a System complete in itself. Hence the same method of exposition will be adopted here as was followed in the former work on 'The Metaphysical Principles of the Science of Nature.' The Principles of Right which belong to the rational system will form the leading portions of the text, and details connected with Rights which refer to particular cases of experience, will be appended occasionally in subordinate remarks. In this way a distinction will be clearly made between what is a Metaphysical or rational Principle, and what refers to the empirical Practice of Right.

Towards the end of the work, I have treated several sections with less fulness of detail than might have been expected when they are compared with what precedes them. But this has been intentionally done, partly because it appears to me that the more general principles of the later subjects may be easily deduced from what has gone before; and, also, partly because the details of the Principles of Public Right are at present subjected to so much discussion, and are besides so important in themselves, that they may well justify delay, for a time, of a final and decisive judgment regarding them.

PROLEGOMENA. GENERAL INTRODUCTION TO THE METAPHYSIC OF MORALS.

I.: The Relation of the Faculties of the Human Mind to the Moral Laws.

The Practical Faculty of Action. — The active Faculty of the Human Mind, as the Faculty of Desire in its widest sense, is the Power which man has, through his mental representations, of becoming the cause of objects corresponding to these representations. The capacity of a Being to act in conformity with his own representations, is what constitutes the Life of such a Being.

The Feeling of Pleasure or Pain. — It is to be observed, first, that with Desire or Aversion there is always connected Pleasure or Pain, the susceptibility for which is called Feeling. But the converse does not always hold. For there may be a Pleasure connected, not with the desire of an object, but with a mere mental representation, it being indifferent whether an object corresponding to the representation exist or not. And, second, the Pleasure or Pain connected with the object of desire does not always precede the activity of Desire; nor can it be regarded in every case as the cause, but it may as well be the Effect of that activity. The capacity of experiencing Pleasure or Pain on the occasion of a mental representation, is called 'Feeling,' because Pleasure and Pain contain only what is subjective in the relations of our mental activity. They do not involve any relation to an object that could possibly furnish a knowledge of it as such; they cannot even give us a knowledge of our own mental state. For even Sensations, considered apart from the qualities which attach to them on account of the modifications of the Subject, — as, for instance, in reference to Red, Sweet, and such like, — are referred as constituent elements of knowledge to Objects, whereas Pleasure or Pain felt in connection with what is red or sweet, express absolutely nothing that is in the Object, but merely a relation to the Subject. And for the reason just stated, Pleasure and Pain considered in themselves cannot be more precisely defined. All that can be further done with regard to them is merely to point out what consequences they may have in certain relations, in order to make the knowledge of them available practically.

Practical Pleasure, Interest, Inclination. — The Pleasure, which is necessarily connected with the activity of Desire, when the representation of the object desired affects the capacity of Feeling, may be called Practical Pleasure. And this designation is applicable whether the Pleasure is the cause or the effect of the Desire. On the other hand, that Pleasure which is not necessarily connected with the Desire of an object, and which, therefore, is not a pleasure in the existence of the object, but is merely attached to a mental representation alone, may be called Inactive Complacency, or mere Contemplative Pleasure. The Feeling of this latter kind of Pleasure, is what is called Taste. Hence, in a System of Practical Philosophy, the Contemplative Pleasure of Taste will not be discussed as an essential constituent conception, but need only be referred to incidentally or episodically. But as regards Practical Pleasure, it is otherwise. For the determination of the activity of the Faculty of Desire or Appetency, which is necessarily preceded by this Pleasure as its cause, is what properly constitutes Desire in the strict sense of the term. Habitual Desire, again, constitutes Inclination; and the connection of Pleasure with the activity of Desire, in so far as this connection is judged by the Understanding to be valid according to a general Rule holding good at least for the individual, is what is called Interest. Hence, in such a case, the Practical Pleasure is an Interest of the Inclination of the individual. On the other hand, if the Pleasure can only follow a preceding determination of the Faculty of Desire, it is an Intellectual Pleasure, and the interest in the object must be called a rational Interest; for were the Interest sensuous, and not based only upon pure Principles of

Reason, Sensation would necessarily be conjoined with the Pleasure, and would thus determine the activity of the Desire. Where an entirely pure Interest of Reason must be assumed, it is not legitimate to introduce into it an Interest of Inclination surreptitiously. However, in order to conform so far with the common phraseology, we may allow the application of the term ‘Inclination’ even to that which can only be the object of an ‘Intellectual’ Pleasure in the sense of a habitual Desire arising from a pure Interest of Reason. But such Inclination would have to be viewed, not as the Cause, but as the Effect of the rational Interest; and we might call it the non-sensuous or rational Inclination (propensio intellectualis). — Further, Concupiscence is to be distinguished from the activity of Desire itself, as a stimulus or incitement to its determination. It is always a sensuous state of the mind, which does not itself attain to the definiteness of an act of the Power of Desire.

The Will generally as Practical Reason. — The activity of the Faculty of Desire may proceed in accordance with Conceptions; and in so far as the Principle thus determining it to action is found in the mind, and not in its object, it constitutes a Power of acting or not acting according to liking. In so far as the activity is accompanied with the Consciousness of the Power of the action to produce the Object, it forms an act of Choice; if this consciousness is not conjoined with it, the Activity is called a Wish. The Faculty of Desire, in so far as its inner Principle of determination as the ground of its liking or Predilection lies in the Reason of the Subject, constitutes the Will. The Will is therefore the Faculty of active Desire or Appetency, viewed not so much in relation to the action — which is the relation of the act of Choice — as rather in relation to the Principle that determines the power of Choice to the action. It has, in itself, properly no special Principle of determination, but in so far as it may determine the voluntary act of Choice, it is the Practical Reason itself.

The Will as the Faculty of Practical Principles. — Under the Will, taken generally, may be included the volitional act of Choice, and also the mere act of Wish, in so far as Reason may determine the Faculty of Desire in its activity. The act of Choice that can be determined by pure Reason, constitutes the act of Free-will. That act which is determinable only by Inclination as a sensuous impulse or stimulus would be irrational brute Choice (arbitrium brutum). The human act of Choice, however, as human, is in fact affected by such impulses or stimuli, but is not determined by them; and it is, therefore, not pure in itself when taken apart from the acquired habit of determination by Reason. But it may be determined to action by the pure Will. The Freedom of the act of volitional Choice, is its independence of being determined by sensuous impulses or stimuli. This forms the negative conception of the Free-will. The positive Conception of Freedom is given by the fact that the Will is the capability of Pure Reason to be practical of itself. But this is not possible otherwise than by the Maxim of every action being subjected to the condition of being practicable as a universal Law. Applied as Pure Reason to the act of Choice, and considered apart from its objects, it may be regarded as the Faculty of Principles; and, in this connection, it is the source of Practical Principles. Hence it is to be viewed as a lawgiving Faculty. But as the material upon which to construct a Law is not furnished to it, it can only make the form of the Maxim of the act of Will, in so far as it is available as a universal Law, the supreme Law and determining Principle of the Will. And as the Maxims, or Rules of human action derived from subjective causes, do not of themselves necessarily agree with those that are objective and universal, Reason can only prescribe this supreme Law as an absolute Imperative of prohibition or command.

The Laws of Freedom as Moral, Juridical, and Ethical. — The Laws of Freedom, as distinguished from the Laws of Nature, are moral Laws. So far as they refer only to external actions and their lawfulness, they are called Juridical; but if they also require that, as Laws, they shall themselves be the determining Principles of our actions, they are Ethical. The agreement of an action with Juridical Laws, is its Legality; the agreement of an action with Ethical Laws, is its Morality. The Freedom to which the former laws refer, can only be Freedom in external practice; but the Freedom to which the latter laws refer, is Freedom in the internal as well as the external exercise of the activity of the Will in so far as it is

determined by Laws of Reason. So, in Theoretical Philosophy, it is said that only the objects of the external senses are in Space, but all the objects both of internal and external sense are in Time; because the representations of both, as being representations, so far belong all to the internal sense. In like manner, whether Freedom is viewed in reference to the external or the internal action of the Will, its Laws, as pure practical Laws of Reason for the free activity of the Will generally, must at the same time be inner Principles for its determination, although they may not always be considered in this relation.

II.: The Idea and Necessity of a Metaphysic of Morals.

The Laws of Nature Rational and also Empirical. — It has been shown in The Metaphysical Principles of the Science of Nature, that there must be Principles à priori for the Natural Science that has to deal with the objects of the external senses. And it was further shown that it is possible, and even necessary, to formulate a System of these Principles under the name of a 'Metaphysical Science of Nature,' as a preliminary to Experimental Physics regarded as Natural Science applied to particular objects of experience. But this latter Science, if care be taken to keep its generalizations free from error, may accept many propositions as universal on the evidence of experience, although if the term 'Universal' be taken in its strict sense, these would necessarily have to be deduced by the Metaphysical Science from Principles à priori. Thus Newton accepted the principle of the Equality of Action and Reaction as established by experience, and yet he extended it as a universal Law over the whole of material Nature. The Chemists go even farther, grounding their most general Laws regarding the combination and decomposition of the materials of bodies wholly upon experience; and yet they trust so completely to the Universality and Necessity of those laws, that they have no anxiety as to any error being found in propositions founded upon experiments conducted in accordance with them.

Moral Laws à priori and Necessary. — But it is otherwise with Moral Laws. These, in contradistinction to Natural Laws, are only valid as Laws, in so far as they can be rationally established à priori and comprehended as necessary. In fact, conceptions and judgments regarding ourselves and our conduct have no moral significance, if they contain only what may be learned from experience; and when any one is, so to speak, misled into making a Moral Principle out of anything derived from this latter source, he is already in danger of falling into the coarsest and most fatal errors.

If the Philosophy of Morals were nothing more than a Theory of Happiness (Eudæmonism), it would be absurd to search after Principles à priori as a foundation for it. For however plausible it may sound to say that Reason, even prior to experience, can comprehend by what means we may attain to a lasting enjoyment of the real pleasures of life, yet all that is taught on this subject à priori is either tautological, or is assumed wholly without foundation. It is only Experience that can show what will bring us enjoyment. The natural impulses directed towards nourishment, the sexual instinct, or the tendency to rest and motion, as well as the higher desires of honour, the acquisition of knowledge, and such like, as developed with our natural capacities, are alone capable of showing in what those enjoyments are to be found. And, further, the knowledge thus acquired, is available for each individual merely in his own way; and it is only thus he can learn the means by which he has to seek those enjoyments. All specious rationalizing à priori, in this connection, is nothing at bottom but carrying facts of Experience up to generalizations by induction (secundum principia generalia non universalia); and the generality thus attained is still so limited that numberless exceptions must be allowed to every individual in order that he may adapt the choice of his mode of life to his own particular inclinations and his capacity for pleasure. And, after all, the individual has really to acquire his Prudence at the cost of his own suffering or that of his neighbours.

But it is quite otherwise with the Principles of Morality. They lay down Commands for every one

without regard to his particular inclinations, and merely because and so far as he is free, and has a practical Reason. Instruction in the Laws of Morality is not drawn from observation of oneself or of our animal nature, nor from perception of the course of the world in regard to what happens, or how men act. But Reason commands how we ought to act, even although no example of such action were to be found; nor does Reason give any regard to the Advantage which may accrue to us by so acting, and which Experience could alone actually show. For, although Reason allows us to seek what is for our advantage in every possible way, and although, founding upon the evidence of Experience, it may further promise that greater advantages will probably follow on the average from the observance of her commands than from their transgression, especially if Prudence guides the conduct, yet the authority of her precepts as Commands does not rest on such considerations. They are used by Reason only as Counsels, and by way of a counterpoise against seductions to an opposite course, when adjusting beforehand the equilibrium of a partial balance in the sphere of Practical Judgment, in order thereby to secure the decision of this Judgment, according to the due weight of the à priori Principles of a pure Practical Reason.

The Necessity of a Metaphysic of Morals.— 'Metaphysics' designates any System of Knowledge à priori that consists of pure Conceptions. Accordingly a Practical Philosophy not having Nature, but the Freedom of the Will for its object, will presuppose and require a Metaphysic of Morals. It is even a Duty to have such a Metaphysic; and every man does, indeed, possess it in himself, although commonly but in an obscure way. For how could any one believe that he has a source of universal Law in himself, without Principles à priori? And just as in a Metaphysic of Nature there must be principles regulating the application of the universal supreme Principles of Nature to objects of Experience, so there cannot but be such principles in the Metaphysic of Morals; and we will often have to deal objectively with the particular nature of man as known only by Experience, in order to show in it the consequences of these universal Moral Principles. But this mode of dealing with these Principles in their particular applications will in no way detract from their rational purity, or throw doubt on their à priori origin. In other words, this amounts to saying that a Metaphysic of Morals cannot be founded on Anthropology as the Empirical Science of Man, but may be applied to it.

Moral Anthropology. — The counterpart of a Metaphysic of Morals, and the other member of the Division of Practical Philosophy, would be a Moral Anthropology, as the Empirical Science of the Moral Nature of Man. This Science would contain only the subjective conditions that hinder or favour the realization in practice of the universal moral Laws in human Nature, with the means of propagating, spreading, and strengthening the Moral Principles, — as by the Education of the young and the instruction of the people, — and all other such doctrines and precepts founded upon experience and indispensable in themselves, although they must neither precede the metaphysical investigation of the Principles of Reason, nor be mixed up with it. For, by doing so, there would be a great danger of laying down false, or at least very flexible Moral Laws, which would hold forth as unattainable what is not attained only because the Law has not been comprehended and presented in its purity, in which also its strength consists. Or, otherwise, spurious and mixed motives might be adopted instead of what is dutiful and good in itself; and these would furnish no certain Moral Principles either for the guidance of the Judgment or for the discipline of the heart in the practice of Duty. It is only by Pure Reason, therefore, that Duty can and must be prescribed.

Practical Philosophy in relation to Art. — The higher Division of Philosophy, under which the Division just mentioned stands, is into Theoretical Philosophy and Practical Philosophy. Practical Philosophy is just Moral Philosophy in its widest sense, as has been explained elsewhere. All that is practicable and possible, according to Natural Laws, is the special subject of the activity of Art, and its precepts and rules entirely depend on the Theory of Nature. It is only what is practicable according to Laws of Freedom that can have Principles independent of Theory, for there is no Theory in relation to what passes

beyond the determinations of Nature. Philosophy therefore cannot embrace under its practical Division a technical Theory, but only a morally practical Doctrine. But if the dexterity of the Will in acting according to Laws of Freedom, in contradistinction to Nature, were to be also called an Art, it would necessarily indicate an Art which would make a System of Freedom possible like the System of Nature. This would truly be a Divine Art, if we were in a position by means of it to realize completely what Reason prescribes to us, and to put the Idea into practice.

III.: The Division of a Metaphysic of Morals.

Two Elements involved in all Legislation. — All Legislation, whether relating to internal or external action, and whether prescribed à priori by mere Reason or laid down by the Will of another, involves two Elements: — 1st, a Law which represents the action that ought to happen as necessary objectively, thus making the action a Duty; 2nd, a Motive which connects the principle determining the Will to this action with the Mental representation of the Law subjectively, so that the Law makes Duty the motive of the Action. By the first element, the action is represented as a Duty, in accordance with the mere theoretical knowledge of the possibility of determining the activity of the Will by practical Rules. By the second element, the Obligation so to act, is connected in the Subject with a determining Principle of the Will as such.

Division of Duties into Juridical and Ethical. — All Legislation, therefore, may be differentiated by reference to its Motive-principle. The Legislation which makes an Action a Duty, and this Duty at the same time a Motive, is ethical. That Legislation which does not include the Motive-principle in the Law, and consequently admits another Motive than the idea of Duty itself, is juridical. In respect of the latter, it is evident that the motives distinct from the idea of Duty, to which it may refer, must be drawn from the subjective (pathological) influences of Inclination and of Aversion, determining the voluntary activity, and especially from the latter: because it is a Legislation which has to be compulsory, and not merely a mode of attracting or persuading. The agreement or non-agreement of an action with the Law, without reference to its Motive, is its Legality; and that character of the action in which the idea of Duty arising from the Law, at the same time forms the Motive of the Action, is its Morality.

Duties specially in accord with a Juridical Legislation, can only be external Duties. For this mode of Legislation does not require that the idea of the Duty, which is internal, shall be of itself the determining Principle of the act of Will; and as it requires a motive suitable to the nature of its laws, it can only connect what is external with the Law. Ethical Legislation, on the other hand, makes internal actions also Duties, but not to the exclusion of the external, for it embraces everything which is of the nature of Duty. And just because ethical Legislation includes within its Law the internal motive of the action as contained in the idea of Duty, it involves a characteristic which cannot at all enter into the Legislation that is external. Hence, Ethical Legislation cannot as such be external, not even when proceeding from a Divine Will, although it may receive Duties which rest on an external Legislation as Duties, into the position of motives, within its own Legislation.

Jurisprudence and Ethics distinguished. — From what has been said, it is evident that all Duties, merely because they are duties, belong to Ethics; and yet the Legislation upon which they are founded is not on that account in all cases contained in Ethics. On the contrary, the Law of many of them lies outside of Ethics. Thus Ethics commands that I must fulfil a promise entered into by Contract, although the other party might not be able to compel me to do so. It adopts the Law ‘pacta sunt servanda,’ and the Duty corresponding to it, from Jurisprudence or the Science of Right, by which they are established. It is not in Ethics, therefore, but in Jurisprudence, that the principle of the Legislation lies, that ‘promises made and accepted must be kept.’ Accordingly, Ethics specially teaches that if the Motive-principle of external compulsion which Juridical Legislation connects with a Duty is even let go, the idea of Duty alone is

sufficient of itself as a Motive. For were it not so, and were the Legislation itself not juridical, and consequently the Duty arising from it not specially a Duty of Right as distinguished from a Duty of Virtue, then Fidelity in the performance of acts, to which the individual may be bound by the terms of a Contract, would have to be classified with acts of Benevolence and the Obligation that underlies them, which cannot be correct. To keep one's promise is not properly a Duty of Virtue, but a Duty of Right; and the performance of it can be enforced by external Compulsion. But to keep one's promise, even when no Compulsion can be applied to enforce it, is, at the same time, a virtuous action, and a proof of Virtue. Jurisprudence as the Science of Right, and Ethics as the Science of Virtue, are therefore distinguished not so much by their different Duties, as rather by the difference of the Legislation which connects the one or the other kind of motive with their Laws.

Ethical Legislation is that which cannot be external, although the Duties it prescribes may be external as well as internal. Juridical Legislation is that which may also be external. Thus it is an external duty to keep a promise entered into by Contract; but the injunction to do this merely because it is a duty, without regard to any other motive, belongs exclusively to the internal Legislation. It does not belong thus to the ethical sphere as being a particular kind of duty or a particular mode of action to which we are bound, — for it is an external duty in Ethics as well as in Jurisprudence, — but it is because the Legislation in the case referred to is internal, and cannot have an external Lawgiver, that the Obligation is reckoned as belonging to Ethics. For the same reason, the Duties of Benevolence, although they are external Duties as Obligations to external actions, are, in like manner, reckoned as belonging to Ethics, because they can only be enjoined by Legislation that is internal. — Ethics has no doubt its own peculiar Duties, — such as those towards oneself, — but it has also Duties in common with Jurisprudence, only not under the same mode of Obligation. In short, the peculiarity of Ethical Legislation is to enjoin the performance of certain actions merely because they are Duties, and to make the Principle of Duty itself — whatever be its source or occasion — the sole sufficing motive of the activity of the Will. Thus, then, there are many ethical Duties that are directly such; and the inner Legislation also makes the others — all and each of them — indirectly Ethical.

The Deduction of the Division of a System is the proof of its completeness as well as of its continuity, so that there may be a logical transition from the general conception divided to the members of the Division, and through the whole series of the subdivisions without any break or leap in the arrangement (divisio per saltum). Such a Division is one of the most difficult conditions for the architect of a System to fulfil. There is even some doubt as to what is the highest Conception that is primarily divided into Right and Wrong (aut fas aut nefas). It is assuredly the conception of the activity of the Free-will in general. In like manner, the expounders of Ontology start from 'Something' and 'Nothing,' without perceiving that these are already members of a Division for which the highest divided conception is awanting, and which can be no other than that of 'Thing' in general.

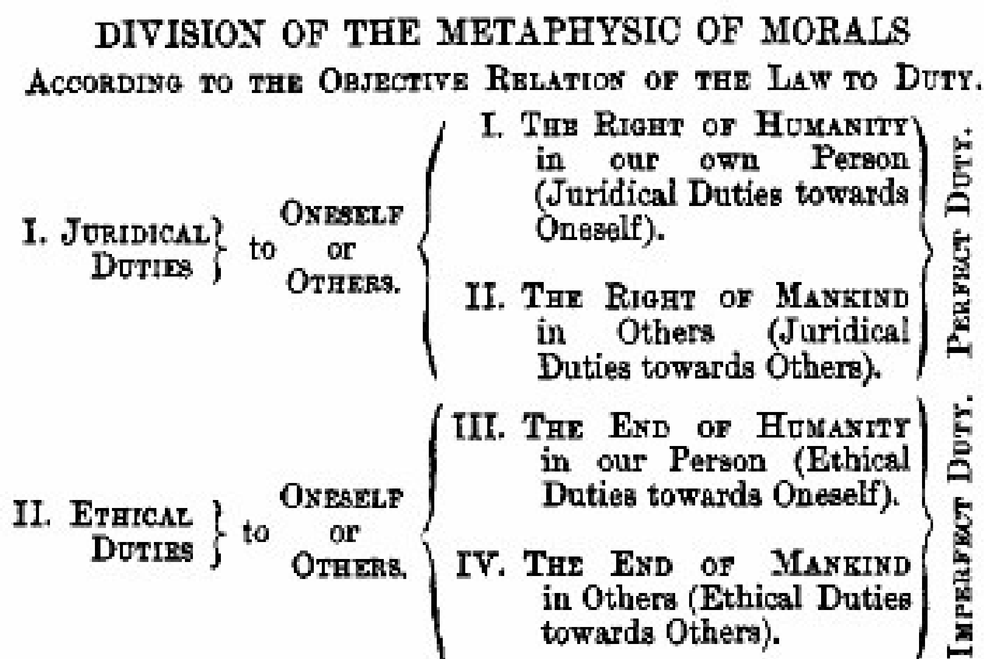
GENERAL DIVISIONS OF THE METAPHYSIC OF MORALS.

I.: Division of the Metaphysic of Morals as a System of Duties generally.

All Duties are either Duties of Right, that is, Juridical Duties (Officia Juris), or Duties of Virtue, that is, Ethical Duties (Officia Virtutis s. ethica). Juridical Duties are such as may be promulgated by external Legislation; Ethical Duties are those for which such legislation is not possible. The reason why the latter cannot be properly made the subject of external Legislation is because they relate to an End or final purpose, which is itself, at the same time, embraced in these Duties, and which it is a Duty for the individual to have as such. But no external Legislation can cause any one to adopt a particular intention, or to propose to himself a certain purpose; for this depends upon an internal condition or act of the mind itself. However, external actions conducive to such a mental condition may be commanded, without its being implied that the individual will of necessity make them an End to himself.

But why, then, it may be asked, is the Science of Morals or Moral Philosophy, commonly entitled — especially by Cicero — the Science of Duty and not also the Science of Right, since Duties and Rights refer to each other? The reason is this. We know our own Freedom — from which all Moral Laws and consequently all Rights as well as all Duties arise — only through the Moral Imperative, which is an immediate injunction of Duty; whereas the conception of Right as a ground of putting others under Obligation has afterwards to be developed out of it.

In the Doctrine of Duty, Man may and ought to be represented in accordance with the nature of his faculty of Freedom, which is entirely supra-sensible. He is, therefore, to be represented purely according to his Humanity as a Personality independent of physical determinations (homo noumenon), in distinction from the same person as a Man modified with these determinations (homo phenomenon). Hence the conceptions of Right and End when referred to Duty, in view of this twofold quality, give the following Division: —



II.: Division of the Metaphysic of Morals according to Relations of Obligation.

As the Subjects between whom a relation of Right to Duty is apprehended — whether it actually exist or not — admit of being conceived in various juridical relations to each other, another Division may be proposed from this point of view, as follows: —

DIVISION possible according to the Subjective Relation of those who bind under Obligations, and those who are bound under Obligations.

1.

The juridical Relation of Man to Beings who have neither Right nor Duty.

Vacat. — There is no such Relation. For such Beings are irrational, and they neither put us under Obligation, nor can we be put under Obligation by them.

2.

The juridical Relation of Man to Beings who have both Rights and Duties.

Adest. — There is such a Relation. For it is the Relation of Men to Men.

3.

The juridical Relation of Man to Beings who have only Duties and no Rights.

Vacat. — There is no such Relation. For such Beings would be Men without juridical Personality, as Slaves or Bondsmen.

4.

The juridical Relation of Man to a Being who has only Rights and no Duties — (God).

Vacat. — There is no such Relation in mere Philosophy, because such a Being is not an object of possible experience.

A real relation between Right and Duty is therefore found, in this scheme, only in No. 2. The reason why such is not likewise found in No. 4 is, because it would constitute a transcendent Duty, that is, one to which no corresponding subject can be given that is external and capable of imposing Obligation. Consequently the Relation from the theoretical point of view is here merely ideal; that is, it is a Relation to an object of thought which we form for ourselves. But the conception of this object is not entirely empty. On the contrary, it is a fruitful conception in relation to ourselves and the maxims of our inner morality, and therefore in relation to practice generally. And it is in this bearing, that all the Duty involved and practicable for us in such a merely ideal relation lies.

III.: Division of the Metaphysic of Morals.

AS A SYSTEM OF DUTIES GENERALLY.

According to the constituent Principles and the Method of the System.

I. PRINCIPLES,
- I. DUTIES OF RIGHT,
  - I. Private Right.
  - II. Public Right.
- II. DUTIES OF VIRTUE, ETC.—And so on, including all that refers not only to the Materials, but also to the Architectonic Form of a scientific system of Morals, when the Metaphysical investigation of the elements has completely traced out the Universal Principles constituting the whole.

II. METHOD,
- I. DIDACTICS.
- II. ASCETICS.

IV.: General preliminary Conceptions defined and explained.

(Philosophia practica universalis.)

Freedom. — The conception of Freedom is a conception of pure Reason. It is therefore transcendent in so far as regards Theoretical Philosophy; for it is a conception for which no corresponding instance or example can be found or supplied in any possible experience. Accordingly Freedom is not presented as an object of any theoretical knowledge that is possible for us. It is in no respect a constitutive, but only a regulative conception; and it can be accepted by the Speculative Reason as at most a merely negative Principle. In the practical sphere of Reason, however, the reality of Freedom may be demonstrated by certain Practical Principles which, as Laws, prove a causality of the Pure Reason in the process of determining the activity of the Will, that is independent of all empirical and sensible conditions. And thus there is established the fact of a pure Will existing in us as the source of all moral conceptions and laws.

Moral Laws and Categorical Imperatives. — On this positive conception of Freedom in the practical relation certain unconditional practical Laws are founded, and they specially constitute Moral Laws. In relation to us as human beings, with an activity of Will modified by sensible influences so as not to be conformable to the pure Will, but as often contrary to it, these Laws appear as Imperatives commanding or prohibiting certain actions; and as such they are Categorical or Unconditional Imperatives. Their categorical and unconditional character distinguishes them from the Technical Imperatives which express the prescriptions of Art, and which always command only conditionally. According to these Categorical Imperatives, certain actions are allowed or disallowed as being morally possible or impossible; and certain of them or their opposites are morally necessary and obligatory. Hence, in reference to such actions, there arises the conception of a Duty whose observance or transgression is accompanied with a Pleasure or Pain of a peculiar kind, known as Moral Feeling. We do not, however, take the Moral Feelings or Sentiments into account, in considering the practical Laws of Reason. For they do not form the foundation or principle of practical Laws of Reason, but only the subjective Effects that arise in the mind on the occasion of our voluntary activity being determined by these Laws. And while they neither add to nor take from the objective validity or influence of the moral Laws in the judgment of Reason, such Sentiments may vary according to the differences of the individuals who experience them.

The following Conceptions are common to Jurisprudence and Ethics as the two main Divisions of the Metaphysic of Morals.

Obligation. — Obligation is the Necessity of a free Action when viewed in relation to a Categorical Imperative of Reason.

An Imperative is a practical Rule by which an Action, otherwise contingent in itself, is made necessary. It is distinguished from a practical Law, in that such a Law, while likewise representing the Action as necessary, does not consider whether it is internally necessary as involved in the nature of the Agent —

say as a holy Being — or is contingent to him, as in the case of Man as we find him; for, where the first condition holds good, there is in fact no Imperative. Hence an Imperative is a Rule which not only represents but makes a subjectively contingent action necessary; and it, accordingly, represents the Subject as being (morally) necessitated to act in accordance with this Rule. — A Categorical or Unconditional Imperative is one which does not represent the action in any way mediately through the conception of an End that is to be attained by it; but it presents the action to the mind as objectively necessary by the mere representation of its form as an action, and thus makes it necessary. Such Imperatives cannot be put forward by any other practical Science than that which prescribes Obligations, and it is only the Science of Morals that does this. All other Imperatives are technical, and they are altogether conditional. The ground of the possibility of Categorical Imperatives, lies in the fact that they refer to no determination of the activity of the Will by which a purpose might be assigned to it, but solely to its Freedom.

The Allowable. — Every Action is allowed (licitum) which is not contrary to Obligation; and this Freedom not being limited by an opposing Imperative, constitutes a Moral Right as a warrant or title of action (facultas moralis). From this it is at once evident what actions are disallowed or illicit (illicita).

Duty. — Duty is the designation of any Action to which any one is bound by an obligation. It is therefore the subject-matter of all Obligation. Duty as regards the Action concerned, may be one and the same, and yet we may be bound to it in various ways.

The Categorical Imperative, as expressing an Obligation in respect to certain actions, is a morally practical Law. But because Obligation involves not merely practical Necessity expressed in a Law as such, but also actual Necessitation, the Categorical Imperative is a Law either of Command or Prohibition, according as the doing or not doing of an action is represented as a Duty. An Action which is neither commanded nor forbidden, is merely allowed, because there is no Law restricting Freedom, nor any Duty in respect of it. Such an Action is said to be morally indifferent (indifferens, adiaphoron, res meræ facultatis). It may be asked whether there are such morally indifferent actions; and if there are, whether in addition to the preceptive and prohibitive Law (lex præceptiva et prohibitiva, lex mandati et vetiti), there is also required a Permissive Law (lex permissiva), in order that one may be free in such relations to act, or to forbear from acting, at his pleasure? If it were so, the moral Right in question would not, in all cases, refer to actions that are indifferent in themselves (adiaphora); for no special Law would be required to establish such a Right, considered according to Moral Laws.

Act; Agent. — An Action is called an Act — or moral Deed — in so far as it is subject to Laws of Obligation, and consequently in so far as the Subject of it is regarded with reference to the Freedom of his choice in the exercise of his Will. The Agent — as the actor or doer of the deed — is regarded as, through the act, the Author of its effect; and this effect, along with the action itself, may be imputed to him, if he previously knew the Law, in virtue of which an Obligation rested upon him.

Person; Imputation. — A Person is a Subject who is capable of having his actions imputed to him. Moral Personality is, therefore, nothing but the Freedom of a rational Being under Moral Laws; and it is to be distinguished from psychological Freedom as the mere faculty by which we become conscious of ourselves in different states of the Identity of our existence. Hence it follows that a Person is properly subject to no other Laws than those he lays down for himself, either alone or in conjunction with others.

Thing. — A Thing is what is incapable of being the subject of Imputation. Every object of the free activity of the Will, which is itself void of freedom, is therefore called a Thing (res corporealis).

Right and Wrong. — Right or Wrong applies, as a general quality, to an Act (rectum aut minus rectum), in so far as it is in accordance with Duty or contrary to Duty (factum licitum aut illicitum), no matter what may be the subject or origin of the Duty itself. An act that is contrary to Duty is called a Transgression (reatus).

Fault; Crime. — An unintentional Transgression of a Duty, which is, nevertheless, imputable to a Person, is called a mere Fault (culpa). An intentional Transgression — that is, an act accompanied with the consciousness that it is a Transgression — constitutes a Crime (dolus).

Just and Unjust. — Whatever is juridically in accordance with External Laws, is said to be Just (Jus, iustum); and whatever is not juridically in accordance with external Laws, is Unjust (unjustum).

Collision of Duties. — A Collision of Duties or Obligations (collisio officiorum s. obligationum) would be the result of such a relation between them that the one would annul the other, in whole or in part. Duty and Obligation, however, are conceptions which express the objective practical Necessity of certain actions, and two opposite Rules cannot be objective and necessary at the same time; for if it is a Duty to act according to one of them, it is not only no Duty to act according to an opposite Rule, but to do so would even be contrary to Duty. Hence a Collision of Duties and Obligations is entirely inconceivable (obligationes non colliduntur). There may, however, be two grounds of Obligation (rationes obligandi), connected with an individual under a Rule prescribed for himself, and yet neither the one nor the other may be sufficient to constitute an actual Obligation (rationes obligandi non obligantes); and in that case the one of them is not a Duty. If two such grounds of Obligation are actually in collision with each other, Practical Philosophy does not say that the stronger Obligation is to keep the upper hand (fortior obligatio vincit), but that the stronger ground of Obligation is to maintain its place (fortior obligandi ratio vincit).

Natural and Positive Laws. — Obligatory Laws for which an external Legislation is possible, are called generally External Laws. Those External Laws, the obligatoriness of which can be recognised by Reason à priori even without an external Legislation, are called Natural Laws. Those Laws, again, which are not obligatory without actual External Legislation, are called Positive Laws. An External Legislation, containing pure Natural Laws, is therefore conceivable; but in that case a previous Natural Law must be presupposed to establish the authority of the Lawgiver by the Right to subject others to Obligation through his own act of Will.

Maxims. — The Principle which makes a certain action a Duty, is a Practical Law. The Rule of the Agent or Actor, which he forms as a Principle for himself on subjective grounds, is called his Maxim. Hence, even when the Law is one and invariable, the Maxims of the Agent may yet be very different.

The Categorical Imperative. — The Categorical Imperative only expresses generally what constitutes Obligation. It may be rendered by the following Formula: ‘Act according to a Maxim which can be adopted at the same time as a Universal Law.’ Actions must therefore be considered, in the first place, according to their subjective Principle; but whether this principle is also valid objectively, can only be known by the criterion of the Categorical Imperative. For Reason brings the principle or maxim of any action to the test, by calling upon the Agent to think of himself in connection with it as at the same time laying down a Universal Law, and to consider whether his action is so qualified as to be fit for entering into such a Universal Legislation.

The simplicity of this Law, in comparison with the great and manifold Consequences which may be drawn from it, as well as its commanding authority and supremacy without the accompaniment of any visible motive or sanction, must certainly at first appear very surprising. And we may well wonder at the power of our Reason to determine the activity of the Will by the mere idea of the qualification of a Maxim for the universality of a practical Law, especially when we are taught thereby that this practical Moral Law first reveals a property of the Will which the Speculative Reason would never have come upon either by Principles à priori, or from any experience whatever; and even if it had ascertained the fact, it could never have theoretically established its possibility. This practical Law, however, not only discovers the fact of that property of the Will, which is Freedom, but irrefutably establishes it. Hence it will be less surprising to find that the Moral Laws are undemonstrable, and yet apodictic, like the mathematical Postulates; and that they, at the same time, open up before us a whole field of practical knowledge, from which Reason, on its theoretical side, must find itself entirely excluded with its

speculative idea of Freedom and all such ideas of the Supersensible generally.

The conformity of an Action to the Law of Duty constitutes its Legality; the conformity of the Maxim of the Action with the Law constitutes its Morality. A Maxim is thus a subjective Principle of Action, which the individual makes a Rule for himself as to how in fact he will act.

On the other hand, the Principle of Duty is what Reason absolutely, and therefore objectively and universally, lays down in the form of a Command to the individual, as to how he ought to act.

The Supreme Principle of the Science of Morals accordingly is this: 'Act according to a Maxim which can likewise be valid as a Universal Law.' — Every Maxim which is not qualified according to this condition, is contrary to Morality.

Laws arise from the Will, viewed generally as Practical Reason; Maxims spring from the activity of the Will in the process of Choice. The latter in Man, is what constitutes free-will. The Will which refers to nothing else than mere Law, can neither be called free nor not free; because it does not relate to actions immediately, but to the giving of a Law for the Maxim of actions; it is therefore the Practical Reason itself. Hence as a Faculty, it is absolutely necessary in itself, and is not subject to any external necessitation. It is, therefore, only the act of Choice in the voluntary process, that can be called free.

The Freedom of the act of Will, however, is not to be defined as a Liberty of Indifference (libertas indifferentiæ), that is, as a capacity of choosing to act for or against the Law. The voluntary process, indeed, viewed as a phenomenal appearance, gives many examples of this choosing in experience; and some have accordingly so defined the free-will. For Freedom, as it is first made knowable by the Moral Law, is known only as a negative Property in us, as constituted by the fact of not being necessitated to act by sensible principles of determination. Regarded as a noumenal reality, however, in reference to Man as a pure rational Intelligence, the act of the Will cannot be at all theoretically exhibited; nor can it therefore be explained how this power can act necessitatingly in relation to the sensible activity in the process of Choice, or consequently in what the positive quality of Freedom consists. Only thus much we can see into and comprehend, that although Man, as a Being belonging to the world of Sense, exhibits — as experience shows — a capacity of choosing not only conformably to the Law but also contrary to it, his Freedom as a rational Being belonging to the world of Intelligence cannot be defined by reference merely to sensible appearances. For sensible phenomena cannot make a supersensible object — such as free-will is — intelligible; nor can Freedom ever be placed in the mere fact that the rational Subject can make a choice in conflict with his own Lawgiving Reason, although experience may prove that it happens often enough, notwithstanding our inability to conceive how it is possible. For it is one thing to admit a proposition as based on experience, and another thing to make it the defining Principle and the universal differentiating mark of the act of free-will, in its distinction from the arbitrium brutum s. servum; because the empirical proposition does not assert that any particular characteristic necessarily belongs to the conception in question, but this is requisite in the process of Definition. — Freedom in relation to the internal Legislation of Reason, can alone be properly called a Power; the possibility of diverging from the Law thus given, is an incapacity or want of Power. How then can the former be defined by the latter? It could only be by a Definition which would add to the practical conception of the free-will, its exercise as shown by experience; but this would be a hybrid Definition which would exhibit the conception in a false light.

Law; Legislator. — A morally practical Law is a proposition which contains a Categorical Imperative or Command. He who commands by a Law (imperans) is the Lawgiver or Legislator. He is the Author of the Obligation that accompanies the Law, but he is not always the Author of the Law itself. In the latter case, the Law would be positive, contingent, and arbitrary. The Law which is imposed upon us à priori and unconditionally by our own Reason, may also be expressed as proceeding from the Will of a Supreme Lawgiver or the Divine Will. Such a Will as Supreme can consequently have only Rights and not Duties;

and it only indicates the idea of a moral Being whose Will is Law for all, without conceiving of Him as the Author of that Will.

Imputation; Judgment; Judge. — Imputation, in the moral sense, is the Judgment by which any one is declared to be the Author or free Cause of an action which is then regarded as his moral fact or deed, and is subjected to Law. When the Judgment likewise lays down the juridical consequences of the Deed, it is judicial or valid (imputatio judiciaria s. valida); otherwise it would be only adjudicative or declaratory (imputatio dijudicatoria). — That Person — individual or collective — who is invested with the Right to impute actions judicially, is called a Judge or a Court (judex s. forum).

Merit and Demerit. — When any one does, in conformity with Duty, more than he can be compelled to do by the Law, it is said to be meritorious (meritum). What is done only in exact conformity with the Law, is what is due (debitum). And when less is done than can be demanded to be done by the Law, the result is moral Demerit (demeritum) or Culpability.

Punishment; Reward. — The juridical Effect or Consequence of a culpable act of Demerit is Punishment (poena); that of a meritorious act is Reward (præmium), assuming that this Reward was promised in the Law and that it formed the motive of the action. The coincidence or exact conformity of conduct to what is due, has no juridical effect. — Benevolent Remuneration (remuneratio s. repensio benefica) has no place in juridical Relations.

The good or bad Consequences arising from the performance of an obligated action — as also the Consequences arising from failing to perform a meritorious action — cannot be imputed to the Agent (modus imputationis tollens).

The good Consequences of a meritorious action — as also the bad Consequences of a wrongful action — may be imputed to the Agent (modus imputationis poneus).

The degree of the Imputability of Actions is to be reckoned according to the magnitude of the hindrances or obstacles which it has been necessary for them to overcome. The greater the natural hindrances in the sphere of sense, and the less the moral hindrance of Duty, so much the more is a good Deed imputed as meritorious. This may be seen by considering such examples as rescuing a man who is an entire stranger from great distress, and at very considerable sacrifice. — Conversely, the less the natural hindrance, and the greater the hindrance on the ground of Duty, so much the more is a Transgression imputable as culpable. — Hence the state of mind of the Agent or Doer of a deed makes a difference in imputing its consequences, according as he did it in passion or performed it with coolness and deliberation.

INTRODUCTION to THE SCIENCE OF RIGHT.

GENERAL DEFINITIONS AND DIVISIONS.

A.: What the Science of Right is.

The Science of Right has for its object the Principles of all the Laws which it is possible to promulgate by external legislation. Where there is such a legislation, it becomes in actual application to it, a system of positive Right and Law; and he who is versed in the knowledge of this System is called a Jurist or Jurisconsult (jurisconsultus). A practical Jurisconsult (jurisperitus), or a professional Lawyer, is one who is skilled in the knowledge of positive external Laws, and who can apply them to cases that may occur in experience. Such practical knowledge of positive Right, and Law, may be regarded as belonging to Jurisprudence (Jurisprudentia) in the original sense of the term. But the theoretical knowledge of Right

and Law in Principle, as distinguished from positive Laws and empirical cases, belongs to the pure Science of Right (Jurisscientia). The Science of Right thus designates the philosophical and systematic knowledge of the Principles of Natural Right. And it is from this Science that the immutable Principles of all positive Legislation must be derived by practical Jurists and Lawgivers.

B.: What is Right?

This question may be said to be about as embarrassing to the Jurist as the well-known question, 'What is Truth?' is to the Logician. It is all the more so, if, on reflection, he strives to avoid tautology in his reply, and recognise the fact that a reference to what holds true merely of the laws of some one country at a particular time, is not a solution of the general problem thus proposed. It is quite easy to state what may be right in particular cases (quid sit juris), as being what the laws of a certain place and of a certain time say or may have said; but it is much more difficult to determine whether what they have enacted is right in itself, and to lay down a universal Criterion by which Right and Wrong in general, and what is just and unjust, may be recognised. All this may remain entirely hidden even from the practical Jurist until he abandon his empirical principles for a time, and search in the pure Reason for the sources of such judgments, in order to lay a real foundation for actual positive Legislation. In this search his empirical Laws may, indeed, furnish him with excellent guidance; but a merely empirical system that is void of rational principles is, like the wooden head in the fable of Phædrus, fine enough in appearance, but unfortunately it wants brain.

The conception of Right, — as referring to a corresponding Obligation which is the moral aspect of it, — in the first place, has regard only to the external and practical relation of one Person to another, in so far as they can have influence upon each other, immediately or mediately, by their Actions as facts. 2. In the second place, the conception of Right does not indicate the relation of the action of an individual to the wish or the mere desire of another, as in acts of benevolence or of unkindness, but only the relation of his free action to the freedom of action of the other. 3. And, in the third place, in this reciprocal relation of voluntary actions, the conception of Right does not take into consideration the matter of the act of Will in so far as the end which any one may have in view in willing it, is concerned. In other words, it is not asked in a question of Right whether any one on buying goods for his own business realizes a profit by the transaction or not; but only the form of the transaction is taken into account, in considering the relation of the mutual acts of Will. Acts of Will or voluntary Choice are thus regarded only in so far as they are free, and as to whether the action of one can harmonize with the Freedom of another, according to a universal Law.

Right, therefore, comprehends the whole of the conditions under which the voluntary actions of any one Person can be harmonized in reality with the voluntary actions of every other Person, according to a universal Law of Freedom.

C.: Universal Principle of Right.

'Every Action is right which in itself, or in the maxim on which it proceeds, is such that it can co-exist along with the Freedom of the Will of each and all in action, according to a universal Law.'

If, then, my action or my condition generally can co-exist with the freedom of every other, according to a universal Law, any one does me a wrong who hinders me in the performance of this action, or in the maintenance of this condition. For such a hindrance or obstruction cannot co-exist with Freedom according to universal Laws.

It follows also that it cannot be demanded as a matter of Right, that this universal Principle of all

maxims shall itself be adopted as my maxim, that is, that I shall make it the maxim of my actions. For any one may be free, although his Freedom is entirely indifferent to me, or even if I wished in my heart to infringe it, so long as I do not actually violate that freedom by my external action. Ethics, however, as distinguished from Jurisprudence, imposes upon me the obligation to make the fulfilment of Right a maxim of my conduct.

The universal Law of Right may then be expressed, thus: 'Act externally in such a manner that the free exercise of thy Will may be able to co-exist with the Freedom of all others, according to a universal Law.' This is undoubtedly a Law which imposes obligation upon me; but it does not at all imply and still less command that I ought, merely on account of this obligation, to limit my freedom to these very conditions. Reason in this connection says only that it is restricted thus far by its Idea, and may be likewise thus limited in fact by others; and it lays this down as a Postulate which is not capable of further proof. As the object in view is not to teach Virtue, but to explain what Right is, thus far the Law of Right, as thus laid down, may not and should not be represented as a motive-principle of action.

D.: Right is conjoined with the Title or Authority to compel.

The resistance which is opposed to any hindrance of an effect, is in reality a furtherance of this effect, and is in accordance with its accomplishment. Now, everything that is wrong is a hindrance of freedom, according to universal Laws; and Compulsion or Constraint of any kind is a hindrance or resistance made to Freedom. Consequently, if a certain exercise of Freedom is itself a hindrance of the Freedom that is according to universal Laws, it is wrong; and the compulsion or constraint which is opposed to it is right, as being a hindering of a hindrance of Freedom, and as being in accord with the Freedom which exists in accordance with universal Laws. Hence, according to the logical principle of Contradiction, all Right is accompanied with an implied Title or warrant to bring compulsion to bear on any one who may violate it in fact.

E.: Strict Right may be also represented as the possibility of a universal reciprocal Compulsion in harmony with the Freedom of all according to universal Laws.

This proposition means that Right is not to be regarded as composed of two different elements — Obligation according to a Law, and a Title on the part of one who has bound another by his own free choice, to compel him to perform. But it imports that the conception of Right may be viewed as consisting immediately in the possibility of a universal reciprocal Compulsion, in harmony with the Freedom of all. As Right in general has for its object only what is external in actions, Strict Right, as that with which nothing ethical is intermingled, requires no other motives of action than those that are merely external; for it is then pure Right, and is unmixed with any prescriptions of Virtue. A strict Right, then, in the exact sense of the term, is that which alone can be called wholly external. Now such Right is founded, no doubt, upon the consciousness of the Obligation of every individual according to the Law; but if it is to be pure as such, it neither may nor should refer to this consciousness as a motive by which to determine the free act of the Will. For this purpose, however, it founds upon the principle of the possibility of an external Compulsion, such as may co-exist with the freedom of every one according to universal Laws. Accordingly, then, where it is said that a Creditor has a right to demand from a Debtor the payment of his debt, this does not mean merely that he can bring him to feel in his mind that Reason obliges him to do this; but it means that he can apply an external compulsion to force any such one so to pay, and that this compulsion is quite consistent with the Freedom of all, including the parties in question, according to a universal Law. Right and the Title to compel, thus indicate the same thing.

The Law of Right, as thus enunciated, is represented as a reciprocal Compulsion necessarily in accordance with the Freedom of every one, under the principle of a universal Freedom. It is thus, as it were, a representative Construction of the conception of Right, by exhibiting it in a pure intuitive perception à priori, after the analogy of the possibility of the free motions of bodies under the physical Law of the Equality of Action and Reaction. Now, as in pure Mathematics, we cannot deduce the properties of its objects immediately from a mere abstract conception, but can only discover them by figurative construction or representation of its conceptions; so it is in like manner with the Principle of Right. It is not so much the mere formal Conception of Right, but rather that of a universal and equal reciprocal Compulsion as harmonizing with it, and reduced under general laws, that makes representation of that conception possible. But just as those conceptions presented in Dynamics are founded upon a merely formal representation of pure Mathematics as presented in Geometry, Reason has taken care also to provide the Understanding as far as possible with intuitive presentations à priori in behoof of a Construction of the conception of Right. The Right in geometrical lines (rectum) is opposed as the Straight to that which is Curved, and to that which is Oblique. In the first opposition there is involved an inner quality of the lines of such a nature that there is only one straight or right Line possible between two given points. In the second case, again, the positions of two intersecting or meeting Lines are of such a nature that there can likewise be only one line called the Perpendicular, which is not more inclined to the one side than the other, and it divides space on either side into two equal parts. After the manner of this analogy, the Science of Right aims at determining what every one shall have as his own with mathematical exactness; but this is not to be expected in the ethical Science of Virtue, as it cannot but allow a certain latitude for exceptions. But without passing into the sphere of Ethics, there are two cases — known as the equivocal Right of Equity and Necessity — which claim a juridical decision, yet for which no one can be found to give such a decision, and which, as regards their relation to Rights, belong, as it were, to the 'Intermundia' of Epicurus. These we must at the outset take apart from the special exposition of the Science of Right, to which we are now about to advance; and we may consider them now by way of supplement to these introductory Explanations, in order that their uncertain conditions may not exert a disturbing influence on the fixed Principles of the proper doctrine of Right.

F.: Supplementary Remarks on Equivocal Right.

(Jus æquivocum.)

With every Right, in the strict acceptation (jus strictum), there is conjoined a Right to compel. But it is possible to think of other Rights of a wider kind (jus latum) in which the Title to compel cannot be determined by any law. Now there are two real or supposed Rights of this kind — Equity and the Right of Necessity. The first alleges a Right that is without compulsion; the second adopts a compulsion that is without Right. This equivocalness, however, can be easily shown to rest on the peculiar fact that there are cases of doubtful Right, for the decision of which no Judge can be appointed.

I.: EQUITY.

Equity (Æquitas), regarded objectively, does not properly constitute a claim upon the moral Duty of benevolence or beneficence on the part of others; but whoever insists upon anything on the ground of Equity, founds upon his Right to the same. In this case, however, the conditions are awanting that are requisite for the function of a Judge in order that he might determine what or what kind of satisfaction can be done to this claim. When one of the partners of a Mercantile Company, formed under the condition of Equal profits, has, however, done more than the other members, and in consequence has also lost more, it is in accordance with Equity that he should demand from the Company more than merely an equal share of

advantage with the rest. But, in relation to strict Right, — if we think of a Judge considering his case, — he can furnish no definite data to establish how much more belongs to him by the Contract; and in case of an action at law, such a demand would be rejected. A domestic servant, again, who might be paid his wages due to the end of his year of service in a coinage that became depreciated within that period, so that it would not be of the same value to him as it was when he entered on his engagement, cannot claim by Right to be kept from loss on account of the unequal value of the money if he receives the due amount of it. He can only make an appeal on the ground of Equity, — a dumb goddess who cannot claim a hearing of Right, — because there was nothing bearing on this point in the Contract of Service, and a Judge cannot give a decree on the basis of vague or indefinite conditions.

Hence it follows, that a Court of Equity for the decision of disputed questions of Right, would involve a contradiction. It is only where his own proper Rights are concerned, and in matters in which he can decide, that a Judge may or ought to give a hearing to Equity. Thus, if the Crown is supplicated to give an indemnity to certain persons for loss or injury sustained in its service, it may undertake the burden of doing so, although, according to strict Right, the claim might be rejected on the ground of the pretext that the parties in question undertook the performance of the service occasioning the loss, at their own risk.

The Dictum of Equity may be put thus: 'The strictest Right is the greatest Wrong' (summum jus summa injuria). But this evil cannot be obviated by the forms of Right although it relates to a matter of Right; for the grievance that it gives rise to can only be put before a 'Court of Conscience' (forum poli), whereas every question of Right must be taken before a Civil Court (forum soli).

II.: THE RIGHT OF NECESSITY.

The so-called Right of Necessity (Jus necessitatis) is the supposed Right or Title, in case of the danger of losing my own life, to take away the life of another who has, in fact, done me no harm. It is evident that, viewed as a doctrine of Right, this must involve a contradiction. For this is not the case of a wrongful aggressor making an unjust assault upon my life, and whom I anticipate by depriving him of his own (jus inculpatæ tutelæ); nor consequently is it a question merely of the recommendation of moderation which belongs to Ethics as the Doctrine of Virtue, and not to Jurisprudence as the Doctrine of Right. It is a question of the allowableness of using violence against one who has used none against me.

It is clear that the assertion of such a Right is not to be understood objectively as being in accordance with what a Law would prescribe, but merely subjectively, as proceeding on the assumption of how a sentence would be pronounced by a Court in the case. There can, in fact, be no Criminal Law assigning the penalty of death to a man who, when shipwrecked and struggling in extreme danger for his life, and in order to save it, may thrust another from a plank on which he had saved himself. For the punishment threatened by the Law could not possibly have greater power than the fear of the loss of life in the case in question. Such a Penal Law would thus fail altogether to exercise its intended effect; for the threat of an Evil which is still uncertain — such as Death by a judicial sentence — could not overcome the fear of an Evil which is certain, as Drowning is in such circumstances. An act of violent self-preservation, then, ought not to be considered as altogether beyond condemnation (inculpabile); it is only to be adjudged as exempt from punishment (impunibile). Yet this subjective condition of impunity, by a strange confusion of ideas, has been regarded by Jurists as equivalent to objective lawfulness.

The Dictum of the Right of Necessity is put in these terms, 'Necessity has no Law' (Necessitas non habet legem). And yet there cannot be a necessity that could make what is wrong lawful.

It is apparent, then, that in judgments relating both to 'Equity' and 'the Right of Necessity,' the Equivocations involved arise from an interchange of the objective and subjective grounds that enter into the application of the Principles of Right, when viewed respectively by Reason or by a Judicial Tribunal.

What one may have good grounds for recognising as Right in itself, may not find confirmation in a Court of Justice; and what he must consider to be wrong in itself, may obtain recognition in such a Court. And the reason of this is, that the conception of Right is not taken in the two cases in one and the same sense.

DIVISION OF THE SCIENCE OF RIGHT.

A.: General Division of the Duties of Right.

(Juridical Duties.)

In this Division we may very conveniently follow Ulpian, if his three Formulæ are taken in a general sense, which may not have been quite clearly in his mind, but which they are capable of being developed into or of receiving. They are the following: —

1. Honeste vive. 'Live rightly.' Juridical Rectitude, or Honour (Honestas juridica), consists in maintaining one's own worth as a man in relation to others. This Duty may be rendered by the proposition, 'Do not make thyself a mere Means for the use of others, but be to them likewise an End.' This Duty will be explained in the next Formula as an Obligation arising out of the Right of Humanity in our own Person (Lex justi).

2. Neminem læde. 'Do Wrong to no one.' This Formula may be rendered so as to mean, 'Do no Wrong to any one, even if thou shouldst be under the necessity, in observing this Duty, to cease from all connection with others and to avoid all Society' (Lex juridica).

3. Suum cuique tribue. 'Assign to every one what is his own.' This may be rendered, 'Enter, if Wrong cannot be avoided, into a Society with others in which every one may have secured to him what is his own.' — If this Formula were to be simply translated, 'Give every one his own,' it would express an absurdity, for we cannot give any one what he already has. If it is to have a definite meaning, it must therefore run thus, 'Enter into a state in which every one can have what is his own secured against the action of every other' (Lex justitiæ).

These three classical Formulæ, at the same time, represent principles which suggest a Division of the System of Juridical Duties into Internal Duties, External Duties, and those Connecting Duties which contain the latter as deduced from the Principle of the former by subsumption.

B.: Universal Division of Rights.

I.: Natural Right and Positive Right.

The System of Rights, viewed as a scientific System of Doctrines, is divided into Natural Right and Positive Right. Natural Right rests upon pure rational Principles à priori; Positive or Statutory Right is what proceeds from the Will of a Legislator.

II.: Innate Right and Acquired Right.

The System of Rights may again be regarded in reference to the implied Powers of dealing morally with others as bound by Obligations, that is, as furnishing a legal Title of action in relation to them. Thus viewed, the System is divided into Innate Right and Acquired Right. Innate Right is that Right which belongs to every one by Nature, independent of all juridical acts of experience. Acquired Right is that Right which is founded upon such juridical acts.

Innate Right may also be called the ‘Internal Mine and Thine’ (Meum vel Tuum internum); for External Right must always be acquired.

There is only one Innate Right, the Birthright of Freedom.

Freedom is Independence of the compulsory Will of another; and in so far as it can co-exist with the Freedom of all according to a universal Law, it is the one sole original, inborn Right belonging to every man in virtue of his Humanity. There is, indeed, an innate Equality belonging to every man which consists in his Right to be independent of being bound by others to anything more than that to which he may also reciprocally bind them. It is, consequently, the inborn quality of every man in virtue of which he ought to be his own master by Right (sui juris). There is, also, the natural quality of Justness attributable to a man as naturally of unimpeachable Right (justi), because he has done no Wrong to any one prior to his own juridical actions. And, further, there is also the innate Right of Common Action on the part of every man so that he may do towards others what does not infringe their Rights or take away anything that is theirs unless they are willing to appropriate it; such as merely to communicate thought, to narrate anything, or to promise something whether truly and honestly, or untruly and dishonestly (veriloquium aut falsiloquium), for it rests entirely upon these others whether they will believe or trust in it or not. But all these Rights or Titles are already included in the Principle of Innate Freedom, and are not really distinguished from it, even as dividing members under a higher species of Right.

The reason why such a Division into separate Rights has been introduced into the System of Natural Right viewed as including all that is innate, was not without a purpose. Its object was to enable proof to be more readily put forward in case of any controversy arising about an Acquired Right, and questions emerging either with reference to a fact that might be in doubt, or, if that were established, in reference to a Right under dispute. For the party repudiating an obligation, and on whom the burden of proof (onus probandi) might be incumbent, could thus methodically refer to his Innate Right of Freedom as specified under various relations in detail, and could therefore found upon them equally as different Titles of Right.

In the relation of Innate Right, and consequently of the Internal ‘Mine’ and ‘Thine,’ there is therefore not Rights, but only one Right. And, accordingly, this highest Division of Rights into Innate and Acquired, which evidently consists of two members extremely unequal in their contents, is properly placed in the Introduction; and the subdivisions of the Science of Right may be referred in detail to the External Mine and Thine.

C.: Methodical Division of the Science of Right.

The highest Division of the System of Natural Right should not be — as it is frequently put — into ‘Natural Right’ and ‘Social Right,’ but into Natural Right and Civil Right. The first constitutes Private Right; the second, Public Right. For it is not the ‘Social state’ but the ‘Civil state’ that is opposed to the ‘State of Nature;’ for in the ‘State of Nature’ there may well be Society of some kind, but there is no ‘civil’ Society, as an Institution securing the Mine and Thine by public laws. It is thus that Right, viewed under reference to the state of Nature, is specially called Private Right. The whole of the Principles of Right will therefore fall to be expounded under the two subdivisions of Private Right and Public Right.

PART FIRST. PRIVATE RIGHT.

PRIVATE RIGHT. THE SYSTEM OF THOSE LAWS WHICH REQUIRE NO EXTERNAL PROMULGATION.

PRIVATE RIGHT. THE PRINCIPLES OF THE EXTERNAL MINE AND THINE GENERALLY.

CHAPTER FIRST. Of the Mode of having anything External as one’s own.

1.: The meaning of ‘Mine’ in Right.

(Meum Juris.)

Anything is ‘Mine’ by Right, or is rightfully Mine, when I am so connected with it, that if any other Person should make use of it without my consent, he would do me a lesion or injury. The subjective condition of the use of anything, is Possession of it.

An external thing, however, as such could only be mine, if I may assume it to be possible that I can be wronged by the use which another might make of it when it is not actually in my possession. Hence it would be a contradiction to have anything External as one’s own, were not the conception of Possession capable of two different meanings, as sensible Possession that is perceivable by the senses, and rational Possession that is perceivable only by the Intellect. By the former is to be understood a physical Possession, and by the latter, a purely juridical Possession of the same object.

The description of an Object as ‘external to me’ may signify either that it is merely ‘different and distinct from me as a Subject,’ or that it is also ‘a thing placed outside of me, and to be found elsewhere in space or time.’ Taken in the first sense, the term Possession signifies ‘rational Possession;’ and, in the second sense, it must mean ‘Empirical Possession.’ A rational or intelligible Possession, if such be possible, is Possession viewed apart from physical holding or detention (detentio).

2.: Juridical Postulate of the Practical Reason.

It is possible to have any external object of my Will as Mine. In other words, a Maxim to this effect — were it to become law — that any object on which the Will can be exerted must remain objectively in itself without an owner, as ‘res nullius,’ is contrary to the Principle of Right.

For an object of any act of my Will, is something that it would be physically within my power to use. Now, suppose there were things that by right should absolutely not be in our power, or, in other words, that it would be wrong or inconsistent with the freedom of all, according to universal Law, to make use of them. On this supposition, Freedom would so far be depriving itself of the use of its voluntary activity, in thus putting useable objects out of all possibility of use. In practical relations, this would be to annihilate them, by making them res nullius, notwithstanding the fact that acts of Will in relation to such things would formally harmonize, in the actual use of them, with the external freedom of all according to universal Laws. Now the pure practical Reason lays down only formal Laws as Principles to regulate the exercise of the Will; and therefore abstracts from the matter of the act of Will, as regards the other qualities of the object, which is considered only in so far as it is an object of the activity of the Will. Hence the practical Reason cannot contain, in reference to such an object, an absolute prohibition of its use, because this would involve a contradiction of external freedom with itself. — An object of my free Will, however, is one which I have the physical capability of making some use of at will, since its use stands in my power (in potentia). This is to be distinguished from having the object brought under my disposal (in potestatem meam reductum), which supposes not a capability merely, but also a particular act of the free-will. But in order to consider something merely as an object of my Will as such, it is sufficient to be conscious that I have it in my power. It is therefore an assumption à priori of the practical Reason, to regard and treat every object within the range of my free exercise of Will as objectively a possible Mine

or Thine.

This Postulate may be called ‘a Permissive Law’ of the practical Reason, as giving us a special title which we could not evolve out of the mere conceptions of Right generally. And this Title constitutes the Right to impose upon all others an obligation, not otherwise laid upon them, to abstain from the use of certain objects of our free Choice, because we have already taken them into our possession. Reason wills that this shall be recognised as a valid Principle, and it does so as practical Reason; and it is enabled by means of this Postulate à priori to enlarge its range of activity in practice.

3.: Possession and Ownership.

Any one who would assert the Right to a thing as his, must be in possession of it as an object. Were he not its actual possessor or owner, he could not be wronged or injured by the use which another might make of it without his consent. For, should anything external to him, and in no way connected with him by Right, affect this object, it could not affect himself as a Subject, nor do him any wrong, unless he stood in a relation of Ownership to it.

4.: Exposition of the Conception of the External Mine and Thine.

There can only be three external Objects of my Will in the activity of Choice:

A Corporeal Thing external to me;

The Free-will of another in the performance of a particular act (præstatio);

The State of another in relation to myself.

These correspond to the categories of Substance, Causality, and Reciprocity; and they form the practical relations between me and external objects, according to the Laws of Freedom.

A. I can only call a corporeal thing or an object in space ‘mine,’ when, even although not in physical possession of it, I am able to assert that I am in possession of it in another real non-physical sense. Thus, I am not entitled to call an apple mine merely because I hold it in my hand or possess it physically; but only when I am entitled to say, ‘I possess it, although I have laid it out of my hand, and wherever it may lie.’ In like manner, I am not entitled to say of the ground, on which I may have laid myself down, that therefore it is mine; but only when I can rightly assert that it still remains in my possession, although I may have left the spot. For any one who, in the former appearances of empirical possession, might wrench the apple out of my hand, or drag me away from my resting-place, would, indeed, injure me in respect of the inner ‘Mine’ of Freedom, but not in respect of the external ‘Mine,’ unless I could assert that I was in the possession of the Object, even when not actually holding it physically. And if I could not do this, neither could I call the apple or the spot mine.

B. I cannot call the performance of something by the action of the Will of another ‘Mine,’ if I can only say ‘it has come into my possession at the same time with a promise’ (pactum re initum); but only if I am able to assert ‘I am in possession of the Will of the other, so as to determine him to the performance of a particular act, although the time for the performance of it has not yet come.’ In the latter case, the promise belongs to the nature of things actually held as possessed, and as an ‘active obligation’ I can reckon it mine; and this holds good not only if I have the thing promised — as in the first case — already in my possession, but even although I do not yet possess it in fact. Hence, I must be able to regard myself in thought as independent of that empirical form of possession that is limited by the condition of time, and as being nevertheless in possession of the object.

C. I cannot call a Wife, a Child, a Domestic, or, generally, any other Person ‘mine’ merely because I command them at present as belonging to my household, or because I have them under control, and in my power and possession. But I can call them mine, if, although they may have withdrawn themselves from

my control and I do not therefore possess them empirically, I can still say ‘I possess them by my mere Will, provided they exist anywhere in space or time; and, consequently, my possession of them is purely juridical.’ They belong, in fact, to my possessions, only when and so far as I can assert this as a matter of Right.

5.: Definition of the conception of the external Mine and Thine.

Definitions are nominal or real. A nominal Definition is sufficient merely to distinguish the object defined from all other objects, and it springs out of a complete and definite exposition of its conception. A real Definition further suffices for a Deduction of the conception defined, so as to furnish a knowledge of the reality of the object. — The nominal Definition of the external ‘Mine’ would thus be: ‘The external Mine is anything outside of myself, such that any hindrance of my use of it at will, would be doing me an injury or wrong as an infringement of that Freedom of mine which may coexist with the freedom of all others according to a universal Law.’ The real Definition of this conception may be put thus: ‘The external Mine is anything outside of myself, such that any prevention of my use of it would be a wrong, although I may not be in possession of it so as to be actually holding it as an object.’ — I must be in some kind of possession of an external object, if the object is to be regarded as mine; for, otherwise, any one interfering with this object would not, in doing so, affect me; nor, consequently, would he thereby do me any wrong. Hence, according to § 4, a rational Possession (possessio noumenon) must be assumed as possible, if there is to be rightly an external ‘Mine and Thine.’ Empirical Possession is thus only phenomenal possession or holding (detention) of the object in the sphere of sensible appearance (possessio phenomenon), although the object which I possess is not regarded in this practical relation as itself a Phenomenon, — according to the exposition of the Transcendental Analytic in the Critique of Pure Reason — but as a Thing in itself. For in the Critique of Pure Reason the interest of Reason turns upon the theoretical knowledge of the Nature of Things, and how far Reason can go in such knowledge. But here Reason has to deal with the practical determination of the action of the Will according to Laws of Freedom, whether the object is perceivable through the senses or merely thinkable by the pure Understanding. And Right, as under consideration, is a pure practical conception of the Reason in relation to the exercise of the Will under Laws of Freedom.

And, hence, it is not quite correct to speak of ‘possessing’ a Right to this or that object, but it should rather be said that an object is possessed in a purely juridical way; for a Right is itself the rational possession of an Object, and to ‘possess a possession,’ would be an expression without meaning.

6.: Deduction of the conception of a purely juridical Possession of an External Object.

(Possessio noumenon.)

The question, ‘How is an external Mine and Thine possible?’ resolves itself into this other question, ‘How is a merely juridical or rational Possession possible?’ And this second question resolves itself again into a third, ‘How is a synthetic proposition in Right possible à priori?’

All Propositions of Right — as juridical propositions — are Propositions à priori, for they are practical Laws of Reason (Dictamina rationis). But the juridical Proposition à priori respecting empirical Possession is analytical; for it says nothing more than what follows by the principle of Contradiction, from the conception of such possession; namely, that if I am the holder of a thing in the way of being physically connected with it, any one interfering with it without my consent — as, for instance, in wrenching an apple out of my hand — affects and detracts from my freedom as that which is internally Mine; and consequently the maxim of his action is in direct contradiction to the Axiom of Right. The proposition expressing the principle of an empirical rightful Possession, does not therefore go beyond the

Right of a Person in reference to himself.

On the other hand, the Proposition expressing the possibility of the Possession of a thing external to me, after abstraction of all the conditions of empirical possession in space and time — consequently presenting the assumption of the possibility of a Possessio Noumenon — goes beyond these limiting conditions; and because this Proposition asserts a possession even without physical holding, as necessary to the conception of the external Mine and Thine, it is synthetical. And thus it becomes a problem for Reason to show how such a Proposition, extending its range beyond the conception of empirical possession, is possible à priori.

In this manner, for instance, the act of taking possession of a particular portion of the soil, is a mode exercising the private free-will without being an act of usurpation. The possessor founds upon the innate Right of common possession of the surface of the earth, and upon the universal Will corresponding à priori to it, which allows a private Possession of the soil; because what are mere things would be otherwise made in themselves and by a Law, into unappropriable objects. Thus a first appropriator acquires originally by primary possession a particular portion of the ground; and by Right (jure) he resists every other person who would hinder him in the private use of it, although while the 'state of Nature' continues, this cannot be done by juridical means (de jure), because a public Law does not yet exist.

And although a piece of ground should be regarded as free, or declared to be such, so as to be for the public use of all without distinction, yet it cannot be said that it is thus free by nature and originally so, prior to any juridical act. For there would be a real relation already incorporated in such a piece of ground by the very fact that the possession of it was denied to any particular individual; and as this public freedom of the ground would be a prohibition of it to every particular individual, this presupposes a common possession of it which cannot take effect without a Contract. A piece of ground, however, which can only become publicly free by contract, must actually be in the possession of all those associated together, who mutually interdict or suspend each other, from any particular or private use of it.

This original Community of the soil and of the things upon it (communio fundi originaria), is an idea which has objective and practical Juridical reality, and is entirely different from the idea of a primitive community of things which is a fiction. For the latter would have had to be founded as a form of Society, and must have taken its rise from a Contract by which all renounced the Right of Private Possession, so that by uniting the property owned by each into a whole, it was thus transformed into a common possession. But had such an event taken place, History must have presented some evidence of it. To regard such a procedure as the original mode of taking possession, and to hold that the particular possessions of every individual may and ought to be grounded upon it, is evidently a contradiction.

Possession (possessio) is to be distinguished from habitation as mere residence (sedes); and the act of taking possession of the soil in the intention of acquiring it once for all, is also to be distinguished from settlement or domicile (incolatus), which is a continuous private Possession of a place that is dependent on the presence of the individual upon it. We have not here to deal with the question of domiciliary settlement, as that is a secondary juridical act which may follow upon possession, or may not occur at all; for as such it could not involve an original possession, but only a secondary possession derived from the consent of others.

Simple physical Possession, or holding of the soil, involves already certain relations of Right to the thing, although it is certainly not sufficient to enable me to regard it as Mine. Relative to others, so far as they know, it appears as a first possession in harmony with the law of external freedom; and, at the same time, it is embraced in the universal original possession which contains à priori the fundamental principle of the possibility of a private possession. Hence to disturb the first occupier or holder of a portion of the soil in his use of it, is a lesion or wrong done to him. The first taking of Possession has therefore a Title of Right (titulus possessionis) in its favour, which is simply the principle of the original common possession; and the saying that 'It is well for those who are in possession' (beati possidentes), when one

is not bound to authenticate his possession, is a principle of Natural Right that establishes the juridical act of taking possession, as a ground of acquisition upon which every first possessor may found.

It has been shown in the Critique of Pure Reason that in theoretical Principles à priori, an intuitional Perception à priori must be supplied in connection with any given conception; and, consequently, were it a question of a purely theoretical Principle, something would have to be added to the conception of the possession of an object to make it real. But in respect of the practical Principle under consideration, the procedure is just the converse of the theoretical process; so that all the conditions of perception which form the foundation of empirical possession must be abstracted or taken away in order to extend the range of the juridical Conception beyond the empirical sphere, and in order to be able to apply the Postulate, that every external object of the free activity of my Will, so far as I have it in my power, although not in the possession of it, may be reckoned as juridically Mine.

The possibility of such a possession, with consequent Deduction of the conception of a non-empirical possession, is founded upon the juridical Postulate of the Practical Reason, that 'It is a juridical Duty so to act towards others that what is external and useable may come into the possession or become the property of some one.' And this Postulate is conjoined with the exposition of the Conception that what is externally one's own, is founded upon a possession, that is not physical. The possibility of such a possession, thus conceived, cannot, however, be proved or comprehended in itself, because it is a rational conception for which no empirical perception can be furnished; but it follows as an immediate consequence from the Postulate that has been enunciated. For, if it is necessary to act according to that juridical Principle, the rational or intelligible condition of a purely juridical possession must also be possible. It need astonish no one, then, that the theoretical aspect of the Principles of the external Mine and Thine, is lost from view in the rational sphere of pure Intelligence, and presents no extension of Knowledge; for the conception of Freedom upon which they rest does not admit of any theoretical Deduction of its possibility, and it can only be inferred from the practical Law of Reason, called the Categorical Imperative, viewed as a fact.

7.: Application of the Principle of the Possibility of an external Mine and Thine to Objects of Experience.

The conception of a purely juridical Possession, is not an empirical conception dependent on conditions of Space and Time, and yet it has practical reality. As such it must be applicable to objects of experience, the knowledge of which is independent of the conditions of Space and Time. The rational process by which the conception of Right is brought into relation to such objects so as to constitute a possible external Mine and Thine, is as follows. The Conception of Right, being contained merely in Reason, cannot be immediately applied to objects of experience, so as to give the conception of an empirical Possession, but must be applied directly to the mediating conception in the Understanding, of Possession in general; so that, instead of physical holding (Detentio) as an empirical representation of possession, the formal conception or thought of 'Having,' abstracted from all conditions of Space and Time, is conceived by the mind, and only as implying that an object is in my power and at my disposal (in potestate mea positum esse). In this relation, the term 'external' does not signify existence in another place than where I am, nor my resolution and acceptance at another time than the moment in which I have the offer of a thing: it signifies only an object different from or other than myself. Now the practical Reason by its Law of Right wills, that I shall think the Mine and Thine in application to objects, not according to sensible conditions, but apart from these and from the Possession they indicate; because they refer to determinations of the activity of the Will that are in accordance with the Laws of Freedom. For it is only a conception of the Understanding that can be brought under the rational Conception of Right. I may therefore say that I possess a field, although it is in quite a different place from that on which I actually find myself. For the question here is not concerning an intellectual relation to the object, but I have the

thing practically in my power and at my disposal, which is a conception of Possession realized by the Understanding and independent of relations of space; and it is mine, because my Will in determining itself to any particular use of it, is not in conflict with the Law of external Freedom. Now it is just in abstraction from physical possession of the object of my free-will in the sphere of sense, that the Practical Reason wills that a rational possession of it shall be thought, according to intellectual conceptions which are not empirical, but contain à priori the conditions of rational possession. Hence it is in this fact, that we found the ground of the validity of such a rational conception of possession (possessio noumenon) as the principle of a universally valid Legislation. For such a Legislation is implied and contained in the expression, 'This external object is mine,' because an Obligation is thereby imposed upon all others in respect of it, who would otherwise not have been obliged to abstain from the use of this object.

The mode, then, of having something External to myself as Mine, consists in a specially juridical connection of the Will of the Subject with that object, independently of the empirical relations to it in Space and in Time, and in accordance with the conception of a rational possession. — A particular spot on the earth is not externally Mine because I occupy it with my body; for the question here discussed refers only to my external Freedom, and consequently it affects only the possession of myself, which is not a thing external to me, and therefore only involves an internal Right. But if I continue to be in possession of the spot, although I have taken myself away from it and gone to another place, only under that condition is my external Right concerned in connection with it. And to make the continuous possession of this spot by my person a condition of having it as mine, must either be to assert that it is not possible at all to have anything External as one's own, which is contrary to the Postulate in § 2, or to require, in order that this external Possession may be possible, that I shall be in two places at the same time. But this amounts to saying that I must be in a place and also not in it, which is contradictory and absurd.

This position may be applied to the case in which I have accepted a promise; for my Having and Possession in respect of what has been promised, become established on the ground of external Right. This Right is not to be annulled by the fact that the promiser having said at one time, 'This thing shall be yours,' again at a subsequent time says, 'My will now is that the thing shall not be yours.' In such relations of rational Right the conditions hold just the same as if the promiser had, without any interval of time between them, made the two declarations of his Will, 'This shall be yours,' and also 'This shall not be yours;' which manifestly contradicts itself.

The same thing holds, in like manner, of the Conception of the juridical possession of a Person as belonging to the 'Having' of a subject, whether it be a Wife, a Child, or a Servant. The relations of Right involved in a household, and the reciprocal possession of all its members, are not annulled by the capability of separating from each other in space; because it is by juridical relations that they are connected, and the external 'Mine' and 'Thine,' as in the former cases, rests entirely upon the assumption of the possibility of a purely rational possession, without the accompaniment of physical detention or holding of the object.

Reason is forced to a Critique of its juridically Practical Function in special reference to the conception of the external Mine and Thine, by the Antinomy of the propositions enunciated regarding the possibility of such a form of Possession. For these give rise to an inevitable Dialectic, in which a Thesis and an Antithesis set up equal claims to the validity of two conflicting Conditions. Reason is thus compelled, in its practical function in relation to Right, — as it was in its theoretical function, — to make a distinction between Possession as a phenomenal appearance presented to the senses, and that Possession which is rational and thinkable only by the Understanding.

Thesis. — The Thesis, in this case, is, 'It is possible to have something external as mine, although I am not in possession of it.'

Antithesis. — The Antithesis is, 'It is not possible to have anything external as mine, if I am not in

possession of it.’

Solution. — The Solution is, ‘Both Propositions are true;’ the former when I mean empirical Possession (possessio phænomenon), the latter when I understand by the same term, a purely rational Possession (possessio noumenon).

But the possibility of a rational possession, and consequently of an external Mine and Thine, cannot be comprehended by direct insight, but must be deduced from the Practical Reason. And in this relation it is specially noteworthy that the Practical Reason without intuitional perceptions, and even without requiring such an element à priori, can extend its range by the mere elimination of empirical conditions, as justified by the law of Freedom, and can thus establish synthetical Propositions à priori. The proof of this in the practical connection, as will be shown afterwards, can be adduced in an analytical manner.

8.: To have anything External as one’s own is only possible in a Juridical or Civil State of Society under the regulation of a public legislative Power.

If, by word or deed, I declare my Will that some external thing shall be mine, I make a declaration that every other person is obliged to abstain from the use of this object of my exercise of Will; and this imposes an Obligation which no one would be under, without such a juridical act on my part. But the assumption of this Act, at the same time involves the admission that I am obliged reciprocally to observe a similar abstention towards every other in respect of what is externally theirs; for the Obligation in question arises from a universal Rule regulating the external juridical relations. Hence I am not obliged to let alone what another person declares to be externally his, unless every other person likewise secures me by a guarantee that he will act in relation to what is mine, upon the same Principle. This guarantee of reciprocal and mutual abstention from what belongs to others, does not require a special juridical act for its establishment, but is already involved in the Conception of an external Obligation of Right, on account of the universality and consequently the reciprocity of the obligatoriness arising from a universal Rule. — Now a single Will, in relation to an external and consequently contingent Possession, cannot serve as a compulsory Law for all, because that would be to do violence to the Freedom which is in accordance with universal Laws. Therefore it is only a Will that binds every one, and as such a common, collective, and authoritative Will, that can furnish a guarantee of security to all. But the state of men under a universal, external, and public Legislation, conjoined with authority and power, is called the Civil state. There can therefore be an external Mine and Thine only in the Civil state of Society.

Consequence. — It follows, as a Corollary, that if it is juridically possible to have an external object as one’s own, the individual Subject of possession must be allowed to compel or constrain every person, with whom a dispute as to the Mine or Thine of such a possession may arise, to enter along with himself into the relations of a Civil Constitution.

9.: There may, however, be an external Mine and Thine found as a fact in the state of Nature, but it is only provisory.

Natural Right in the state of a Civil Constitution, means the forms of Right which may be deduced from Principles à priori as the conditions of such a Constitution. It is therefore not to be infringed by the statutory laws of such a Constitution; and accordingly the juridical Principle remains in force, that, ‘Whoever proceeds upon a Maxim by which it becomes impossible for me to have an object of the exercise of my Will as Mine, does me a lesion or injury.’ For a Civil Constitution is only the juridical condition under which every one has what is his own merely secured to him, as distinguised from its being specially assigned and determined to him. — All Guarantee, therefore, assumes that every one to

whom a thing is secured, is already in possesion of it as his own. Hence, prior to the Civil Constitution — or apart from it — an external Mine and Thine must be assumed as possible, and along with it a Right to compel every one with whom we could come into any kind of intercourse, to enter with us into a constitution in which what is Mine or Thine can be secured. — There may thus be a Possession in expectation or in preparation for such a state of security, as can only be established on the Law of the Common Will; and as it is therefore in accordance with the possibility of such a state, it constitutes a provisory or temporary juridical Possession; whereas that Possession which is found in reality in the Civil state of Society will be a peremptory or guaranteed Possession. — Prior to entering into this state, for which he is naturally prepared, the individual rightfully resists those who will not adapt themselves to it, and who would disturb him in his provisory possession; because if the Will of all except himself were imposing upon him an obligation to withdraw from a certain possession, it would still be only a one-sided or unilateral Will, and consequently it would have just as little legal Title — which can be properly based only on the universalized Will — to contest a claim of Right; as he would have to assert it. Yet he has the advantage on his side, of being in accord with the conditions requisite to the introduction and institution of a civil form of Society. In a word, the mode in which anything external may be held as one's own in the state of Nature, is just physical possession with a presumption of Right thus far in its favour, that by union of the Wills of all in a public Legislation, it will be made juridical; and in this expectation it holds comparatively, as a kind of potential juridical Possession.

This Prerogative of Right, as arising from the fact of empirical possession, is in accordance with the Formula, 'It is well for those who are in possession' (Beati possidentes). It does not consist in the fact that because the Possessor has the presumption of being a rightful man, it is unnecessary for him to bring forward proof that he possesses a certain thing rightfully, for this position applies only to a case of disputed Right. But it is because it accords with the Postulate of the Practical Reason, that every one is invested with the faculty of having as his own any external object upon which he has exerted his Will; and, consequently, all actual possession is a state whose rightfulness is established upon that Postulate by an anterior act of Will. And such an act, if there be no prior possession of the same object by another opposed to it, does, therefore, provisionally justify and entitle me, according to the Law of external Freedom, to restrain any one who refuses to enter with me into a state of public legal Freedom, from all pretension to the use of such an object. For such a procedure is requisite, in conformity with the Postulate of Reason, in order to subject to my proper use a thing which would otherwise be practically annihilated, as regards all proper use of it.

PRIVATE RIGHT

CHAPTER SECOND. The Mode of acquiring anything External.

10.: The general Principle of External Acquisition.

I acquire a thing when I act (efficio) so that it becomes mine. — An external thing is originally mine, when it is mine even without the intervention of a juridical Act. An Acquisition is original and primary, when it is not derived from what another had already made his own.

There is nothing External that is as such originally mine; but anything external may be originally acquired when it is an object that no other person has yet made his. — A state in which the Mine and Thine are in common, cannot be conceived as having been at any time original. Such a state of things would have to be acquired by an external juridical Act, although there may be an original and common possession of an external object. Even if we think hypothetically of a state in which the Mine and Thine would be originally in common as a 'Communio mei et tui originaria,' it would still have to be distinguished from a primeval communion (Communio primæva) with things in common, sometimes supposed to be founded in the first period of the relations of Right among men, and which could not be regarded as based upon Principles like the former, but only upon History. Even under that condition the historic Communio, as a supposed primeval Community would always have to be viewed as acquired and derivative (Communio derivativa).

The Principle of external Acquisition, then, may be expressed thus: 'Whatever I bring under my power according to the Law of external Freedom, of which as an object of my free activity of Will I have the capability of making use according to the Postulate of the Practical Reason, and which I will to become mine in conformity with the Idea of a possible united common Will, is mine.'

The practical Elements (Momenta attendenda) constitutive of the process of original Acquisition are: —

Prehension or Seizure of an object which belongs to no one; for if it belonged already to some one the act would conflict with the Freedom of others that is according to universal Laws. This is the taking possession of an object of my free activity of Will in Space and Time; the Possession, therefore, into which I thus put myself is sensible or physical possession (possessio phenomenon);

Declaration of the possession of this object by formal designation and the act of my free-will in interdicting every other person from using it as his;

Appropriation, as the act, in Idea, of an externally legislative common Will, by which all and each are obliged to respect and act in conformity with my act of Will.

The validity of the last element in the process of Acquisition, as that on which the conclusion that 'the external object is mine' rests, is what makes the possession valid as a purely rational and juridical possession (possessio noumenon). It is founded upon the fact that as all these Acts are juridical, they consequently proceed from the Practical Reason, and therefore in the question as to what is Right, abstraction may be made of the empirical conditions involved, and the conclusion 'the external object is mine' thus becomes a correct inference from the external fact of sensible possession to the internal Right of rational Possession.

The original primary Acquisition of an external object of the action of the Will, is called Occupancy. It can only take place in reference to Substances or Corporeal Things. Now when this Occupation of an external object does take place, the Act presupposes as a condition of such empirical possession, its Priority in time before the act of any other who may also be willing to enter upon occupation of it. Hence the legal maxim, 'qui prior tempore, potior jure.' Such Occupation as original or primary is, further, the effect only of a single or unilateral Will; for were a bilateral or twofold Will requisite for it, it would be

derived from a Contract of two or more persons with each other, and consequently it would be based upon what another or others had already made their own. — It is not easy to see how such an act of free-will as this would be, could really form a foundation for every one having his own. — However, the first Acquisition of a thing is on that account not quite exactly the same as the original Acquisition of it. For the Acquisition of a public juridical state by union of the Wills of all in a universal Legislation, would be such an original Acquisition, seeing that no other of the kind could precede it, and yet it would be derived from the particular Wills of all the individuals, and consequently become all-sided or omnilateral; for a properly primary Acquisition can only proceed from an individual or unilateral Will.

Division of the Subject of the Acquisition of the external Mine and Thine.

In respect of the Matter or Object of Acquisition, I acquire either a Corporeal Thing (Substance), or the Performance of something by another (Causality), or this other as a Person in respect of his state, so far as I have a Right to dispose of the same (in a relation of Reciprocity with him).

In respect of the Form or Mode of Acquisition, it is either a Real Right (jus reale), or a Personal Right (jus personale), or a Real-Personal Right (jus realiter personale), to the possession, although not to the use, of another Person as if he were a Thing.

In respect of the Ground of Right or the Title (titulus) of Acquisition — which, properly, is not a particular member of the Division of Rights, but rather a constituent element of the mode of exercising them — any thing External is acquired by a certain free Exercise of Will that is either unilateral, as the act of a single Will (facto), or bilateral, as the act of two Wills (pacto), or omnilateral, as the act of all the Wills of a Community together (lege).

FIRST SECTION. Principles of Real Right.

11.: What is a Real Right?

The usual Definition of Real Right, or 'Right in a Thing' (jus reale, jus in re), is that 'it is a Right as against every possessor of it.' This is a correct Nominal Definition. But what is it that entitles me to claim an external object from any one who may appear as its possessor, and to compel him, per vindicationem, to put me again, in place of himself, into possession of it? Is this external juridical relation of my Will a kind of immediate relation to an external thing? — If so, whoever might think of his Right as referring not immediately to Persons but to Things, would have to represent it, although only in an obscure way, somewhat thus. A Right on one side has always a Duty corresponding to it on the other, so that an external thing, although away from the hands of its first Possessor, continues to be still connected with him by a continuing obligation; and thus it refuses to fall under the claim of any other possessor, because it is already bound to another. In this way my Right, viewed as a kind of good Genius accompanying a thing and preserving it from all external attack, would refer an alien possessor always to me! It is, however, absurd to think of an obligation of Persons towards Things, and conversely; although it may be allowed in any particular case, to represent the juridical relation by a sensible image of this kind, and to express it in this way.

The Real Definition would run thus: 'Right in a Thing is a Right to the Private Use of a Thing, of which I am in possession — original or derivative — in common with all others.' For this is the one condition under which it is alone possible that I can exclude every other possessor from the private use of the Thing (jus contra quemlibet hujus rei possessorem). For, except by presupposing such a common collective possession, it cannot be conceived how, when I am not in actual possession of a thing, I could be injured

or wronged by others who are in possession of it and use it. — By an individual act of my own Will I cannot oblige any other person to abstain from the use of a thing in respect of which he would otherwise be under no obligation; and, accordingly, such an Obligation can only arise from the collective Will of all united in a relation of common possession. Otherwise, I would have to think of a Right in a Thing, as if the Thing had an Obligation towards me, and as if the Right as against every Possessor of it had to be derived from this Obligation in the Thing, which is an absurd way of representing the subject.

Further, by the term 'Real Right' (jus reale) is meant not only the 'Right in a Thing' (jus in re), but also the constitutive principle of all the Laws which relate to the real Mine and Thine. — It is, however, evident that a man entirely alone upon the earth could properly neither have nor acquire any external thing as his own; because between him as a Person and all external Things as material objects, there could be no relations of Obligation. There is therefore, literally, no direct Right in a Thing, but only that Right is to be properly called 'real' which belongs to any one as constituted against a Person, who is in common possession of things with all others in the Civil state of Society.

12.: The First Acquisition of a Thing can only be that of the Soil.

By the Soil is understood all habitable Land. In relation to everything that is moveable upon it, it is to be regarded as a Substance, and the mode of the existence of the Moveables is viewed as an Inherence in it. And just as, in the theoretical acceptation, Accidents cannot exist apart from their Substances, so, in the practical relation, Moveables upon the Soil cannot be regarded as belonging to any one unless he is supposed to have been previously in juridical possession of the Soil so that it is thus considered to be his.

For, let it be supposed that the Soil belongs to no one. Then I would be entitled to remove every moveable thing found upon it from its place, even to total loss of it, in order to occupy that place, without infringing thereby on the freedom of any other; there being, by the hypothesis, no possessor of it at all. But everything that can be destroyed, such as a Tree, a House, and such like — as regards its matter at least — is moveable; and if we call a thing which cannot be moved without destruction of its form an immoveable, the Mine and Thine in it is not understood as applying to its substance, but to that which is adherent to it, and which does not essentially constitute the thing itself.

13.: Every part of the Soil may be originarily acquired; and the Principle of the possibility of such Acquisition is the original Community of the Soil generally.

The first Clause of this Proposition is founded upon the Postulate of the Practical Reason (§ 2); the second is established by the following Proof.

All Men are originally and before any juridical act of Will in rightful possession of the Soil; that is, they have a Right to be wherever Nature or Chance has placed them without their will. Possession (possessio), which is to be distinguished from residential settlement (sedes) as a voluntary, acquired, and permanent possession, becomes common possession, on account of the connection with each other of all the places on the surface of the Earth as a globe. For, had the surface of the earth been an infinite plain, men could have been so dispersed upon it that they might not have come into any necessary communion with each other, and a state of social Community would not have been a necessary consequence of their existence upon the Earth. — Now that Possession proper to all men upon the earth which is prior to all their particular juridical acts, constitutes an original possession in common (Communio possessionis originaria). The conception of such an original, common Possession of things is not derived from experience, nor is it dependent on conditions of time, as is the case with the imaginary and indemonstrable fiction of a primæval Community of possession in actual history. Hence it is a practical

conception of Reason, involving in itself the only Principle according to which Men may use the place they happen to occupy on the surface of the Earth, in accordance with Laws of Right.

14.: The juridical Act of this original Acquisition is Occupancy.

The Act of taking possession (apprehensio), as being at its beginning the physical appropriation of a corporeal thing in space (possessionis physicæ), can accord with the Law of the external Freedom of all, under no other condition than that of its Priority in respect of Time. In this relation it must have the characteristic of a first act in the way of taking possession, as a free exercise of Will. The activity of Will, however, as determining that the thing — in this case a definite separate place on the surface of the Earth — shall be mine, being an act of Appropriation, cannot be otherwise in the case of original Acquisition than individual or unilateral (voluntas unilateralis s. propria). Now, Occupancy is the Acquisition of an external object by an individual act of Will. The original Acquisition of such an object as a limited portion of the Soil, can therefore only be accomplished by an act of Occupation.

The possibility of this mode of Acquisition cannot be intuitively apprehended by pure Reason in any way, nor established by its Principles, but is an immediate consequence from the Postulate of the Practical Reason. The Will as practical Reason, however, cannot justify external Acquisition otherwise than only in so far as it is itself included in an absolutely authoritative Will, with which it is united by implication; or, in other words, only in so far as it is contained within a union of the Wills of all who come into practical relation with each other. For an individual, unilateral Will — and the same applies to a Dual or other particular Will — cannot impose on all an Obligation which is contingent in itself. This requires an omnilateral or universal Will, which is not contingent, but à priori, and which is therefore necessarily united and legislative. Only in accordance with such a Principle can there be agreement of the active free-will of each individual with the freedom of all, and consequently Rights in general, or even the possibility of an external Mine and Thine.

15.: It is only within a Civil Constitution that anything can be acquired peremptorily, whereas in the State of Nature Acquisition can only be provisory.

A Civil Constitution is objectively necessary as a Duty, although subjectively its reality is contingent. Hence, there is connected with it a real natural Law of Right, to which all external Acquisition is subjected.

The empirical Title of Acquisition has been shown to be constituted by the taking physical possession (Apprehensio physica) as founded upon an original community of Right in all to the Soil. And because a possession in the phenomenal sphere of sense, can only be subordinated to that Possession which is in accordance with rational conceptions of right, there must correspond to this physical act of possession a rational mode of taking possession by elimination of all the empirical conditions in Space and Time. This rational form of possession establishes the proposition, that ‘whatever I bring under my power in accordance with Laws of external Freedom, and will that it shall be mine, becomes mine.’

The rational Title of Acquisition can therefore only lie originally in the Idea of the Will of all united implicitly, or necessarily to be united, which is here tacitly assumed as an indispensable Condition (Conditio sine qua non). For by a single Will there cannot be imposed upon others an obligation by which they would not have been otherwise bound. — But the fact formed by Wills actually and universally united in a Legislation, constitutes the Civil state of Society. Hence, it is only in conformity with the idea of a Civil state of Society, or in reference to it and its realization, that anything External can be acquired. Before such a state is realized, and in anticipation of it, Acquisition, which would otherwise be derived,

is consequently only provisory. The Acquisition, which is peremptory, finds place only in the Civil state.

Nevertheless, such provisory Acquisition is real Acquisition. For, according to the Postulate of the juridically Practical Reason, the possibility of Acquisition in whatever state men may happen to be living beside one another, and therefore in the State of Nature as well, is a Principle of Private Right. And in accordance with this Principle, every one is justified or entitled to exercise that compulsion by which it alone becomes possible to pass out of the state of Nature, and to enter into that state of Civil Society which alone can make all Acquisition peremptory.

It is a question as to how far the right of taking possession of the Soil extends? The answer is, So far as the capability of having it under one's power extends, that is, just as far as he who wills to appropriate it can defend it, as if the Soil were to say, 'If you cannot protect me, neither can you command me.' In this way the controversy about what constitutes a free or closed Sea must be decided. Thus, within the range of a cannon-shot no one has a right to intrude on the coast of a country that already belongs to a certain State, in order to fish or gather amber on the shore, or such like. — Further, the question is put, 'Is Cultivation of the Soil, by building, agriculture, drainage, etc., necessary in order to its Acquisition?' No. For, as these processes as forms of specification are only Accidents, they do not constitute objects of immediate possession, and can only belong to the Subject in so far as the substance of them has been already recognised as his. When it is a question of the first Acquisition of a thing, the cultivation or modification of it by labour forms nothing more than an external sign of the fact that it has been taken into possession, and this can be indicated by many other signs that cost less trouble. — Again, 'May any one be hindered in the Act of taking possession, so that neither one nor other of two Competitors shall acquire the Right of Priority, and the Soil in consequence may remain for all time free as belonging to no one?' Not at all. Such a hindrance cannot be allowed to take place, because the second of the two, in order to be enabled to do this, would himself have to be upon some neighbouring Soil, where he also, in this manner, could be hindered from being, and such absolute Hindering would involve a Contradiction. It would, however, be quite consistent with the Right of Occupation, in the case of a certain intervening piece of the Soil, to let it lie unused as a neutral ground for the separation of two neighbouring States; but under such a condition, that ground would actually belong to them both in common, and would not be without an owner (res nullius), just because it would be used by both in order to form a separation between them. — Again, 'May one have a thing as his, on a Soil of which no one has appropriated any part as his own?' Yes. In Mongolia, for example, any one may let lie whatever baggage he has, or bring back the horse that has run away from him into his possession as his own, because the whole Soil belongs to the people generally, and the use of it accordingly belongs to every individual. But that any one can have a moveable thing on the soil of another as his own, is only possible by Contract. — Finally, there is the question: 'May one of two neighbouring Nations or Tribes resist another when attempting to impose upon them a certain mode of using a particular Soil; as, for instance, a tribe of hunters making such an attempt in relation to a pastoral people, or the latter to agriculturists and such like?' Certainly. For the mode in which such peoples or tribes may settle themselves upon the surface of the earth, provided they keep within their own boundaries, is a matter of mere pleasure and choice on their own part (res meræ facultatis).

As a further question, it may be asked: Whether, when neither Nature nor Chance, but merely our own Will, brings us into the neighbourhood of a people that gives no promise of a prospect of entering into Civil Union with us, we are to be considered entitled in any case to proceed with force in the intention of founding such a Union, and bringing into a juridical state such men as the savage American Indians, the Hottentots, and the New Hollanders; Or — and the case is not much better — whether we may establish Colonies by deceptive purchase, and so become owners of their soil, and, in general, without regard to their first possession, make use at will of our superiority in relation to them? Further, may it not be held that Nature herself, as abhorring a vacuum, seems to demand such a procedure, and that large regions in other Continents, that are now magnificently peopled, would otherwise have remained unpossessed by

civilised inhabitants, and might have for ever remained thus, so that the end of Creation would have so far been frustrated? It is almost unnecessary to answer; for it is easy to see through all this flimsy veil of injustice, which just amounts to the Jesuitism of making a good End justify any Means. This mode of acquiring the Soil is, therefore, to be repudiated.

The Indefiniteness of external acquirable objects in respect of their Quantity, as well as their Quality, makes the problem of the sole primary external Acquisition of them one of the most difficult to solve. There must, however, be some one first Acquisition of an external object; for every Acquisition cannot be derivative. Hence, the problem is not to be given up as insoluble, or in itself as impossible. If it is solved by reference to the Original Contract, unless this Contract is extended so as to include the whole human race, Acquisition under it would still remain but provisional.

16.: Exposition of the Conception of a Primary Acquisition of the Soil.

All men are originally in a common collective possession of the Soil of the whole Earth (Communio fundi originaria), and they have naturally each a Will to use it (lex justi). But on account of the opposition of the free Will of one to that of the other in the sphere of action, which is inevitable by nature, all use of the soil would be prevented did not every will contain at the same time a Law for the regulation of the relation of all Wills in action, according to which a particular possession can be determined to every one upon the common soil. This is the juridical Law (lex juridica). But the distributive Law of the Mine and Thine, as applicable to each individual on the soil, according to the Axiom of external Freedom, cannot proceed otherwise than from a primarily united Will à priori — which does not presuppose any juridical act as requisite for this union. This Law can only take form in the Civil State (lex justitiæ distributivæ); as it is in this state alone that the united common Will determines what is right, what is rightful, and what is the constitution of Right. In reference to this state, however, — and prior to its establishment and in view of it, — it is provisorily a Duty for every one to proceed according to the Law of external Acquisition; and accordingly it is a juridical procedure on the part of the Will to lay every one under Obligation to recognise the act of possessing and appropriating, although it be only unilaterally. Hence a provisory Acquisition of the Soil, with all its juridical consequences, is possible in the state of Nature.

Such an Acquisition, however, requires and also obtains the favour of a Permissive Law (Lex permissiva), in respect of the determination of the limits of juridically possible Possession. For it precedes the juridical state, and as merely introductory to it is not yet peremptory; and this favour does not extend farther than the date of the consent of the other co-operators in the establishment of the Civil State. But if they are opposed to entering into the Civil State, as long as this opposition lasts it carries all the effect of a guaranteed juridical Acquisition with it, because the advance from the state of nature to the Civil State is founded upon a Duty.

17.: Deduction of the Conception of the original Primary Acquisition.

We have found the Title of Acquisition in a universal original community of the Soil, under the conditions of an external Acquisition in space; and the Mode of Acquisition is contained in the empirical fact of taking possession (Apprehensio), conjoined with the Will to have an external object as one's own. It is further necessary to unfold from the Principles of the pure juridically Practical Reason involved in the conception, the juridical Acquisition proper of an object, — that is, the external Mine and Thine that follows from the two previous conditions, as Rational Possession (possessio noumenon).

The juridical Conception of the external Mine and Thine, so far as it involves the category of Substance, cannot by 'that which is external to me' mean merely 'in a place other than that in which I am;' for it is a rational conception. As under the conceptions of the Reason only intellectual conceptions can be

embraced, the expression in question can only signify ‘something that is different and distinct from me’ according to the idea of a non-empirical Possession through, as it were, a continuous activity in taking possession of an external object; and it involves only the notion of ‘having something in my power,’ which indicates the connection of an object with myself, as a subjective condition of the possibility of making use of it. This forms a purely intellectual conception of the Understanding. Now we can leave out or abstract from the sensible conditions of Possession, as relations of a Person to objects which have no obligation. This process of elimination just gives the rational relation of a Person to Persons; and it is such that he can bind them all by an obligation in reference to the use of things through his act of Will, so far as it is conformable to the Axiom of Freedom, the Postulate of Right, and the universal Legislation of the common Will conceived as united à priori. This is therefore the rational intelligible possession of things as by pure Right, although they are objects of sense.

It is evident that the first modification, limitation, or transformation generally of a portion of the Soil cannot of itself furnish a Title to its Acquisition, since possession of an Accident does not form a ground for legal possession of the Substance. Rather, conversely, the inference as to the Mine and Thine must be drawn from ownership of the Substance according to the rule, ‘Accessarium sequitur suum principale.’ Hence one who has spent labour on a piece of ground that was not already his own, has lost his effort and work to the former Owner. This position is so evident of itself, that the old opinion to the opposite effect, that is still spread far and wide, can hardly be ascribed to any other than the prevailing illusion which unconsciously leads to the Personification of things; and, then, as if they could be bound under an obligation by the labour bestowed upon them to be at the service of the person who does the labour, to regard them as his by immediate Right. Otherwise it is probable that the natural question — already discussed — would not have been passed over with so light a tread, namely, ‘How is a Right in a thing possible?’ For, Right as against every possible possessor of a Thing, means only the claim of a particular Will to the use of an object so far as it may be included in the All-comprehending universal Will, and can be thought as in harmony with its law.

As regards bodies situated upon a piece of ground which is already mine, if they otherwise belong to no other Person, they belong to me without my requiring any particular juridical act for the purpose of this Acquisition; they are mine not facto, but lege. For they may be regarded as Accidents inhering in the Substance of the Soil, and they are thus mine jure rei meæ. To this Category also belongs everything which is so connected with anything of mine, that it cannot be separated from what is mine without altering it substantially. Examples of this are Gilding on an object, Mixture of a material belonging to me with other things, Alluvial deposit, or even Alteration of the adjoining bed of a stream or river in my favour so as to produce an increase of my land, etc. By the same principles the question must also be decided as to whether the acquirable Soil may extend farther than the existing land, so as even to include part of the bed of the Sea, with the Right to fish on my own shores, to gather Amber and such like. So far as I have the mechanical capability from my own Site, as the place I occupy, to secure my Soil from the attack of others — and, therefore, as far as Cannon can carry from the shore — all is included in my possession, and the sea is thus far closed (mare clausum). But as there is no Site for Occupation upon the wide sea itself, possible possession cannot be extended so far, and the open sea is free (mare liberum). But in the case of men, or things that belong to them, becoming stranded on the Shore, since the fact is not voluntary, it cannot be regarded by the owner of the shore as giving him a Right of Acquisition. For shipwreck is not an act of Will, nor is its result a lesion to him; and things which may have come thus upon his Soil, as still belonging to some one, are not to be treated as being without an Owner or Res nullius. On the other hand, a River, so far as possession of the bank reaches, may be originally acquired, like any other piece of ground, under the above restrictions, by one who is in possession of both its banks.

Property.

An external Object, which, in respect of its Substance, can be claimed by some one as his own, is called the Property (dominium) of that Person to whom all the Rights in it as a thing belong, like the Accidents inhering in a Substance, and which, therefore, he as the Proprietor (dominus) can dispose of at will (jus disponendi de re sua). But from this it follows at once, that such an object can only be a Corporeal Thing towards which there is no direct personal Obligation. Hence a man may be his own Master (sui juris) but not the Proprietor of himself (sui dominus), so as to be able to dispose of himself at will, to say nothing of the possibility of such a relation to other men; because he is responsible to Humanity in his own person. This point, however, as belonging to the Right of Humanity as such, rather than to that of individual men, would not be discussed at its proper place here, but is only mentioned incidentally for the better elucidation of what has just been said. It may be further observed that there may be two full Proprietors of one and the same thing, without there being a Mine and Thine in common, but only in so far as they are common Possessors of what belongs only to one of them as his own. In such a case the whole Possession without the Use of the thing, belongs to one only of the Co-proprietors (condomini); while to the other belongs all the Use of the thing along with its Possession. The former as the direct Proprietor (dominus directus), therefore, restricts the latter as the Proprietor in use (dominus utilis) to the condition of a certain continuous performance, with reference to the thing itself, without limiting him in the use of it.

SECOND SECTION. Principles of Personal Right.

18.: Nature and Acquisition of Personal Right.

The possession of the active free-will of another person, as the power to determine it by my Will to a certain action, according to Laws of Freedom, is a form of Right relating to the external Mine and Thine, as affected by the Causality of another. It is possible to have several such Rights in reference to the same Person or to different persons. The Principle of the System of Laws, according to which I can be in such possession, is that of Personal Right, and there is only one such Principle.

The Acquisition of a Personal Right can never be primary or arbitrary; for such a mode of acquiring it would not be in accordance with the Principle of the harmony of the freedom of my will with the freedom of every other, and it would therefore be wrong. Nor can such a Right be acquired by means of any unjust act of another (facto injusti alterius), as being itself contrary to Right; for if such a wrong as it implies were perpetrated on me, and I could demand satisfaction from the other, in accordance with Right, yet in such a case I would only be entitled to maintain undiminished what was mine, and not to acquire anything more than what I formerly had.

Acquisition by means of the action of another, to which I determine his Will according to Laws of Right, is therefore always derived from what that other has as his own. This derivation, as a Juridical act, cannot be effected by a mere negative relinquishment or renunciation of what is his (per derelictionem aut renunciationem); because such a negative Act would only amount to a cessation of his Right, and not to the acquirement of a Right on the part of another. It is therefore only by positive Transference (translatio), or Conveyance, that a Personal Right can be acquired; and this is only possible by means of a common Will, through which objects come into the power of one or other, so that as one renounces a particular thing which he holds under the common Right, the same object when accepted by another, in consequence of a positive act of Will, becomes his. Such transference of the Property of one to another is termed its Alienation. The act of the united Wills of two Persons, by which what belonged to one passes to the other, constitutes Contract.

19.: Acquisition by Contract.

In every Contract there are four Juridical Acts of Will involved; two of them being preparatory Acts, and two of them constitutive Acts. The two Preparatory Acts, as forms of treating in the Transaction, are Offer (oblatio) and Approval (approbatio); the two Constitutive Acts, as the forms of concluding the transaction, are Promise (promissum) and Acceptance (acceptatio). For an offer cannot constitute a Promise before it can be judged that the thing offered (oblatum) is something that is agreeable to the Party to whom it is offered, and this much is shown by the first two declarations; but by them alone there is nothing as yet acquired.

Further, it is neither by the particular Will of the Promiser nor that of the Acceptor that the property of the former passes over to the latter. This is effected only by the combined or united Wills of both, and consequently so far only as the Will of both is declared at the same time or simultaneously. Now, such simultaneousness is impossible by empirical acts of declaration, which can only follow each other in time, and are never actually simultaneous. For if I have promised, and another person is now merely willing to accept, during the interval before actual Acceptance, however short it may be, I may retract my offer, because I am thus far still free; and, on the other side, the Acceptor, for the same reason, may likewise hold himself not to be bound, up till the moment of Acceptance, by his counter-declaration following upon the Promise. — The external Formalities or Solemnities (solemnia) on the conclusion of a Contract, — such as shaking hands or breaking a straw (stipula) laid hold of by two persons, — and all the various modes of confirming the Declarations on either side, prove in fact the embarrassment of the contracting parties as to how and in what way they may represent Declarations, which are always successive, as existing simultaneously at the same moment; and these forms fail to do this. They are, by their very nature, Acts necessarily following each other in time, so that when the one Act is, the other either is not yet or is no longer.

It is only the philosophical Transcendental Deduction of the Conception of Acquisition by Contract, that can remove all these difficulties. In a juridical external relation, my taking possession of the free-will of another, as the cause that determined it to a certain Act, is conceived at first empirically by means of the declaration and counter-declaration of the free-will of each of us in time, as the sensible conditions of taking possession; and the two juridical Acts must necessarily be regarded as following one another in time. But because this relation, viewed as juridical, is purely Rational in itself, the Will as a law-giving faculty of Reason represents this possession as intelligible or rational (possessio noumenon), in accordance with conceptions of Freedom and under abstraction of those empirical conditions. And now, the two Acts of Promise and Acceptance are not regarded as following one another in time, but, in the manner of a pactum re initum, as proceeding from a common Will, which is expressed by the term 'at the same time,' or 'simultaneous,' and the object promised (promissum) is represented, under elimination of empirical conditions, as acquired according to the Law of the pure Practical Reason.

That this is the true and only possible Deduction of the idea of Acquisition by Contract, is sufficiently attested by the laborious yet always futile striving of writers on Jurisprudence — such as Moses Mendelssohn in his Jerusalem — to adduce a proof of its rational possibility. — The question is put thus: 'Why ought I to keep my Promise?' for it is assumed as understood by all that I ought to do so. It is, however, absolutely impossible to give any further proof of the Categorical Imperative implied; just as it is impossible for the Geometrician to prove by rational Syllogisms that in order to construct a Triangle, I must take three Lines — so far an Analytical Proposition — of which three Lines any two together must be greater than the third — a Synthetical Proposition, and like the former à priori. It is a Postulate of the Pure Reason that we ought to abstract from all the sensible conditions of Space and Time in reference to the conception of Right; and the theory of the possibility of such Abstraction from these conditions without taking away the reality of the Possession, just constitutes the Transcendental Deduction of the Conception

of Acquisition by Contract. It is quite akin to what was presented under the last Title, as the Theory of Acquisition by Occupation of the external object.

20.: What is acquired by Contract?

But what is that, designated as ‘External,’ which I acquire by Contract? As it is only the Causality of the active Will of another, in respect of the Performance of something promised to me, I do not immediately acquire thereby an external Thing, but an Act of the Will in question, whereby a Thing is brought under my power so that I make it mine. — By the Contract, therefore, I acquire the Promise of another, as distinguished from the Thing promised; and yet something is thereby added to my Having and Possession. I have become the richer in possession (locupletior) by the Acquisition of an active Obligation that I can bring to bear upon the Freedom and Capability of another. — This my Right, however, is only a personal Right, valid only to the effect of acting upon a particular physical Person and specially upon the Causality of his Will, so that he shall perform something for me. It is not a Real Right upon that Moral Person, which is identified with the Idea of the united Will of All viewed à priori, and through which alone I can acquire a Right valid against every Possessor of the Thing. For, it is in this that all Right in a Thing consists.

The Transfer or transmission of what is mine to another by Contract, takes place according to the Law of Continuity (Lex Continui). Possession of the object is not interrupted for a moment during this Act; for, otherwise, I would acquire an object in this state as a Thing that had no Possessor, and it would thus be acquired originally; which is contrary to the idea of a Contract. — This Continuity, however, implies that it is not the particular Will of either the Promiser or the Acceptor, but their united Will in common, that transfers what is mine to another. And hence it is not accomplished in such a manner that the Promiser first relinquishes (derelinquit) his Possession for the benefit of another, or renounces his Right (renunciat), and thereupon the other at the same time enters upon it; or conversely. The Transfer (translatio) is therefore an Act in which the object belongs for a moment at the same time to both, just as in the parabolic path of a projectile the object on reaching its highest point may be regarded for a moment as at the same time both rising and falling, and as thus passing in fact from the ascending to the falling motion.

21.: Acceptance and Delivery.

A thing is not acquired in a case of Contract by the Acceptance (acceptatio) of the Promise, but only by the Delivery (traditio) of the object promised. For all Promise is relative to Performance; and if what was promised is a Thing, the Performance cannot be executed otherwise than by an act whereby the Acceptor is put by the Promiser into possession of the Thing; and this is Delivery. Before the Delivery and the Reception of the Thing, the Performance of the act required has not yet taken place; the Thing has not yet passed from the one person to the other, and consequently has not been acquired by that other. Hence the Right arising from a Contract, is only a Personal Right; and it only becomes a Real Right by Delivery.

A Contract upon which Delivery immediately follows (pactum re initum) excludes any interval of time between its conclusion and its execution; and as such it requires no further particular act in the future by which one person may transfer to another what is his. But if there is a time — definite or indefinite — agreed upon between them for the Delivery, the question then arises, Whether the Thing has already before that time become the Acceptor’s by the Contract, so that his Right is a Right in the Thing; or whether a further special Contract regarding the Delivery alone must be entered upon, so that the Right that is acquired by mere Acceptance is only a Personal Right, and thus it does not become a Right in the Thing until Delivery? That the relation must be determined according to the latter alternative, will be

clear from what follows.

Suppose I conclude a Contract about a Thing that I wish to acquire, — such as a Horse, — and that I take it immediately into my Stable, or otherwise into my possession; then it is mine (vi pacti re initi), and my Right is a Right in the Thing. But if I leave it in the hands of the Seller without arranging with him specially in whose physical possession or holding (detentio) this Thing shall be before my taking possession of it (apprehensio), and consequently before the actual change of possession, the Horse is not yet mine; and the Right which I acquire is only a Right against a particular Person — namely, the Seller of the Horse — to be put into possession of the object (poscendi traditionem) as the subjective condition of any use of it at my will. My Right is thus only a Personal Right to demand from the Seller the performance of his promise (præstatio) to put me into possession of the thing. Now, if the Contract does not contain the condition of Delivery at the same time, — as a pactum re initum, — and consequently an interval of time intervenes between the conclusion of the Contract and the taking possession of the object of acquisition, I cannot obtain possession of it during this interval otherwise than by exercising the particular juridical activity called a possessory Act (actum possessorium) which constitutes a special Contract. This Act consists in my saying, 'I will send to fetch the horse,' to which the Seller has to agree. For it is not self-evident or universally reasonable, that any one will take a Thing destined for the use of another into his charge at his own risk. On the contrary, a special Contract is necessary for this arrangement, according to which the Alienator of a thing continues to be its owner during a certain definite time, and must bear the risk of whatever may happen to it; while the Acquirer can only be regarded by the Seller as the Owner, when he has delayed to enter into possession beyond the date at which he agreed to take delivery. Prior to the Possessory Act, therefore, all that is acquired by the Contract is only a Personal Right; and the Acceptor can acquire an external Thing only by Delivery.

THIRD SECTION. Principles of Personal Right that is Real in Kind.

(Jus realiter personale.)

22.: Nature of Personal Right of a Real Kind.

Personal Right of a real kind is the Right to the possession of an external object as a Thing, and to the use of it as a Person. — The Mine and Thine embraced under this Right relate specially to the Family and Household; and the relations involved are those of free beings in reciprocal real interaction with each other. Through their relations and influence as Persons upon one another, in accordance with the principle of external Freedom as the cause of it, they form a Society composed as a whole of members standing in community with each other as Persons; and this constitutes the Household. — The mode in which this social status is acquired by individuals, and the functions which prevail within it, proceed neither by arbitrary individual action (facto), nor by mere Contract (pacto), but by Law (lege). And this Law as being not only a Right, but also as constituting Possession in reference to a Person, is a Right rising above all mere Real and Personal Right. It must, in fact, form the Right of Humanity in our own Person; and, as such, it has as its consequence a natural Permissive Law, by the favour of which such Acquisition becomes possible to us.

23.: What is acquired in the Household?

The Acquisition that is founded upon this Law is, as regards its objects, threefold. The Man acquires a Wife; the Husband and Wife acquire Children, constituting a Family; and the Family acquire Domestics.

All these objects, while acquirable, are inalienable; and the Right of Possession in these objects is the most strictly personal of all Rights.

THE RIGHTS OF THE FAMILY AS A DOMESTIC SOCIETY.

TITLE FIRST. Conjugal Right. (Husband and Wife.)

24.: The Natural Basis of Marriage.

The domestic Relations are founded on Marriage, and Marriage is founded upon the natural Reciprocity or intercommunity (commercium) of the Sexes. This natural union of the sexes proceeds either according to the mere animal Nature (vaga libido, venus vulgivaga, fornicatio), or according to Law. The latter is Marriage (matrimonium), which is the Union of two Persons of different sex for life-long reciprocal possession of their sexual faculties. — The End of producing and educating children may be regarded as always the End of Nature in implanting mutual desire and inclination in the sexes; but it is not necessary for the rightfulness of marriage that those who marry should set this before themselves as the End of their Union, otherwise the Marriage would be dissolved of itself when the production of children ceased.

And even assuming that enjoyment in the reciprocal use of the sexual endowments is an end of marriage, yet the Contract of Marriage is not on that account a matter of arbitrary will, but is a Contract necessary in its nature by the Law of Humanity. In other words, if a man and a woman have the will to enter on reciprocal enjoyment in accordance with their sexual nature, they must necessarily marry each other; and this necessity is in accordance with the juridical Laws of Pure Reason.

25.: The Rational Right of Marriage.

For, this natural 'Commercium' — as a 'usus membrorum sexualium alterius' — is an enjoyment for which the one person is given up to the other. In this relation the human individual makes himself a 'res,' which is contrary to the Right of Humanity in his own Person. This, however, is only possible under the one condition, that as the one Person is acquired by the other as a res, that same Person also equally acquires the other reciprocally, and thus regains and re-establishes the rational Personality. The Acquisition of a part of the human organism being, on account of its unity, at the same time the acquisition of the whole Person, it follows that the surrender and acceptation of, or by, one sex in relation to the other, is not only permissible under the condition of Marriage, but is further only really possible under that condition. But the Personal Right thus acquired is at the same time, real in kind; and this characteristic of it is established by the fact that if one of the married Persons run away or enter into the possession of another, the other is entitled, at any time, and incontestably, to bring such a one back to the former relation, as if that Person were a Thing.

26.: Monogamy and Equality in Marriage.

For the same reasons, the relation of the Married Persons to each other is a relation of Equality as regards the mutual possession of their Persons, as well as of their Goods. Consequently Marriage is only truly realized in Monogamy; for in the relation of Polygamy the Person who is given away on the one side, gains only a part of the one to whom that Person is given up, and therefore becomes a mere res. But in respect of their Goods, they have severally the Right to renounce the use of any part of them, although only by a special Contract.

From the Principle thus stated, it also follows that Concubinage is as little capable of being brought under a Contract of Right, as the hiring of a person on any one occasion, in the way of a pactum fornicationis. For, as regards such a Contract as this latter relation would imply, it must be admitted by all that any one who might enter into it could not be legally held to the fulfilment of their promise if they wished to resile from it. And as regards the former, a Contract of Concubinage would also fall as a pactum turpe; because as a Contract of the hire (locatio, conductio), of a part for the use of another, on account of the inseparable unity of the members of a Person, any one entering into such a Contract would be actually surrendering as a res to the arbitrary Will of another. Hence any party may annul a Contract like this if entered into with any other, at any time and at pleasure; and that other would have no ground, in the circumstances, to complain of a lesion of his Right. The same holds likewise of a morganatic or 'left-hand' Marriage contracted in order to turn the inequality in the social status of the two parties to advantage in the way of establishing the social supremacy of the one over the other; for, in fact, such a relation is not really different from Concubinage, according to the principles of Natural Right, and therefore does not constitute a real Marriage. Hence the question may be raised as to whether it is not contrary to the Equality of married Persons when the Law says in any way of the Husband in relation to the Wife, 'he shall be thy master,' so that he is represented as the one who commands, and she as the one who obeys. This, however, cannot be regarded as contrary to the natural Equality of a human pair, if such legal Supremacy is based only upon the natural superiority of the faculties of the Husband compared with the Wife, in the effectuation of the common interest of the household; and if the Right to command, is based merely upon this fact. For this Right may thus be deduced from the very duty of Unity and Equality in relation to the End involved.

27.: Fulfilment of the Contract of Marriage.

The Contract of Marriage is completed only by conjugal cohabitation. A Contract of two Persons of different sex, with the secret understanding either to abstain from conjugal cohabitation or with the consciousness on either side of incapacity for it, is a simulated Contract; it does not constitute a marriage, and it may be dissolved by either of the parties at will. But if the incapacity only arises after marriage, the Right of the Contract is not annulled or diminished by a contingency that cannot be legally blamed.

The Acquisition of a Spouse either as a Husband or as a Wife, is therefore not constituted facto — that is, by Cohabitation — without a preceding Contract; nor even pacto — by a mere Contract of Marriage, without subsequent Cohabitation; but only lege, that is, as a juridical consequence of the obligation that is formed by two Persons entering into a sexual Union solely on the basis of a reciprocal Possession of each other, which Possession at the same time is only effected in reality by the reciprocal 'usus facultatum sexualium alterius.'

RIGHTS OF THE FAMILY AS A DOMESTIC SOCIETY.

TITLE SECOND. Parental Right. (Parent and Child.)

28.: The Relation of Parent and Child.

From the Duty of Man towards himself — that is, towards the Humanity in his own Person — there thus arises a personal Right on the part of the Members of the opposite sexes, as Persons, to acquire one another really and reciprocally by Marriage. In like manner, from the fact of Procreation in the union thus

constituted, there follows the Duty of preserving and rearing Children as the Products of this Union. Accordingly Children, as Persons, have, at the same time, an original congenital Right — distinguished from mere hereditary Right — to be reared by the care of their Parents till they are capable of maintaining themselves; and this provision becomes immediately theirs by Law, without any particular juridical Act being required to determine it.

For what is thus produced is a Person, and it is impossible to think of a Being endowed with personal Freedom as produced merely by a physical process. And hence, in the practical relation, it is quite a correct and even a necessary Idea to regard the act of generation as a process by which a Person is brought without his consent into the world, and placed in it by the responsible free will of others. This Act, therefore, attaches an obligation to the Parents to make their Children — as far as their power goes — contented with the condition thus acquired. Hence Parents cannot regard their Child as, in a manner, a Thing of their own making, for a Being endowed with Freedom cannot be so regarded. Nor, consequently, have they a Right to destroy it as if it were their own property, or even to leave it to chance; because they have brought a Being into the world who becomes in fact a Citizen of the world, and they have placed that Being in a state which they cannot be left to treat with indifference, even according to the natural conceptions of Right.

We cannot even conceive how it is possible that God can create free Beings; for it appears as if all their future actions, being predetermined by that first act, would be contained in the chain of natural necessity, and that, therefore, they could not be free. But as men we are free in fact, as is proved by the Categorical Imperative in the moral and practical relation as an authoritative decision of Reason; yet reason cannot make the possibility of such a relation of Cause to Effect conceivable from the theoretical point of view, because they are both suprasensible. All that can be demanded of Reason under these conditions, would merely be to prove that there is no Contradiction involved in the conception of a Creation of free beings; and this may be done by showing that Contradiction only arises when, along with the Category of Causality, the Condition of Time is transferred to the relation of suprasensible Things. This condition, as implying that the cause of an effect must precede the effect as its reason, is inevitable in thinking the relation of objects of sense to one another; and if this conception of Causality were to have objective reality given to it in the theoretical bearing, it would also have to be referred to the suprasensible sphere. But the Contradiction vanishes when the pure Category, apart from any sensible conditions, is applied from the moral and practical point of view, and consequently as in a non-sensible relation to the conception of Creation.

The philosophical Jurist will not regard this investigation, when thus carried back even to the ultimate Principles of the Transcendental Philosophy, as an unnecessary subtlety in a Metaphysic of Morals, or as losing itself in aimless obscurity, when he takes into consideration the difficulty of the problem to be solved, and also the necessity of doing justice in this inquiry to the ultimate relations of the Principles of Right.

29.: The Rights of the Parent.

From the Duty thus indicated, there further necessarily arises the Right of the Parents to the Management and Training of the Child, so long as it is itself incapable of making proper use of its body as an Organism, and of its mind as an Understanding. This involves its nourishment and the care of its Education. This includes, in general, the function of forming and developing it practically, that it may be able in the future to maintain and advance itself, and also its moral Culture and Development, the guilt of neglecting it falling upon the Parents. All this training is to be continued till the Child reaches the period of Emancipation (emancipatio), as the age of practicable self-support. The Parents then virtually renounce the parental Right to command, as well as all claim to repayment for their previous care and trouble; for

which care and trouble, after the process of Education is complete, they can only appeal to the Children by way of any claim, on the ground of the Obligation of Gratitude as a Duty of Virtue.

From the fact of Personality in the Children, it further follows that they can never be regarded as the Property of the Parents, but only as belonging to them by way of being in their possession, like other things that are held apart from the possession of all others and that can be brought back even against the will of the Subjects. Hence the Right of the Parents is not a purely Real Right, and it is not alienable (jus personalissimum). But neither is it a merely Personal Right; it is a Personal Right of a real kind, that is, a Personal Right that is constituted and exercised after the manner of a Real Right.

It is therefore evident that the Title of a Personal Right of a Real Kind must necessarily be added, in the Science of Right, to the Titles of Real Right and Personal Right, the Division of Rights into these two being not complete. For, if the Right of the Parents to the Children were treated as if it were merely a Real Right to a part of what belongs to their house, they could not found only upon the Duty of the Children to return to them in claiming them when they run away, but they would be then entitled to seize them and to impound them like things or runaway cattle.

RIGHTS OF THE FAMILY AS A DOMESTIC SOCIETY.

TITLE THIRD. Household Right. (Master and Servant.)

30.: Relation and Right of the Master of a Household.

The Children of the House, who, along with the Parents, constitute a Family, attain majority, and become Masters of Themselves (majorennes, sui juris), even without a Contract of release from their previous state of Dependence, by their actually attaining to the capability of self-maintenance. This attainment arises, on the one hand, as a state of natural Majority, with the advance of years in the general course of Nature; and, on the other hand, it takes form, as a state in accordance with their own natural condition. They thus acquire the Right of being their own Masters, without the interposition of any special juridical act, and therefore merely by Law (lege); and they owe their Parents nothing by way of legal debt for their Education, just as the parents, on their side, are now released from their Obligations to the Children in the same way. Parents and Children thus gain or regain their natural Freedom; and the domestic society, which was necessary according to the Law of Right, is thus naturally dissolved.

Both Parties, however, may resolve to continue the Household, but under another mode of Obligation. It may assume the form of a relation between the Head of the House as its Master, and the other members as domestic Servants, male or female; and the connection between them in this new regulated domestic economy (societas herilis) may be determined by Contract. The Master of the House, actually or virtually, enters into Contract with the Children, now become major and masters of themselves; or, if there be no Children in the Family, with other free Persons constituting the membership of the Household; and thus there is established a domestic relationship not founded on social equality, but such that one commands as Master, and another obeys as Servant (Imperantis et subjecti Domestici).

The Domestics or Servants may then be regarded by the Master of the household, as thus far his. As regards the form or mode of his Possession of them, they belong to him as if by a Real Right; for if any of them run away, he is entitled to bring them again under his power by a unilateral act of his will. But as regards the matter of his Right, or the use he is entitled to make of such persons as his Domestics, he is not entitled to conduct himself towards them as if he was their proprietor or owner (dominus servi); because they are only subjected to his power by Contract, and by a Contract under certain definite restrictions. For

a Contract by which the one party renounced his whole freedom for the advantage of the other, ceasing thereby to be a person and consequently having no duty even to observe a Contract, is self-contradictory, and is therefore of itself null and void. The question as to the Right of Property in relation to one who has lost his legal personality by a Crime, does not concern us here.

This Contract, then, of the Master of a Household with his Domestics, cannot be of such a nature that the use of them could ever rightly become an abuse of them; and the judgment as to what constitutes use or abuse in such circumstances is not left merely to the Master, but is also competent to the Servants, who ought never to be held in bondage or bodily servitude as Slaves or Serfs. Such a Contract cannot, therefore, be concluded for life, but in all cases only for a definite period, within which one party may intimate to the other a termination of their connection. Children, however, including even the children of one who has become enslaved owing to a Crime, are always free. For every man is born free, because he has at birth as yet broken no Law; and even the cost of his education till his maturity, cannot be reckoned as a debt which he is bound to pay. Even a Slave, if it were in his power, would be bound to educate his children without being entitled to count and reckon with them for the cost; and in view of his own incapacity for discharging this function, the Possessor of a Slave, therefore, enters upon the Obligation which he has rendered the Slave himself unable to fulfil.

Here, again, as under the first two Titles, it is clear that there is a Personal Right of a Real kind, in the relation of the Master of a House to his Domestics. For he can legally demand them as belonging to what is externally his, from any other possessor of them; and he is entitled to fetch them back to his house, even before the reasons that may have led them to run away, and their particular Right in the circumstances, have been judicially investigated. [See Sup plementary Explanations, I. II. III.]

SYSTEMATIC DIVISION Of all the Rights capable of being acquired by Contract.

31.: Division of Contracts. Juridical Conceptions of Money and A Book.

It is reasonable to demand that a metaphysical Science of Right shall completely and definitely determine the members of a logical Division of its Conceptions à priori, and thus establish them in a genuine System. All empirical Division, on the other hand, is merely fragmentary Partition, and it leaves us in uncertainty as to whether there may not be more members still required to complete the whole sphere of the divided Conception. A Division that is made according to a Principle à priori may be called, in contrast to all empirical Partitions, a dogmatic Division.

Every Contract, regarded in itself objectively, consists of two juridical Acts: the Promise and its Acceptance. Acquisition by the latter, unless it be a pactum re initum which requires Delivery, is not a part, but the juridically necessary Consequence of the Contract. Considered again subjectively, or as to whether the Acquisition, which ought to happen as a necessary Consequence according to Reason, will also follow, in fact, as a physical Consequence, it is evident that I have no Security or Guarantee that this will happen by the mere Acceptance of a Promise. There is therefore something externally required connected with the mode of the Contract, in reference to the certainty of Acquisition by it; and this can only be some element completing and determining the Means necessary to the attainment of Acquisition as realizing the purpose of the Contract. And in his connection and behoof, three Persons are required to intervene — the Promiser, the Acceptor, and the Cautioner or Surety. The importance of the Cautioner is evident; but by his intervention and his special Contract with the Promiser, the Acceptor gains nothing in respect of the Object, but the means of Compulsion that enable him to obtain what is his own.

According to these rational Principles of logical Division, there are properly only three pure and simple Modes of Contract. There are, however, innumerable mixed and empirical Modes, adding statutory and conventional Forms to the Principles of the Mine and Thine that are in accordance with rational Laws. But they lie outside of the circle of the Metaphysical Science of Right, whose Rational Modes of Contract can alone be indicated here.

All Contracts are founded upon a purpose of Acquisition, and are either

A. Gratuitous Contracts, with unilateral Acquisition; or

B. Onerous Contracts, with reciprocal Acquisition; or

C. Cautionary Contracts, with no Acquisition, but only Guarantee of what has been already acquired. These Contracts may be gratuitous on the one side, and yet, at the same time, onerous on the other.

The Gratuitous Contracts (pacta gratuita) are —

1. Depositation (depositum), involving the Preservation of some valuable deposited in Trust.

2. Commodate (commodatum), a Loan of the use of a Thing.

3. Donation (donatio), a free Gift.

The Onerous Contracts, are Contracts either of Permutation or of Hiring.

I. Contracts of Permutation or Reciprocal Exchange (permutatio late sic dicta):

1. Barter, or strictly real Exchange (permutatio stricte sic dicta). Goods exchanged for Goods.

2. Purchase and Sale (emptio venditio). Goods exchanged for Money.

3. Loan (mutuum). Loan of a fungible under condition of its being returned in kind: Corn for Corn, or Money for Money.

II. Contracts of Letting and Hiring (locatio conductio):

1. Letting of a Thing on Hire to another person who is to make use of it (locatio rei). If the Thing can only be restored in specie, it may be the subject of an Onerous Contract combining the consideration of Interest with it (pactum usurarium).

2. Letting of Work on Hire (locatio operæ). Consent to the use of my Powers by another for a certain Price (merces). The Worker under this Contract is a hired Servant (mercenarius).

3. Mandate (mandatum). The Contract of Mandate is an engagement to perform or execute a certain business in place and in name of another person. If the action is merely done in the place of another, but not, at the same time, in his name, it is performance without Commission (gestio negotii); but if it is (rightfully) performed in name of the other, it constitutes Mandate, which as a Contract of Procuration is an onerous Contract (mandatum onerosum).

The Cautionary Contracts (cautiones) are: —

1. Pledge (pignus). Caution by a Moveable deposited as security.

2. Suretyship (fidejussio). Caution for the fulfilment of the promise of another.

3. Personal Security (præstatio obsidis). Guarantee of Personal Performance.

This List of all the modes in which the property of one Person may be transferred or conveyed to another, includes conceptions of certain objects or Instruments required for such transference (translatio). These appear to be entirely empirical, and it may therefore seem questionable whether they are entitled to a place in a Metaphysical Science of Right. For, in such a Science the Divisions must be made according to Principles à priori; and hence the matter of the juridical relation, which may be conventional, ought to be left out of account, and only its Form should be taken into consideration.

Such conceptions may be illustrated by taking the instance of Money, in contradistinction from all other exchangeable things as Wares and Merchandise; or by the case of a Book. And considering these as illustrative examples in this connection, it will be shown that the conception of Money as the greatest and most useable of all the Means of human intercommunication through Things, in the way of Purchase and Sale in commerce, as well as that of Books as the greatest Means of carrying on the interchange of Thought, resolve themselves into relations that are purely intellectual and rational. And hence it will be

made evident that such Conceptions do not really detract from the purity of the given Scheme of pure Rational Contracts, by empirical admixture.

Illustration of Relations of Contract by the Conceptions of Money and A Book.

I.: What is Money?

Money is a thing which can only be made use of, by being alienated or exchanged. This is a good Nominal Definition, as given by Achenwall; and it is sufficient to distinguish objects of the Will of this kind from all other objects. But it gives us no information regarding the rational possibility of such a thing as money is. Yet we see thus much by the Definition: (1) that the Alienation in this mode of human intercommunication and exchange is not viewed as a Gift, but is intended as a mode of reciprocal Acquisition by an Onerous Contract; and (2) that it is regarded as a mere means of carrying on Commerce, universally adopted by the people, but having no value as such of itself, in contrast to other Things as mercantile Goods or Wares which have a particular value in relation to special wants existing among the people. It therefore represents all exchangeable things.

A bushel of Corn has the greatest direct value as a means of satisfying human wants. Cattle may be fed by it; and these again are subservient to our nourishment and locomotion, and they even labour in our stead. Thus by means of corn men are multiplied and supported, who not only act again in reproducing such natural products, but also by other artificial products they can come to the relief of all our proper wants. Thus are men enabled to build dwellings, to prepare clothing, and to supply all the ingenious comforts and enjoyments which make up the products of industry. — On the other hand, the value of Money is only indirect. It cannot be itself enjoyed, nor be used directly for enjoyment; it is, however, a Means towards this, and of all outward things it is of the highest utility.

We may found a Real Definition of Money provisionally upon these considerations. It may thus be defined as the universal means of carrying on the Industry of men in exchanging intercommunications with each other. Hence national Wealth, in so far as it can be acquired by means of Money, is properly only the sum of the Industry or applied Labour with which men pay each other, and which is represented by the Money in circulation among the people.

The Thing which is to be called Money must, therefore, have cost as much Industry to produce it, or even to put it into the hands of others, as may be equivalent to the Industry or Labour required for the acquisition of the Goods or Wares or Merchandise, as natural or artificial products, for which it is exchanged. For if it were easier to procure the material which is called Money than the goods that are required, there would be more Money in the market than goods to be sold; and because the Seller would then have to expend more labour upon his goods than the Buyer on the equivalent, the Money coming in to him more rapidly, the Labour applied to the preparation of goods and Industry generally, with the industrial productivity which is the source of the public Wealth, would at the same time dwindle and be cut down. — Hence Bank Notes and Assignations are not to be regarded as Money although they may take its place by way of representing it for a time; because it costs almost no Labour to prepare them, and their value is based merely upon the opinion prevailing as to the further continuance of the previous possibility of changing them into Ready Money. But on its being in any way found out that there is not Ready Money in sufficient quantity for easy and safe conversion of such Notes or Assignations, the opinion gives way, and a fall in their value becomes inevitable. Thus the industrial Labour of those who work the Gold and Silver Mines in Peru and Mexico — especially on account of the frequent failures in the application of fruitless efforts to discover new veins of these precious metals — is probably even greater than what is expended in the manufacture of Goods in Europe. Hence such mining Labour, as unrewarded in the

circumstances, would be abandoned of itself, and the countries mentioned would in consequence soon sink into poverty, did not the Industry of Europe, stimulated in turn by these very metals, proportionally expand at the same time so as constantly to keep up the zeal of the Miners in their work by the articles of luxury thereby offered to them. It is thus that the concurrence of Industry with Industry, and of Labour with Labour, is always maintained.

But how is it possible that what at the beginning constituted only Goods or Wares, at length became Money? This has happened wherever a Sovereign as a great and powerful consumer of a particular substance, which he at first used merely for the adornment and decoration of his servants and court, has enforced the tribute of his subjects in this kind of material. Thus it may have been Gold, or Silver, or Copper, or a species of beautiful shells called Cowries, or even a sort of mat called Makutes, as in Congo; or Ingots of Iron, as in Senegal; or Negro Slaves, as on the Guinea Coast. When the Ruler of the country demanded such things as imposts, those whose Labour had to be put in motion to procure them were also paid by means of them, according to certain regulations of commerce then established, as in a Market or Exchange. As it appears to me, it is only thus that a particular species of goods came to be made a legal means of carrying on the industrial labour of the Subjects in their commerce with each other, and thereby forming the medium of the national Wealth. And thus it practically became Money.

The Rational Conception of Money, under which the empirical conception is embraced, is therefore that of a thing which, in the course of the public permutation or Exchange of possessions (permutatio publica), determines the Price of all the other things that form products or Goods — under which term even the Sciences are included, in so far as they are not taught gratis to others. The quantity of it among a people constitutes their Wealth (opulentia). For Price (pretium) is the public judgment about the Value of a thing, in relation to the proportionate abundance of what forms the universal representative means in circulation for carrying on the reciprocal interchange of the products of Industry or Labour. The precious metals, when they are not merely weighed but also stamped or provided with a sign indicating how much they are worth, form legal Money, and are called Coin.

According to Adam Smith, ‘Money has become, in all civilised nations, the universal instrument of Commerce, by the intervention of which Goods of all kinds are bought and sold or exchanged for one another.’ — This Definition expands the empirical conception of Money to the rational idea of it, by taking regard only to the implied form of the Reciprocal Performances in the Onerous Contracts, and thus abstracting from their matter. It is thus conformable to the conception of Right in the Permutation and Exchange of the Mine and Thine generally (commutatio late sic dicta). The Definition, therefore, accords with the representation in the above Synopsis of a Dogmatic Division of Contracts à priori, and consequently with the Metaphysical Principle of Right in general.

II.: What is a Book?

A Book is a Writing which contains a Discourse addressed by some one to the Public, through visible signs of Speech. It is a matter of indifference to the present considerations whether it is written by a pen or imprinted by types, and on few or many pages. He who speaks to the Public in his own name, is the Author. He who addresses the writing to the Public in the name of the Author, is the Publisher. When a Publisher does this with the permission or authority of the Author, the act is in accordance with Right, and he is the rightful Publisher; but if this is done without such permission or authority, the act is contrary to Right, and the Publisher is a counterfeiter or unlawful Publisher. The whole of a set of Copies of the original Document, is called an Edition.

The unauthorized Publishing of Books is contrary to the Principles of Right, and is rightly prohibited.

A Writing is not an immediate direct presentation of a conception, as is the case, for instance, with an Engraving that exhibits a Portrait, or a Bust or Caste by a Sculptor. It is a Discourse addressed in a particular form to the Public; and the Author may be said to speak publicly by means of his Publisher. The Publisher, again, speaks by the aid of the Printer as his workman (operarius), yet not in his own name, — for otherwise he would be the Author, — but in the name of the Author; and he is only entitled to do so in virtue of a Mandate given him to that effect by the Author. — Now the unauthorized Printer and Publisher speaks by an assumed authority in his Publication; in the name indeed of the Author, but without a Mandate to that effect (gerit se mandatarium absque mandato). Consequently such an unauthorized Publication is a wrong committed upon the authorized and only lawful Publisher, as it amounts to a pilfering of the Profits which the latter was entitled and able to draw from the use of his proper Right (furtum usus). Unauthorized Printing and Publication of Books is therefore forbidden — as an act Counterfeit and Piracy — on the ground of Right.

There seems, however, to be an impression that there is a sort of common Right to print and publish Books; but the slightest reflection must convince any one that this would be a great injustice. The reason of it is found simply in the fact that a Book, regarded from one point of view, is an external product of mechanical art (opus mechanicum), that can be imitated by any one who may be in rightful possession of a Copy; and it is therefore his by a Real Right. But from another point of view, a Book is not merely an external Thing, but is a Discourse of the Publisher to the public, and he is only entitled to do this publicly under the Mandate of the Author (præstatio operæ); and this constitutes a Personal Right. The error underlying the impression referred to, therefore, arises from an interchange and confusion of these two kinds of Right in relation to Books.

Confusion of Personal Right and Real Right.

The confusion of Personal Right with Real Right may be likewise shown by reference to a difference of view in connection with another Contract, falling under the head of Contracts of Hiring (B. II. 1), namely, the Contract of Lease (jus incolatus). The question is raised as to whether a Proprietor when he has sold a house or a piece of ground held on lease, before the expiry of the period of Lease, was bound to add the condition of the continuance of the Lease to the Contract of Purchase; or whether it should be held that ‘Purchase breaks Hire,’ of course under reservation of a period of warning determined by the nature of the subject in use. — In the former view, a house or farm would be regarded as having a Burden lying upon it, constituting a Real Right acquired in it by the Lessee; and this might well enough be carried out by a clause merely indorsing or ingrossing the Contract of Lease in the Deed of Sale. But as it would no longer then be a simple Lease, another Contract would properly be required to be conjoined, a matter which few Lessors would be disposed to grant. The proposition, then, that ‘Purchase breaks Hire’ holds in principle; for the full Right in a Thing as a Property, overbears all Personal Right which is inconsistent with it. But there remains a Right of Action to the Lessee, on the ground of a Personal Right for indemnification on account of any loss arising from breaking of the Contract. [See Supplementary Explanations, IV.]

EPISODICAL SECTION. The Ideal Acquisition of external Objects of the Will.

32.: The Nature and Modes of Ideal Acquisition.

I call that mode of Acquisition ideal which involves no Causality in time, and which is founded upon a mere Idea of pure reason. It is nevertheless actual, and not merely imaginary Acquisition; and it is not called real only because the Act of Acquisition is not empirical. This character of the Act arises from the

peculiarity that the Person acquiring, acquires from another who either is not yet, and who can only be regarded as a possible Being, or who is just ceasing to be, or who no longer is. Hence such a mode of attaining to Possession is to be regarded as a mere practical Idea of Reason.

There are three Modes of Ideal Acquisition: —

Acquisition by Usucapion;

Acquisition by Inheritance or Succession;

Acquisition by Undying Merit (meritum immortale), or the Claim by Right to a good name at Death.

These three Modes of Acquisition can, as a matter of fact, only have effect in a public juridical state of existence, but they are not founded merely upon the Civil Constitution or upon arbitrary Statutes; they are already contained à priori in the conception of the state of Nature, and are thus necessarily conceivable prior to their empirical manifestation. The Laws regarding them in the Civil Constitution ought to be regulated by that rational Conception.

33.: I. Acquisition by Usucapion.

(Acquisitio per Usucapionem.)

I may acquire the Property of another merely by long possession and use of it (Usucapio). Such Property is not acquired, because I may legitimately presume that his Consent is given to this effect (per consensum præsumptum); nor because I can assume that as he does not oppose my Acquisition of it, he has relinquished or abandoned it as his (rem derelictam). But I acquire it thus, because even if there were any one actually raising a claim to this Property as its true Owner, I may exclude him on the ground of my long Possession of it, ignore his previous existence, and proceed as if he existed during the time of my Possession as a mere abstraction, although I may have been subsequently apprized of his reality as well as of his claim. This Mode of Acquisition is not quite correctly designated Acquisition by Prescription (per præscriptionem); for the exclusion of all other claimants is to be regarded as only the Consequence of the Usucapion; and the process of Acquisition must have gone before the Right of Exclusion. The rational possibility of such a Mode of Acquisition, has now to be proved.

Any one who does not exercise a continuous possessory activity (actus possessorius) in relation to a Thing as his, is regarded with good Right as one who does not at all exist as its Possessor. For he cannot complain of lesion so long as he does not qualify himself with a Title as its Possessor. And even if he should afterwards lay claim to the Thing when another has already taken possession of it, he only says he was once on a time Owner of it, but not that he is so still, or that his Possession has continued without interruption as a juridical fact. It can, therefore, only be by a juridical process of Possession, that has been maintained without interruption and is proveable by documentary fact, that any one can secure for himself what is his own after ceasing for a long time to make use of it.

For, suppose that the neglect to exercise this possessory activity had not the effect of enabling another to found upon his hitherto lawful, undisputed and bona fide Possession, an irrefragable Right to continue in its possession so that he may regard the thing that is thus in his Possession as acquired by him. Then no Acquisition would ever become peremptory and secured, but all Acquisition would only be provisory and temporary. This is evident on the ground that there are no historical Records available to carry the investigation of a Title back to the first Possessor and his act of Acquisition. — The Presumption upon which Acquisition by Usucapion is founded is, therefore, not merely its conformity to Right as allowed and just, but also the presumption of its being Right (præsumtio juris et de jure), and its being assumed to be in accordance with compulsory Laws (suppositio legalis). Any one who has neglected to embody his possessory Act in a documentary Title, has lost his Claim to the Right of being Possessor for the time; and the length of the period of his neglecting to do so — which need not necessarily be particularly defined — can be referred to only as establishing the certainty of this neglect. And it would contradict the Postulate

of the Juridically Practical Reason to maintain that one hitherto unknown as a Possessor, and whose possessory activity has at least been interrupted, whether by or without fault of his own, could always at any time reacquire a Property; for this would be to make all Ownership uncertain (Dominia rerum incerta facere).

But if he is a member of the Commonwealth or Civil Union, the State may maintain his Possession for him vicariously, although it may be interrupted as private Possession; and in that case the actual Possessor will not be able to prove a Title of Acquisition even from a first occupation, nor to found upon a Title of Usucapion. But in the state of Nature Usucapion is universally a rightful ground of holding, not properly as a juridical mode of requiring a Thing, but as a ground for maintaining oneself in possession of it where there are no Juridical Acts. A release from juridical claims is commonly also called Acquisition. The Prescriptive Title of the older Possessor, therefore, belongs to the sphere of Natural Right (est juris naturæ). [See Supplementary Explanations, VI.]

34.: II. Acquisition by Inheritance.

(Acquisitio hæreditatis.)

Inheritance is constituted by the transfer (translatio) of the Property or goods of one who is dying to a Survivor, through the consent of the Will of both. The Acquisition of the Heir who takes the Estate (hæredis instituti) and the Relinquishment of the Testator who leaves it, being the acts that constitute the Exchange of the Mine and Thine, take place in the same moment of time — in articulo mortis — and just when the Testator ceases to be. There is therefore no special Act of Transfer (translatio) in the empirical sense; for that would involve two successive acts, by which the one would first divest himself of his Possession, and the other would thereupon enter into it. Inheritance as constituted by a simultaneous double Act is, therefore, an ideal Mode of Acquisition. Inheritance is inconceivable in the State of Nature without a Testamentary Disposition (dispositio ultimæ voluntatis); and the question arises as to whether this mode of Acquisition is to be regarded as a Contract of Succession, or a unilateral Act instituting an Heir by a Will (testamentum). The determination of this question depends on the further question, Whether and How, in the very same moment in which one individual ceases to be, there can be a transition of his Property to another Person. Hence the problem as to how a mode of Acquisition by Inheritance is possible, must be investigated independently of the various possible forms in which it is practically carried out, and which can have place only in a Commonwealth.

‘It is possible to acquire by being instituted or appointed Heir in a Testamentary Disposition.’ For the Testator Caius promises and declares in his last Will to Titius, who knows nothing of this Promise, to transfer to him his Estate in case of death, but thus continuing as long as he lives sole Owner of it. Now by a mere unilateral act of Will, nothing can in fact be transmitted to another person, as in addition to the Promise of the one party there is required Acceptance (acceptatio) on the part of the other, and a simultaneous bilateral act of Will (voluntas simultanea) which, however, is here awanting. So long as Caius lives, Titius cannot expressly accept in order to enter on Acquisition, because Caius has only promised in case of death; otherwise the Property would be for a moment at least in common possession, which is not the Will of the Testator. — However, Titius acquires tacitly a special Right to the Inheritance as a Real Right. This is constituted by the sole and exclusive Right to accept the Estate (jus in re jacente), which is therefore called at that point of time a hæreditas jacens. Now as every man — because he must always gain and never lose by it — necessarily, although tacitly, accepts such a Right, and as Titius after the death of Caius is in this position, he may acquire the succession as Heir by Acceptance of the Promise. And the Estate is not in the meantime entirely without an Owner (res nullius), but is only in abeyance or vacant (vacua); because he has exclusively the Right of Choice as to whether he will actually make the Estate bequeathed to him, his own or not.

Hence Testaments are valid according to mere Natural Right (sunt juris naturæ). This assertion, however, is to be understood in the sense that they are capable and worthy of being introduced and sanctioned in the Civil state, whenever it is instituted. For it is only the Common Will in the Civil state that maintains the possession of the Inheritance or Succession, while it hangs between Acceptance or Rejection and specially belongs to no particular individual. [See Supplementary Explanations, VII.]

35.: III. The continuing Right of a good Name after Death.

(Bona fama Defuncti.)

It would be absurd to think that a dead Person could possess anything after his death, when he no longer exists in the eye of the Law, if the matter in question were a mere Thing. But a good Name is a congenital and external, although merely ideal possession, which attaches inseparably to the individual as a Person. Now we can and must abstract here from all consideration as to whether the Persons cease to be after death or still continue as such to exist; because in considering their juridical relation to others, we regard Persons merely according to their humanity and as rational Beings (homo noumenon). Hence any attempt to bring the Reputation or good Name of a Person into evil and false repute after death, is always questionable, even although a well-founded charge may be allowed — for to that extent the brocard 'De mortuis nil nisi bene' is wrong. Yet to spread charges against one who is absent and cannot defend himself, shows at least a want of magnanimity.

By a blameless life and a death that worthily ends it, it is admitted that a man may acquire a (negatively) good reputation constituting something that is his own, even when he no longer exists in the world of sense as a visible Person (homo phænomenon). It is further held that his Survivors and Successors — whether relatives or strangers — are entitled to defend his good Name as a matter of Right, on the ground that unproved accusations subject them all to the danger of similar treatment after death. Now that a Man when dead can yet acquire such a Right is a peculiar and, nevertheless, an undeniable manifestation in fact, of the à priori law-giving Reason thus extending its Law of Command or Prohibition beyond the limits of the present life. If some one then spreads a charge regarding a dead person that would have dishonoured him when living, or even made him despicable, any one who can adduce a proof that this accusation is intentionally false and untrue, may publicly declare him who thus brings the dead person into ill repute to be a Calumniator, and affix dishonour to him in turn. This would not be allowable unless it were legitimate to assume that the dead person was injured by the accusation, although he is dead, and that a certain just satisfaction was done to him by an Apology, although he no longer sensibly exists. A Title to act the part of the Vindicator of the dead person does not require to be established; for every one necessarily claims this of himself, not merely as a Duty of Virtue regarded ethically, but as a Right belonging to him in virtue of his Humanity. Nor does the Vindicator require to show any special personal damage, accruing to him as a friend or relative, from a stain on the character of the Deceased, to justify him in proceeding to censure it. That such a form of ideal Acquisition, and even a Right in an individual after death against survivors, is thus actually founded, cannot, therefore, be disputed, although the possibility of such a Right is not capable of logical Deduction.

There is no ground for drawing visionary inferences from what has just been stated, to the presentiment of a future life and invisible relations to departed souls. For the considerations connected with this Right, turn on nothing more than the purely moral and juridical Relation which subsists among men even in the present life, as Rational Beings. Abstraction is, however, made from all that belongs physically to their existence in Space and Time; that is, men are considered logically apart from these physical concomitants of their nature, not as to their state when actually deprived of them, but only in so far as being spirits they are in a condition that might realize the injury done them by Calumniators. Any one who may falsely say

something against me a hundred years hence, injures me even now. For in the pure juridical Relation, which is entirely rational and suprasensible, abstraction is made from the physical conditions of Time, and the Calumniator is as culpable as if he had committed the offence in my lifetime; only this will not be tried by a Criminal Process, but he will only be punished with that loss of honour he would have caused to another, and this is inflicted upon him by Public Opinion according to the Lex talionis. Even a Plagiarism from a dead Author, although it does not tarnish the honour of the Deceased, but only deprives him of a part of his property, is yet properly regarded as a lesion of his human Right.

CHAPTER THIRD. Acquisition conditioned by the Sentence of a Public Judicatory.

36.: How and what Acquisition is subjectively conditioned by the Principle of a Public Court.

Natural Right, understood simply as that Right which is not statutory, and which is knowable purely à priori, by every man's Reason, will include Distributive Justice as well as Commutative Justice. It is manifest that the latter as constituting the Justice that is valid between Persons in their reciprocal relations of intercourse with one another, must belong to Natural Right. But this holds also of Distributive Justice, in so far as it can be known à priori; and Decisions or Sentences regarding it, must be regulated by the Law of Natural Right.

The Moral Person who presides in the sphere of Justice and administers it, is called the Court of Justice, and as engaged in the process of official duty, the Judicatory; the Sentence delivered in a case, is the Judgment (judicium). All this is to be here viewed à priori, according to the rational Conditions of Right, without taking into consideration how such a Constitution is to be actually established or organized, for which particular Statutes, and consequently empirical Principles, are requisite.

The question, then, in this connection, is not merely 'What is right in itself? in the sense in which every man must determine it by the Judgment of Reason; but 'What is Right as applied to this case?' that is, what is right and just as viewed by a Court? The rational and the judicial points of view, are therefore to be distinguished; and there are four Cases in which the two forms of Judgment have a different and opposite issue. And yet they may coexist with each other, because they are delivered from two different, yet respectively true points of view: the one from regard to Private Right, the other from the Idea of Public Right. They are: I. The Contract of Donation (pactum donationis), II. The Contract of Loan (commodatum), III. The Action of Real Revindication (vindicatio), and IV. Guarantee by Oath (juramentum).

It is a common error on the part of the Jurist to fall here into the fallacy of begging the question, by a tacit assumption (vitium subreptionis). This is done by assuming as objective and absolute the juridical Principle which a Public Court of Justice is entitled and even bound to adopt in its own behoof, and only from the subjective purpose of qualifying itself to decide and judge upon all the Rights pertaining to individuals. It is therefore of no small importance to make this specific difference intelligible, and to draw attention to it.

37.: I. The Contract of Donation.

(Pactum donationis.)

The Contract of Donation signifies the gratuitous alienation (gratis) of a Thing or Right that is Mine. It involves a relation between me as the Donor (donans), and another Person as the Donatory (donatarius), in accordance with the Principle of Private Right, by which what is mine is transferred to the latter, on his acceptance of it, as a Gift (donum). However, it is not to be presumed that I have voluntarily bound myself thereby so as to be compelled to keep my Promise, and that I have thus given away my Freedom gratuitously, and, as it were, to that extent thrown myself away. Nemo suum jactare præsumitur. But this is what would happen, under such circumstances, according to the principle of Right in the Civil state; for in this sphere the Donatory can compel me, under certain conditions, to perform my Promise. If, then, the

case comes before a Court, according to the conditions of Public Right, it must either be presumed that the Donor has consented to such Compulsion, or the Court would give no regard, in the Sentence, to the consideration as to whether he intended to reserve the Right to resile from his Promise or not; but would only refer to what is certain, namely, the condition of the Promise and the Acceptance of the Donatory. Although the Promiser, therefore, thought — as may easily be supposed — that he could not be bound by his Promise in any case, if he 'rued' it before it was actually carried out, yet the Court assumes that he ought expressly to have reserved this condition if such was his mind; and if he did not make such an express reservation, it will be held that he can be compelled to implement his Promise. And this Principle is assumed by the Court, because the administration of Justice would otherwise be endlessly impeded, or even made entirely impossible.

38.: II. The Contract of Loan.

(Commodatum.)

In the Contract of Commodate-Loan (commodatum) I give some one the gratuitous use of something that is mine. If it is a Thing that is given on Loan, the contracting Parties agree that the Borrower will restore the very same thing to the power of the Lender. But the Receiver of the Loan (commodatarius) cannot, at the same time, assume that the Owner of the Thing lent (commodans) will take upon himself all risk (casus) of any possible loss of it, or of its useful quality, that may arise from having given it into the possession of the Receiver. For it is not to be understood of itself, that the Owner, besides the use of the Thing, which he has granted to the Receiver, and the detriment that is inseparable from such use, also gives a Guarantee or Warrandice against all damage that may arise from such use. On the contrary, a special Accessory Contract would have to be entered into for this purpose. The only question, then, that can be raised is this: Is it incumbent on the Lender or the Borrower to add expressly the condition of undertaking the risk that may accrue to the Thing lent; or, if this is not done, which of the Parties is to be presumed to have consented and agreed to guarantee the property of the Lender, up to restoration of the very same Thing or its equivalent? Certainly not the Lender; because it cannot be presumed that he has gratuitously agreed to give more than the mere use of the Thing, so that he cannot be supposed to have also undertaken the risk of loss of his property. But this may be assumed on the side of the Borrower; because he thereby undertakes and performs nothing more than what is implied in the Contract.

For example, I enter a house when overtaken by a shower of rain, and ask the Loan of a cloak. But through accidental contact with colouring matter, it becomes entirely spoiled while in my possession; or on entering another house, I lay it aside and it is stolen. Under such circumstances, everybody would think it absurd for me to assert that I had no further concern with the cloak but to return it as it was, or, in the latter case, only to mention the fact of the theft; and that, in any case, anything more required would be but an act of Courtesy in expressing sympathy with the Owner on account of his loss, seeing he can claim nothing on the ground of Right. — It would be otherwise, however, if on asking the use of an article, I discharged myself beforehand from all responsibility, in case of its coming to grief among my hands, on the ground of my being poor, and unable to compensate any incidental loss. No one could find such a condition superfluous or ludicrous, unless the Borrower were, in fact, known to be a well-to-do and well-disposed man; because in such a case it would almost be an insult not to act on the presumption of generous compensation for any loss sustained.

Now by the very nature of this Contract, the possible damage (casus) which the Thing lent may undergo cannot be exactly determined in any Agreement. Commodate is therefore an uncertain Contract (pactum incertum), because the consent can only be so far presumed. The Judgment, in any case, deciding upon whom the incidence of any loss must fall, cannot therefore be determined from the conditions of the Contract in itself, but only by the Principle of the Court before which it comes, and which can only

consider what is certain in the Contract; and the only thing certain is always the fact as to the possession of the Thing as property. Hence the Judgment passed in the state of Nature, will be different from that given by a Court of Justice in the Civil state. The Judgment from the standpoint of Natural Right will be determined by regard to the inner rational quality of the Thing, and will run thus: 'Loss arising from damage accruing to a Thing lent falls upon the Borrower' (casum sentit commodatarius); whereas the Sentence of a Court of Justice in the Civil state will run thus: 'The Loss falls upon the Lender' (casum sentit dominus). The latter Judgment turns out differently from the former as the Sentence of the mere sound Reason, because a Public Judge cannot found upon presumptions as to what either party may have thought; and thus the one who has not obtained release from all loss in the Thing by a special Accessory Contract, must bear the loss. — Hence the difference between the Judgment as the Court must deliver it, and the form in which each individual is entitled to hold it for himself by his private Reason, is a matter of importance, and is not to be overlooked in the consideration of Juridical Judgments.

39.: III. The Revindication of what has been Lost.

(Vindicatio.)

It is clear from what has been already said that a Thing of mine which continues to exist, remains mine although I may not be in continuous occupation of it; and that it does not cease to be mine without a Juridical Act of dereliction or alienation. Further, it is evident that a Right in this Thing (jus reale) belongs in consequence to me (jus personale), against every holder of it, and not merely against some Particular Person. But the question now arises as to whether this Right must be regarded by every other person as a continuous Right of Property per se, if I have not in any way renounced it, although the Thing is in the possession of another.

A Thing may be lost (res amissa), and thus come into other hands in an honourable bonâ fide way as a supposed 'Find;' or it may come to me by formal transfer on the part of one who is in possession of it, and who professes to be its Owner, although he is not so. Taking the latter case, the question arises, Whether, since I cannot acquire a Thing from one who is not its Owner (a non domino), I am excluded by the fact from all Right in the Thing itself, and have merely a personal Right against a wrongful Possessor? This is manifestly so, if the Acquisition is judged purely according to its inner justifying grounds and viewed according to the State of Nature, and not according to the convenience of a Court of Justice.

For everything alienable must be capable of being acquired by any one. The Rightfulness of Acquisition, however, rests entirely upon the form in accordance with which what is in possession of another, is transferred to me and accepted by me. In other words, rightful Acquisition depends upon the formality of the juridical act of commutation or interchange between the Possessor of the Thing and the Acquirer of it, without its being required to ask how the former came by it; because this would itself be an injury, on the ground that Quilibet præsumitur bonus. Now suppose it turned out that the said Possessor was not the real Owner, I cannot admit that the real Owner is entitled to hold me directly responsible, or so entitled with regard to any one who might be holding the Thing. For I have myself taken nothing away from him, when, for example, I bought his horse according to the Law (titulo empti venditi) when it was offered for sale in the public market. The Title of Acquisition is therefore unimpeachable on my side; and as Buyer I am not bound, nor even have I the Right, to investigate the Title of the Seller; for this process of investigation would have to go on in an ascending series ad infinitum. Hence on such grounds I ought to be regarded, in virtue of a regular and formal purchase, as not merely the putative, but the real Owner of the horse.

But against this position, there immediately start up the following juridical Principles. Any Acquisition derived from one who is not the Owner of the Thing in question, is null and void. I cannot derive from

another anything more than what he himself rightfully has; and although as regards the form of the Acquisition — the modus acquirendi — I may proceed in accordance with all the conditions of Right when I deal in a stolen horse exposed for sale in the market, yet a real Title warranting the Acquisition was awanting; for the horse was not really the property of the Seller in question. However I may be a bonâ fide Possessor of a Thing under such conditions, I am still only a putative Owner, and the real Owner has the Right of Vindication against me (rem suam vindicandi).

Now, it may be again asked, what is right and just in itself regarding the Acquisition of external things among men in their intercourse with one another — viewed in the state of Nature — according to the Principles of Commutative Justice? And it must be admitted in this connection, that whoever has a purpose of acquiring anything, must regard it as absolutely necessary to investigate whether the Thing which he wishes to acquire does not already belong to another person. For although he may carefully observe the formal conditions required for appropriating what may belong to the property of another, as in buying a horse according to the usual terms in a market, yet he can, at the most, acquire only a Personal Right in relation to a Thing (jus ad rem) so long as it is still unknown to him whether another than the Seller may not be the real Owner. Hence, if some other person were to come forward, and prove by documentary evidence a prior Right of property in the Thing, nothing would remain for the putative new Owner but the advantage which he has drawn as a bonâ fide Possessor of it up to that moment. Now it is frequently impossible to discover the absolutely first original Owner of a Thing in the series of putative Owners, who derive their Rights from one another. Hence no mere exchange of external things, however well it may agree with the formal conditions of Commutative Justice, can ever guarantee an absolutely certain Acquisition.

Here, however, the juridically law-giving Reason comes in again with the Principle of Distributive Justice; and it adopts as a criterion of the Rightfulness of Possession, not what it is in itself in reference to the Private Will of each individual in the state of Nature, but only the consideration of how it would be adjudged by a Court of Justice in a Civil state, constituted by the united Will of all. In this connection, fulfilment of the formal conditions of Acquisition that in themselves only establish a Personal Right, is postulated as sufficient; and they stand as an equivalent for the material conditions which properly establish the derivation of Property from a prior putative Owner, to the extent of making what is in itself only a Personal Right, valid before a Court, as a Real Right. Thus the horse which I bought when exposed for sale in the public market under conditions regulated by the Municipal Law, becomes my property if all the conditions of Purchase and Sale have been exactly observed in the transaction; but always under the reservation that the real Owner continues to have the Right of a claim against the Seller, on the ground of his prior unalienated possession. My otherwise Personal Right is thus transmuted into a Real Right, according to which I may take and vindicate the object as mine wherever I may find it, without being responsible for the way in which the Seller had come into possession of it.

It is therefore only in behoof of the requirements of juridical decision in a Court (in favorem justitiæ distributivæ) that the Right in respect of a Thing is regarded, not as Personal, which it is in itself, but as Real, because it can thus be most easily and certainly adjudged; and it is thus accepted and dealt with according to a pure Principle à priori. Upon this Principle various Statutory Laws come to be founded which specially aim at laying down the conditions under which alone a mode of Acquisition shall be legitimate, so that the Judge may be able to assign every one his own as easily and certainly as possible. Thus, in the brocard, ‘Purchase breaks Hire,’ what by the nature of the subject is a Real Right — namely the Hire — is taken to hold as a merely Personal Right; and, conversely, as in the case referred to above, what is in itself merely a Personal Right is held to be valid as a Real Right. And this is done only when the question arises as to the Principles by which a Court of Justice in the Civil state is to be guided, in order to proceed with all possible safety in delivering judgment on the Rights of individuals.

40.: IV. Acquisition of Security by the taking of an Oath.

(Cautio juratoria.)

Only one ground can be assigned on which it could be held that men are bound in the juridical relation, to believe and to confess that there are Gods, or that there is a God. It is that they may be able to swear an Oath; and that thus by the fear of an all-seeing Supreme Power, whose revenge they must solemnly invoke upon themselves in case their utterance should be false, they may be constrained to be truthful in statement and faithful in promising. It is not Morality but merely blind Superstition that is reckoned upon in this process; for it is evident it implies that no certainty is to be expected from a mere solemn declaration in matters of Right before a Court, although the duty of truthfulness must have always appeared self-evident to all, in a matter which concerns the Holiest that can be among men — namely, the Right of Man. Hence recourse has been had to a motive founded on mere myths and fables as imaginary guarantees. Thus among the Rejangs, a heathen people in Sumatra, it is the custom — according to the testimony of Marsden — to swear by the bones of their dead relatives, although they have no belief in a life after death. In like manner the negroes of Guinea swear by their Fetish, a bird's feather, which they imprecate under the belief that it will break their neck. And so in other cases. The belief underlying these oaths is that an invisible Power — whether it has Understanding or not — by its very nature possesses magical power that can be put into action by such invocations. Such a belief — which is commonly called Religion, but which ought to be called Superstition — is, however, indispensable for the administration of Justice; because, without referring to it, a Court of Justice would not have adequate means to ascertain facts otherwise kept secret, and to determine rights. A Law making an Oath obligatory, is therefore only given in behoof of the judicial Authority.

But then the question arises as to what the obligation could be founded upon, that would bind any one in a Court of Justice to accept the Oath of another person, as a right and valid proof of the truth of his statements which are to put an end to all dispute. In other words, What obliges me juridically to believe that another person when taking an Oath has any Religion at all, so that I should subordinate or entrust my Right to his Oath? And, on like grounds, conversely, Can I be bound at all to take an Oath? It is evident that both these questions point to what is in itself morally wrong.

But in relation to a Court of Justice — and generally in the Civil state — if it be assumed there are no other means of getting to the truth in certain cases than by an Oath, it must be adopted. In regard to Religion, under the supposition that every one has it, it may be utilized as a necessary means (in causu necessitatis), in behoof of the legitimate procedure of a Court of Justice. The Court uses this form of spiritual compulsion (tortura spiritualis) as an available means, in conformity with the superstitious propensity of mankind, for the ascertainment of what is concealed; and therefore holds itself justified in so doing. The Legislative Power, however, is fundamentally wrong in assigning this authority to the Judicial Power, because even in the Civil state any compulsion with regard to the taking of Oaths is contrary to the inalienable Freedom of Man.

Official Oaths, which are usually promissory, being taken on entering upon an Office to the effect that the individual has sincere intention to administer his functions dutifully, might well be changed into assertory Oaths, to be taken at the end of a year or more of actual administration, the official swearing to the faithfulness of his discharge of duty during that time. This would bring the Conscience more into action than the Promissory Oath, which always gives room for the internal pretext that, with the best intention, the difficulties that arose during the administration of the official function were not foreseen. And, further, violations of Duty, under the prospect of their being summed up by future Censors, would give rise to more anxiety as to censure than when they are merely represented, one after the other, and forgotten.

As regards an Oath taken concerning a matter of Belief (de credulitate), it is evident that no such Oath can be demanded by a Court. 1. For, first, it contains in itself a Contradiction. Such Belief, as intermediate between Opinion and Knowledge, is a thing on which one might venture to lay a wager but not to swear an Oath. 2. And, second, the Judge who imposes an Oath of Belief, in order to ascertain anything pertinent to his own purpose or even to the Common Good, commits a great offence against the Conscientiousness of the party taking such an oath. This he does in regard both to the levity of mind, which he thereby helps to engender, and to the stings of conscience which a man must feel who to-day regards a subject from a certain point of view, but who will very probably to-morrow find it quite improbable from another point of view. Any one, therefore, who is compelled to take such an Oath, is subjected to an injury.

TRANSITION From the Mine and Thine in the state of Nature to the Mine and Thine in the Juridical state generally.

41.: Public Justice as related to the Natural and the Civil state.

The Juridical state is that relation of men to one another which contains the conditions, under which it is alone possible for every one to obtain the Right that is his due. The formal Principle of the possibility of actually participating in such Right, viewed in accordance with the Idea of a universally legislative Will, is Public Justice. Public Justice may be considered in relation either to the Possibility, or Actuality, or Necessity of the Possession of objects — regarded as the matter of the activity of the Will — according to laws. It may thus be divided into Protective Justice (justitia testatrix), Commutative Justice (justitia commutativa), and Distributive Justice (justitia distributiva). In the first mode of Justice, the Law declares merely what Relation is internally right in respect of Form (lex justi); in the second, it declares what is likewise externally in accord with a Law in respect of the Object, and what Possession is rightful (lex juridica); and in the third, it declares what is right, and what is just, and to what extent, by the Judgment of a Court in any particular case coming under the given Law. In this latter relation, the Public Court is called the Justice of the Country; and the question whether there actually is or is not such an administration of Public Justice, may be regarded as the most important of all juridical interests.

The non-juridical state is that condition of Society in which there is no Distributive Justice. It is commonly called the Natural state (status naturalis), or the state of Nature. It is not the ‘Social State,’ as Achenwall puts it, for this may be in itself an artificial state (status artificialis), that is to be contradistinguished from the ‘Natural’ state. The opposite of the state of Nature is the Civil state (status civilis) as the condition of a Society standing under a Distributive Justice. In the state of Nature there may even be juridical forms of Society — such as Marriage, Parental Authority, the Household, and such like. For none of these, however, does any Law à priori lay it down as an incumbent obligation, ‘Thou shalt enter into this state.’ But it may be said of the Juridical state that ‘all men who may even involuntarily come into Relations of Right with one another, ought to enter into this state.’

The Natural or non-juridical Social state may be viewed as the sphere of Private Right, and the Civil state may be specially regarded as the sphere of Public Right. The latter state contains no more and no other Duties of men towards each other than what may be conceived in connection with the former state; the Matter of Private Right is, in short, the very same in both. The Laws of the Civil state, therefore, only turn upon the juridical Form of the co-existence of men under a common Constitution; and in this respect these Laws must necessarily be regarded and conceived as Public Laws.

The Civil Union (Unio civilis) cannot, in the strict sense, be properly called a Society; for there is no sociality in common between the Ruler (imperans) and the Subject (subditus) under a Civil Constitution. They are not co-ordinated as Associates in a Society with each other, but the one is subordinated to the other. Those who may be co-ordinated with one another must consider themselves as mutually equal, in so far as they stand under common Laws. The Civil Union may therefore be regarded not so much as being, but rather as making a Society.

42.: The Postulate of Public Right.

From the conditions of Private Right in the Natural state, there arises the Postulate of Public Right. It may be thus expressed: ‘In the relation of unavoidable co-existence with others, thou shalt pass from the state of Nature into a juridical Union constituted under the condition of a Distributive Justice.’ The Principle of this Postulate may be unfolded analytically from the conception of Right in the external relation, contradistinguished from mere Might as Violence.

No one is under obligation to abstain from interfering with the Possession of others, unless they give him a reciprocal guarantee for the observance of a similar abstention from interference with his Possession. Nor does he require to wait for proof by experience of the need of this guarantee, in view of the antagonistic disposition of others. He is therefore under no obligation to wait till he acquires practical prudence at his own cost; for he can perceive in himself evidence of the natural Inclination of men to play the master over others, and to disregard the claims of the Right of others, when they feel themselves their superiors by Might or Fraud. And thus it is not necessary to wait for the melancholy experience of actual hostility; the individual is from the first entitled to exercise a rightful compulsion towards those who already threaten him by their very nature. Quilibet præsumitur malus, donec securitatem dederit oppositi.

So long as the intention to live and continue in this state of externally lawless Freedom prevails, men may be said to do no wrong or injustice at all to one another, even when they wage war against each other. For what seems competent as good for the one, is equally valid for the other, as if it were so by mutual agreement. Uti partes de jure suo disponunt, ita jus est. But generally they must be considered as being in the highest state of Wrong, as being and willing to be in a condition which is not juridical; and in which, therefore, no one can be secured against Violence, in the possession of his own.

The distinction between what is only formally and what is also materially wrong and unjust, finds frequent application in the Science of Right. An enemy who, on occupying a besieged fortress, instead of honourably fulfilling the conditions of a Capitulation, maltreats the garrison on marching out, or otherwise violates the agreement, cannot complain of injury or wrong if on another occasion the same treatment is inflicted upon themselves. But, in fact, all such actions fundamentally involve the commission of wrong and injustice, in the highest degree; because they take all validity away from the conception of Right, and give up everything, as it were by law itself, to savage Violence, and thus overthrow the Rights of Men generally.

PART SECOND. PUBLIC RIGHT.

PUBLIC RIGHT. THE SYSTEM OF THOSE LAWS WHICH REQUIRE PUBLIC PROMULGATION.

PUBLIC RIGHT. THE PRINCIPLES OF RIGHT IN CIVIL SOCIETY.

43.: Definition and Division of Public Right.

Public Right embraces the whole of the Laws that require to be universally promulgated in order to produce a juridical state of Society. It is therefore a System of those Laws that are requisite for a People as a multitude of men forming a Nation, or for a number of Nations, in their relations to each other. Men and Nations, on account of their mutual influence on one another, require a juridical Constitution uniting them under one Will, in order that they may participate in what is right. — This relation of the Individuals of a Nation to each other, constitutes the Civil Union in the social state; and, viewed as a whole in relation to its constituent members, it forms the political State (Civitas).

The State, as constituted by the common interest of all to live in a juridical union, is called, in view of its form, the Commonwealth or the Republic in the wider sense of the term (Res publica latius sic dicta). The Principles of Right in this sphere, thus constitute the first department of Public Right as the Right of the State (jus Civitatis) or National Right. — 2. The State, again, viewed in relation to other peoples, is called a Power (potentia), whence arises the idea of Potentates. Viewed in relation to the supposed hereditary unity of the people composing it, the State constitutes a Nation (gens). Under the general conception of Public Right, in addition to the Right of the individual State, there thus arises another department of Right, constituting the Right of Nations (jus gentium) or International Right. — 3. Further, as the surface of the earth is not unlimited in extent, but is circumscribed into a unity, National Right and International Right necessarily culminate in the idea of a Universal Right of Mankind, which may be called ‘Cosmopolitical Right’ (jus cosmopoliticum). And National, International, and Cosmopolitical Right are so interconnected, that if any one of these three possible forms of the juridical Relation fails to embody the essential Principles that ought to regulate external freedom by law, the structure of Legislation reared by the others will also be undermined, and the whole System would at last fall to pieces.

PUBLIC RIGHT.

I.: Right of The State and Constitutional Law.

(Jus Civitatis.)

44.: Origin of the Civil Union and Public Right.

It is not from any Experience prior to the appearance of an external authoritative Legislation, that we learn of the maxim of natural violence among men, and their evil tendency to engage in war with each other. Nor is it assumed here that it is merely some particular historical condition or fact, that makes public legislative constraint necessary; for however well-disposed or favourable to Right men may be considered to be of themselves, the rational Idea of a state of Society not yet regulated by Right, must be taken as our starting-point. This Idea implies that before a legal state of Society can be publicly established, individual Men, Nations and States can never be safe against violence from each other; and this is evident from the consideration that every one of his own Will naturally does what seems good and right in his own eyes, entirely independent of the opinion of others. Hence, unless the institution of Right is to be renounced, the first thing incumbent on men is to accept the Principle that it is necessary to leave the state of Nature, in which every one follows his own inclinations, and to form a union of all those who cannot avoid coming into reciprocal communication, and thus subject themselves in common to the external restraint of public compulsory Laws. Men thus enter into a Civil Union, in which every one has it determined by Law what shall be recognised as his; and this is secured to him by a competent external Power distinct from his own individuality. Such is the primary Obligation, on the part of all men, to enter into the relations of a Civil State of Society.

The natural condition of mankind need not, on this ground, be represented as a state of absolute Injustice, as if there could have been no other relation originally among men but what was merely determined by force. But this natural condition must be regarded, if it ever existed, as a state of society that was void of regulation by Right (status justitiæ vacuus), so that if a matter of Right came to be in dispute (jus controversum), no competent judge was found to give an authorized legal decision upon it. It is therefore reasonable that any one should constrain another by force, to pass from such a non-juridical state of life and enter within the jurisdiction of a civil state of Society. For, although on the basis of the ideas of Right held by individuals as such, external things may be acquired by Occupancy or Contract, yet such acquisition is only provisory so long as it has not yet obtained the sanction of a Public Law. Till this sanction is reached, the condition of possession is not determined by any public Distributive Justice, nor is it secured by any Power exercising Public Right.

If men were not disposed to recognise any Acquisition at all as rightful — even in a provisional way — prior to entering into the Civil state, this state of Society would itself be impossible. For the Laws regarding the Mine and Thine in the state of Nature, contain formally the very same thing as they prescribe in the Civil state, when it is viewed merely according to rational conceptions: only that in the forms of the Civil state the conditions are laid down under which the formal prescriptions of the state of Nature attain realization conformable to Distributive Justice. — Were there, then, not even provisionally, an external Meum and Tuum in the state of Nature, neither would there be any juridical Duties in relation to them; and, consequently, there would be no obligation to pass out of that state into another.

45.: The Form of the State and its Three Powers.

A State (Civitas) is the union of a number of men under juridical Laws. These Laws, as such, are to be

regarded as necessary à priori, — that is, as following of themselves from the conceptions of external Right generally, — and not as merely established by Statute. The Form of the State is thus involved in the Idea of the State, viewed as it ought to be according to pure principles of Right; and this ideal Form furnishes the normal criterion of every real union that constitutes a Commonwealth.

Every State contains in itself three Powers, the universal united Will of the People being thus personified in a political triad. These are the Legislative Power, the Executive Power, and the Judiciary Power. — 1. The Legislative Power of the Sovereignty in the State, is embodied in the person of the Lawgiver; 2. the Executive Power is embodied in the person of the Ruler who administers the Law; and 3. the Judiciary Power, embodied in the person of the Judge, is the function of assigning every one what is his own, according to the Law (Potestas legislatoria, rectoria et judiciaria). These three Powers may be compared to the three propositions in a practical Syllogism: — the Major as the sumption laying down the universal Law of a Will, the Minor presenting the command applicable to an action according to the Law as the principle of the subsumption, and the Conclusion containing the Sentence or judgment of Right in the particular case under consideration.

46.: The Legislative Power and the Members of the State.

The Legislative Power, viewed in its rational Principle, can only belong to the united Will of the People. For, as all Right ought to proceed from this Power, it is necessary that its Laws should be unable to do wrong to any one whatever. Now, if any one individual determines anything in the State in contradistinction to another, it is always possible that he may perpetrate a wrong on that other; but this is never possible when all determine and decree what is to be Law to themselves. ‘Volenti non fit injuria.’ Hence it is only the united and consenting Will of all the People — in so far as Each of them determines the same thing about all, and All determine the same thing about each — that ought to have the power of enacting Law in the State.

The Members of a Civil Society thus united for the purpose of Legislation, and thereby constituting a State, are called its Citizens; and there are three juridical attributes that inseparably belong to them by Right. These are — 1. Constitutional Freedom, as the Right of every Citizen to have to obey no other Law than that to which he has given his consent or approval; 2. Civil Equality, as the Right of the Citizen to recognise no one as a Superior among the people in relation to himself, except in so far as such a one is as subject to his moral power to impose obligations, as that other has power to impose obligations upon him; and 3. Political Independence, as the Right to owe his existence and continuance in Society not to the arbitrary Will of another, but to his own Rights and Powers as a Member of the Commonwealth; and, consequently, the possession of a Civil Personality, which cannot be represented by any other than himself.

The capability of Voting by possession of the Suffrage, properly constitutes the political qualification of a Citizen as a Member of the State. But this, again, presupposes the Independence or Self-sufficiency of the individual Citizen among the people, as one who is not a mere incidental part of the Commonwealth, but a Member of it acting of his own Will in community with others. The last of the three qualities involved, necessarily constitutes the distinction between active and passive Citizenship; although the latter conception appears to stand in contradiction to the definition of a Citizen as such. The following examples may serve to remove this difficulty. The Apprentice of a Merchant or Tradesman, a Servant who is not in the employ of the State, a Minor (naturaliter vel civiliter), all Women, and, generally, every one who is compelled to maintain himself not according to his own industry, but as it is arranged by others (the State excepted), are without Civil Personality, and their existence is only, as it were, incidentally included in the State. The Woodcutter whom I employ on my estate; the Smith in India who carries his hammer, anvil, and bellows into the houses where he is engaged to work in iron, as distinguished from the

European Carpenter or Smith, who can offer the independent products of his labour as wares for public sale; the resident Tutor as distinguished from the Schoolmaster; the Ploughman as distinguished from the Farmer and such like, illustrate the distinction in question. In all these cases, the former members of the contrast are distinguished from the latter by being mere subsidiaries of the Commonwealth and not active independent Members of it, because they are of necessity commanded and protected by others, and consequently possess no political Self-sufficiency in themselves. Such Dependence on the Will of others and the consequent Inequality are, however, not inconsistent with the Freedom and Equality of the individuals as Men helping to constitute the people. Much rather is it the case that it is only under such conditions, that a People can become a State and enter into a Civil Constitution. But all are not equally qualified to exercise the Right of the Suffrage under the Constitution, and to be full Citizens of the State, and not mere passive Subjects under its protection. For, although they are entitled to demand to be treated by all the other Citizens according to laws of natural Freedom and Equality, as passive parts of the State, it does not follow that they ought themselves to have the Right to deal with the State as active Members of it, to reorganize it, or to take action by way of introducing certain laws. All they have a right in their circumstances to claim, may be no more than that whatever be the mode in which the positive laws are enacted, these laws must not be contrary to the natural Laws that demand the Freedom of all the people and the Equality that is conformable thereto; and it must therefore be made possible for them to raise themselves from this passive condition in the State, to the condition of active Citizenship.

47.: Dignities in the State and the Original Contract.

All these three Powers in the State are Dignities; and as necessarily arising out of the Idea of the State and essential generally to the foundation of its Constitution, they are to be regarded as political Dignities. They imply the relation between a universal Sovereign as Head of the State — which according to the laws of freedom can be none other than the People itself united into a Nation — and the mass of the individuals of the Nation as Subjects. The former member of the relation is the ruling Power, whose function is to govern (imperans); the latter is the ruled Constituents of the State, whose function is to obey (subditi).

The act by which a People is represented as constituting itself into a State, is termed the original Contract. This is properly only an outward mode of representing the idea by which the rightfulness of the process of organizing the Constitution, may be made conceivable. According to this representation, all and each of the people give up their external Freedom in order to receive it immediately again as Members of a Commonwealth. The Commonwealth is the people viewed as united altogether into a State. And thus it is not to be said that the individual in the State has sacrificed a part of his inborn external Freedom for a particular purpose; but he has abandoned his wild lawless Freedom wholly, in order to find all his proper Freedom again entire and undiminished, but in the form of a regulated order of dependence, that is, in a Civil state regulated by laws of Right. This relation of Dependence thus arises out of his own regulative law-giving Will.

48.: Mutual Relations and Characteristics of the Three Powers.

The three Powers in the State, as regards their relations to each other, are, therefore — (1) co-ordinate with one another as so many Moral Persons, and the one is thus the Complement of the other in the way of completing the Constitution of the State; (2) they are likewise subordinate to one another, so that the one cannot at the same time usurp the function of the other by whose side it moves, each having its own Principle, and maintaining its authority in a particular person, but under the condition of the Will of a Superior; and, further, (3) by the union of both these relations, they assign distributively to every subject

in the State his own Rights.

Considered as to their respective Dignity, the three Powers may be thus described. The Will of the Sovereign Legislator, in respect of what constitutes the external Mine and Thine, is to be regarded as irreprehensible; the executive Function of the supreme Ruler is to be regarded as irresistible; and the judicial Sentence of the Supreme Judge is to be regarded as irreversible, being beyond appeal.

49.: Distinct Functions of the Three Powers. Autonomy of the State.

The Executive Power belongs to the Governor or Regent of the State, whether it assumes the form of a Moral or Individual Person, as the King or Prince (rex, princeps). This Executive Authority, as the Supreme Agent of the State, appoints the Magistrates, and prescribes the Rules to the people, in accordance with which individuals may acquire anything or maintain what is their own conformably to the Law, each case being brought under its application. Regarded as a Moral Person, this Executive Authority constitutes the Government. The Orders issued by the Government to the People and the Magistrates as well as to the higher Ministerial Administrators of the State (gubernatio), are Rescripts or Decrees, and not Laws; for they terminate in the decision of particular cases, and are given forth as unchangeable. A Government acting as an Executive, and at the same time laying down the Law as the Legislative Power, would be a Despotic Government, and would have to be contradistinguished from a patriotic Government. A patriotic Government, again, is to be distinguished from a paternal Government (regimen paternale) which is the most despotic Government of all, the Citizens being dealt with by it as mere children. A patriotic Government, however, is one in which the State, while dealing with the Subjects as if they were Members of a Family, still treats them likewise as Citizens, and according to Laws that recognise their independence, each individual possessing himself and not being dependent on the absolute Will of another beside him or above him.

The Legislative Authority ought not at the same time to be the Executive or Governor; for the Governor, as Administrator, should stand under the authority of the Law, and is bound by it under the supreme control of the Legislator. The Legislative Authority may therefore deprive the Governor of his power, depose him, or reform his administration, but not punish him. This is the proper and only meaning of the common saying in England, ‘The King — as the Supreme Executive Power — can do no wrong.’ For any such application of Punishment would necessarily be an act of that very Executive Power to which the supreme Right to compel according to Law pertains, and which would itself be thus subjected to coercion; which is self-contradictory.

Further, neither the Legislative Power nor the Executive Power ought to exercise the judicial Function, but only appoint Judges as Magistrates. It is the People who ought to judge themselves, through those of the Citizens who are elected by free Choice as their Representatives for this purpose, and even specially for every process or cause. For the judicial Sentence is a special act of public Distributive Justice performed by a Judge or Court as a constitutional Administrator of the Law, to a Subject as one of the People. Such an act is not invested inherently with the power to determine and assign to any one what is his. Every individual among the people being merely passive in this relation to the Supreme Power, either the Executive or the Legislative Authority might do him wrong in their determinations in cases of dispute regarding the property of individuals. It would not be the people themselves who thus determined, or who pronounced the judgments of ‘guilty’ or ‘not guilty’ regarding their fellow-citizens. For it is to the determination of this issue in a cause, that the Court has to apply the Law; and it is by means of the Executive Authority, that the Judge holds power to assign to every one his own. Hence it is only the People that properly can judge in a cause — although indirectly — by Representatives elected and deputed by themselves, as in a Jury. — It would even be beneath the dignity of the Sovereign Head of the

State to play the Judge; for this would be to put himself into a position in which it would be possible to do Wrong, and thus to subject himself to the demand for an appeal to a still higher Power (a rege male informato ad regem melius informandum).

It is by the co-operation of these three Powers — the Legislative, the Executive, and the Judicial — that the State realizes its Autonomy. This Autonomy consists in its organizing, forming, and maintaining itself in accordance with the Laws of Freedom. In their union the Welfare of the State is realized. Salus reipublicæ suprema lex. By this is not to be understood merely the individual well-being and happiness of the Citizens of the State; for — as Rousseau asserts — this End may perhaps be more agreeably and more desirably attained in the state of Nature, or even under a despotic Government. But the Welfare of the State as its own Highest Good, signifies that condition in which the greatest harmony is attained between its Constitution and the Principles of Right, — a condition of the State which Reason by a Categorical Imperative makes it obligatory upon us to strive after.

Constitutional and Juridical Consequences arising from the Nature of the Civil Union.

A.: Right of the Supreme Power, Treason; Dethronement; Revolution; Reform.

The Origin of the Supreme Power is practically inscrutable by the People who are placed under its authority. In other words, the Subject need not reason too curiously in regard to its origin in the practical relation, as if the Right of the obedience due to it were to be doubted (jus controversum). For as the People, in order to be able to adjudicate with a title of Right regarding the Supreme Power in the State, must be regarded as already united under one common legislative Will, it cannot judge otherwise than as the present Supreme Head of the State (summus imperans) wills. The question has been raised as to whether an actual Contract of Subjection (pactum subjectionis civilis) originally preceded the Civil Government as a fact; or whether the Power arose first, and the Law only followed afterwards, or may have followed in this order. But such questions, as regards the People already actually living under the Civil Law, are either entirely aimless, or even fraught with subtle danger to the State. For, should the Subject, after having dug down to the ultimate origin of the State, rise in opposition to the present ruling Authority, he would expose himself as a Citizen, according to the Law and with full Right, to be punished, destroyed, or outlawed. A Law which is so holy and inviolable that it is practically a crime even to cast doubt upon it, or to suspend its operation for a moment, is represented of itself as necessarily derived from some Supreme, unblameable Lawgiver. And this is the meaning of the maxim, 'All Authority is from God;' which proposition does not express the historical foundation of the Civil Constitution, but an ideal Principle of the Practical Reason. It may be otherwise rendered thus, 'It is a Duty to obey the Law of the existing Legislative Power, be its origin what it may.'

Hence it follows, that the Supreme Power in the State has only Rights, and no (compulsory) Duties towards the Subject. — Further, if the Ruler or Regent, as the organ of the Supreme Power, proceeds in violation of the Laws, as in imposing taxes, recruiting soldiers, and so on, contrary to the Law of Equality in the distribution of the political burdens, the Subject may oppose complaints and objections (gravamina) to this injustice, but not active resistance.

There cannot even be an Article contained in the political Constitution that would make it possible for a Power in the State, in case of the transgression of the Constitutional Laws by the Supreme Authority, to resist or even to restrict it in so doing. For, whoever would restrict the Supreme Power of the State must have more, or at least equal power as compared with the Power that is so restricted; and if competent to command the subjects to resist, such a one would also have to be able to protect them, and if he is to be

considered capable of judging what is right in every case, he may also publicly order Resistance. But such a one, and not the actual Authority, would then be the Supreme Power; which is contradictory. The Supreme Sovereign Power, then, in proceeding by a Minister who is at the same time the Ruler of the State, consequently becomes despotic; and the expedient of giving the People to imagine — when they have properly only Legislative influence — that they act by their Deputies by way of limiting the Sovereign Authority, cannot so mask and disguise the actual Despotism of such a Government that it will not appear in the measures and means adopted by the Minister to carry out his function. The People, while represented by their Deputies in Parliament, under such conditions, may have in these warrantors of their Freedom and Rights, persons who are keenly interested on their own account and their families, and who look to such a Minister for the benefit of his influence in the Army, Navy, and Public Offices. And hence, instead of offering resistance to the undue pretensions of the Government — whose public declarations ought to carry a prior accord on the part of the people, which, however, cannot be allowed in peace, — they are rather always ready to play into the hands of the Government. Hence the so-called limited political Constitution, as a Constitution of the internal Rights of the State, is an unreality; and instead of being consistent with Right, it is only a Principle of Expediency. And its aim is not so much to throw all possible obstacles in the way of a powerful violator of popular Rights by his arbitrary influence upon the Government, as rather to cloak it over under the illusion of a Right of opposition conceded to the People.

Resistance on the part of the People to the Supreme Legislative Power of the State, is in no case legitimate; for it is only by submission to the universal Legislative Will, that a condition of law and order is possible. Hence there is no Right of Sedition, and still less of Rebellion, belonging to the People. And least of all, when the Supreme Power is embodied in an individual Monarch, is there any justification, under the pretext of his abuse of power, for seizing his Person or taking away his Life (monarchomachismus sub specie tyrannicidii). The slightest attempt of this kind is High Treason (proditio eminens); and a Traitor of this sort who aims at the overthrow of his country may be punished, as a political parricide, even with Death. It is the duty of the People to bear any abuse of the Supreme Power, even then though it should be considered to be unbearable. And the reason is, that any Resistance of the highest Legislative Authority can never but be contrary to the Law, and must even be regarded as tending to destroy the whole legal Constitution. In order to be entitled to offer such Resistance, a Public Law would be required to permit it. But the Supreme Legislation would by such a Law cease to be supreme, and the People as Subjects would be made sovereign over that to which they are subject; which is a contradiction. And the contradiction becomes more apparent when the question is put: Who is to be the Judge in a controversy between the People and the Sovereign? For the People and the Sovereign are to be constitutionally or juridically regarded as two different Moral Persons; but the question shows that the People would then have to be the Judge in their own cause. — See Supplementary Explanations, IX.

The Dethronement of a Monarch may be also conceived as a voluntary abdication of the Crown, and a resignation of his power into the hands of the People; or it might be a deliberate surrender of these without any assault on the royal person, in order that the Monarch may be relegated into private life. But, however it happen, forcible compulsion of it, on the part of the People, cannot be justified under the pretext of a ‘Right of Necessity’ (casus necessitatis); and least of all can the slightest Right be shown for punishing the Sovereign on the ground of previous maladministration. For all that has been already done in the quality of a Sovereign, must be regarded as done outwardly by Right; and, considered as the source of the Laws, the Sovereign himself can do no wrong. Of all the abominations in the overthrow of a State by Revolution, even the murder or assassination of the Monarch is not the worst. For that may be done by the People out of fear, lest if he is allowed to live, he may again acquire power and inflict punishment upon them; and so it may be done, not as an act of punitive Justice, but merely from regard to self-preservation. It is the formal Execution of a Monarch that horrifies a soul filled with ideas of human right; and this feeling occurs again and again as often as the mind realizes the scenes that terminated the fate of

Charles I. or Louis XVI. Now how is this Feeling to be explained? It is not a mere æsthetic feeling, arising from the working of the Imagination, nor from Sympathy, produced by fancying ourselves in the place of the sufferer. On the contrary, it is a moral feeling arising from the entire subversion of all our notions of Right. Regicide, in short, is regarded as a Crime which always remains such, and can never be expiated (crimen immortale, inexpiabile); and it appears to resemble that Sin which the Theologians declare can neither be forgiven in this world nor in the next. The explanation of this phenomenon in the human mind appears to be furnished by the following reflections upon it; and they even shed some light upon the Principles of Political Right.

Every Transgression of a Law only can and must be explained as arising from a Maxim of the transgressor making such wrong-doing his rule of action; for were it not committed by him as a free Being, it could not be imputed to him. But it is absolutely impossible to explain how any rational individual forms such a Maxim against the clear prohibition of the lawgiving Reason; for it is only events which happen according to the mechanical laws of Nature that are capable of explanation. Now a transgressor or criminal may commit his wrong-doing either according to the Maxim of a Rule supposed to be valid objectively and universally, or only as an Exception from the Rule by dispensing with its obligation for the occasion. In the latter case, he only diverges from the Law, although intentionally. He may, at the same time, abhor his own transgression, and without formally renouncing his obedience to the Law only wish to avoid it. In the former case, however, he rejects the authority of the Law itself, the validity of which, however, he cannot repudiate before his own Reason, even while he makes it his Rule to act against it. His Maxim is therefore not merely defective as being negatively contrary to the Law, but it is even positively illegal, as being diametrically contrary and in hostile opposition to it. So far as we can see into and understand the relation, it would appear as if it were impossible for men to commit wrongs and crimes of a wholly useless form of wickedness, and yet the idea of such extreme perversity cannot be overlooked in a System of Moral Philosophy.

There is thus a feeling of horror at the thought of the formal Execution of a Monarch by his People. And the reason of it is, that whereas an act of Assassination must be considered as only an exception from the Rule which has been constituted a Maxim, such an Execution must be regarded as a complete perversion of the Principles that should regulate the relation between a Sovereign and his People. For it makes the People, who owe their constitutional existence to the Legislation that issued from the Sovereign, to be the Ruler over him. Hence mere violence is thus elevated with bold brow, and as it were by principle, above the holiest Right; and, appearing like an abyss to swallow up everything without recall, it seems like suicide committed by the State upon itself, and a crime that is capable of no atonement. There is therefore reason to assume that the consent that is accorded to such executions is not really based upon a supposed Principle of Right, but only springs from fear of the vengeance that would be taken upon the People were the same Power to revive again in the State. And hence it may be held that the formalities accompanying them, have only been put forward in order to give these deeds a look of Punishment from the accompaniment of a judicial process, such as could not go along with a mere Murder or Assassination. But such a cloaking of the deed entirely fails of its purpose, because this pretension on the part of the People is even worse than Murder itself, as it implies a principle which would necessarily make the restoration of a State, when once overthrown, an impossibility.

An alteration of the still defective Constitution of the State may sometimes be quite necessary. But all such changes ought only to proceed from the Sovereign Power in the way of Reform, and are not to be brought about by the people in the way of Revolution; and when they take place, they should only affect the Executive, and not the Legislative Power. A political Constitution which is so modified that the People by their Representatives in Parliament can legally resist the Executive Power and its representative Minister, is called a Limited Constitution. Yet even under such a Constitution there is no Right of active Resistance, as by an arbitrary combination of the People to coerce the Government into a

certain active procedure; for this would be to assume to perform an act of the Executive itself. All that can rightly be allowed, is only a negative Resistance, amounting to an act of Refusal on the part of the People to concede all the demands which the Executive may deem it necessary to make in behoof of the political Administration. And if this Right were never exercised, it would be a sure sign that the People were corrupted, their Representatives venal, the Supreme Head of the Government despotic, and his Ministers practically betrayers of the People.

Further, when on the success of a Revolution a new Constitution has been founded, the unlawfulness of its beginning and of its institution cannot release the Subjects from the obligation of adapting themselves, as good Citizens, to the new order of things; and they are not entitled to refuse honourably to obey the authority that has thus attained the power in the State. A dethroned Monarch, who has survived such a Revolution, is not to be called to account on the ground of his former administration; and still less may he be punished for it, when withdrawing into the private life of a citizen he prefers his own quiet and the peace of the State to the uncertainty of exile, with the intention of maintaining his claims for restoration at all hazards, and pushing these either by secret counter-revolution or by the assistance of other Powers. However, if he prefers to follow the latter course, his Rights remain, because the Rebellion that drove him from his position was inherently unjust. But the question then emerges as to whether other Powers have the Right to form themselves into an alliance in behalf of such a dethroned Monarch merely in order not to leave the crime committed by the People unavenged, or to do away with it as a scandal to all the States; and whether they are therefore justified and called upon to restore by force to another State a formerly existing Constitution that has been removed by a Revolution. The discussion of this question, however, does not belong to this department of Public Right, but to the following section, concerning the Right of Nations.

B.: Land Rights. Secular and Church Lands. Rights of Taxation; Finance; Police; Inspection.

Is the Sovereign, viewed as embodying the Legislative Power, to be regarded as the Supreme Proprietor of the Soil, or only as the Highest Ruler of the People by the laws? As the Soil is the supreme condition under which it is alone possible to have external things as one’s own, its possible possession and use constitute the first acquirable basis of external Right. Hence it is that all such Rights must be derived from the Sovereign as Over-lord and Paramount Superior of the Soil, or, as it may be better put, as the Supreme Proprietor of the Land (Dominus territorii). The People, as forming the mass of the Subjects, belong to the Sovereign as a People; not in the sense of his being their Proprietor in the way of Real Right, but as their Supreme Commander or Chief in the way of Personal Right. This Supreme Proprietorship, however, is only an Idea of the Civil Constitution, objectified to represent, in accordance with juridical conceptions, the necessary union of the private property of all the people under a public universal Possessor. The relation is so represented in order that it may form a basis for the determination of particular Rights in property. It does not proceed, therefore, upon the Principle of mere Aggregation, which advances empirically from the parts to the Whole, but from the necessary formal principle of a Division of the Soil according to conceptions of Right. In accordance with this Principle, the Supreme Universal Proprietor cannot have any private property in any part of the Soil; for otherwise he would make himself a private Person. Private property in the Soil belongs only to the People, taken distributively and not collectively; — from which condition, however, a nomadic people must be excepted as having no private property at all in the Soil. The Supreme Proprietor accordingly ought not to hold private Estates, either for private use or for the support of the Court. For, as it would depend upon his own pleasure how far these should extend, the State would be in danger of seeing all property in the Land taken into the hands of the Government, and all the Subjects treated as bondsmen of the Soil (glebæ adscripti). As possessors only of what was the private property of another, they might thus be deprived of all freedom and regarded as

Serfs or Slaves. Of the Supreme Proprietor of the Land, it may be said that he possesses nothing as his own, except himself; for if he possessed things in the State alongside of others, dispute and litigation would be possible with these others regarding those things, and there would be no independent Judge to settle the cause. But it may be also said that he possesses everything; for he has the Supreme Right of Sovereignty over the whole People, to whom all external things severally (divisim) belong; and as such he assigns distributively to every one what is to be his.

Hence there cannot be any Corporation in the State, nor any Class or Order, that as Proprietors can transmit the Land for a sole exclusive use to the following generations for all time (ad infinitum), according to certain fixed Statutes. The State may annul and abrogate all such Statutes at any time, only under the condition of indemnifying survivors for their interests. The Order of Knights, constituting the nobility regarded as a mere rank or class of specially titled individuals, as well as the Order of the Clergy, called the Church, are both subject to this relation. They can never be entitled by any hereditary privileges with which they may be favoured, to acquire an absolute property in the soil transmissible to their successors. They can only acquire the use of such property for the time being. If Public Opinion has ceased, on account of other arrangements, to impel the State to protect itself from negligence in the national defence by appeal to the military honour of the knightly order, the Estates granted on that condition may be recalled. And, in like manner, the Church Lands or Spiritualities may be reclaimed by the State without scruple, if Public Opinion has ceased to impel the members of the State to maintain Masses for the Souls of the Dead, Prayers for the Living, and a multitude of Clergy, as means to protect themselves from eternal fire. But in both cases, the condition of indemnifying existing interests must be observed. Those who in this connection fall under the movement of Reform, are not entitled to complain that their property is taken from them; for the foundation of their previous possession lay only in the Opinion of the People, and it can be valid only so long as this opinion lasts. As soon as this Public Opinion in favour of such institutions dies out, or is even extinguished in the judgment of those who have the greatest claim by their acknowledged merit to lead and represent it, the putative proprietorship in question must cease, as if by a public appeal made regarding it to the State (a rege male informato ad regem melius informandum).

On this primarily acquired Supreme Proprietorship in the Land, rests the Right of the Sovereign, as universal Proprietor of the country, to assess the private proprietors of the Soil, and to demand Taxes, Excise, and Dues, or the performance of Service to the State such as may be required in War. But this is to be done so that it is actually the People that assess themselves, this being the only mode of proceeding according to Laws of Right. This may be effected through the medium of the Body of Deputies who represent the People. It is also permissible, in circumstances in which the State is in imminent danger, to proceed by a forced Loan, as a Right vested in the Sovereign, although this may be a divergence from the existing Law.

Upon this Principle is also founded the Right of administering the National Economy, including the Finance and the Police. The Police has specially to care for the Public Safety, Convenience, and Decency. As regards the last of these, — the feeling or negative taste for public Propriety, — it is important that it be not deadened by such influences as Begging, disorderly Noises, offensive Smells, public Prostitution (Venus vulgivaga), or other offences against the Moral Sense, as it greatly facilitates the Government in the task of regulating the life of the People by law.

For the preservation of the State there further belongs to it a Right of Inspection (jus inspectionis), which entitles the public Authority to see that no secret Society, political or religious, exists among the people that can exert a prejudicial influence upon the public Weal. Accordingly, when it is required by the Police, no such secret Society may refuse to lay open its constitution. But the visitation and search of private houses by the Police, can only be justified in a case of Necessity; and in every particular

instance, it must be authorized by a higher Authority.

C.: Relief of the Poor. Foundling Hospitals. The Church.

The Sovereign, as undertaker of the duty of the People, has the Right to tax them for purposes essentially connected with their own preservation. Such are, in particular, the Relief of the Poor, Foundling Asylums, and Ecclesiastical Establishments, otherwise designated charitable or pious Foundations.

The People have in fact united themselves by their common Will into a Society, which has to be perpetually maintained; and for this purpose they have subjected themselves to the internal Power of the State, in order to preserve the members of this Society even when they are not able to support themselves. By the fundamental principle of the State, the Government is justified and entitled to compel those who are able, to furnish the means necessary to preserve those who are not themselves capable of providing for the most necessary wants of Nature. For the existence of persons with property in the State, implies their submission under it for protection and the provision by the State of what is necessary for their existence; and accordingly the State founds a Right upon an obligation on their part to contribute of their means for the preservation of their fellow-citizens. This may be carried out by taxing the Property or the commercial industry of the Citizens, or by establishing Funds and drawing interest from them, not for the wants of the State as such, which is rich, but for those of the People. And this is not to be done merely by voluntary contributions, but by compulsory exactions as State-burdens, for we are here considering only the Right of the State in relation to the People. Among the voluntary modes of raising such contributions Lotteries ought not to be allowed, because they increase the number of those who are poor, and involve danger to the public property. — It may be asked whether the Relief of the Poor ought to be administered out of current contributions, so that every age should maintain its own Poor; or whether this were better done by means of permanent funds and charitable institutions, such as Widows' Homes, Hospitals, etc.? And if the former method is the better, it may also be considered whether the means necessary are to be raised by a legal Assessment rather than by Begging, which is generally nigh akin to robbing. The former method must in reality be regarded as the only one that is conformable to the Right of the State, which cannot withdraw its connection from any one who has to live. For a legal current provision does not make the profession of poverty a means of gain for the indolent, as is to be feared is the case with pious Foundations when they grow with the number of the poor; nor can it be charged with being an unjust or unrighteous burden imposed by the Government on the people.

The State has also a Right to impose upon the People the duty of preserving Children exposed from want or shame, and who would otherwise perish; for it cannot knowingly allow this increase of its power to be destroyed, however unwelcome in some respects it may be. But it is a difficult question to determine how this may most justly be carried out. It might be considered whether it would not be right to exact contributions for this purpose from the unmarried persons of both sexes who are possessed of means, as being in part responsible for the evil; and further, whether the end in view would be best carried out by Foundling Hospitals, or in what other way consistent with Right. But this is a problem of which no solution has yet been offered that does not in some measure offend against Right or Morality.

The Church is here regarded as an Ecclesiastical Establishment merely, and as such it must be carefully distinguished from Religion, which as an internal mode of feeling lies wholly beyond the sphere of the action of the Civil Power. Viewed as an Institution for public Worship founded for the people, — to whose opinion or conviction it owes its origin, — the Church Establishment responds to a real want in the State. This is the need felt by the people to regard themselves as also Subjects of a Supreme Invisible Power to which they must pay homage, and which may often be brought into a very undesirable collision with the Civil Power. The State has therefore a Right in this relation; but it is not to be regarded as the Right of Constitutional Legislation in the Church, so as to organize it as may seem most advantageous for

itself, or to prescribe and command its faith and ritual forms of worship (ritus); for all this must be left entirely to the teachers and rulers which the Church has chosen for itself. The function of the State in this connection, only includes the negative Right of regulating the influence of these public teachers upon the visible political Commonwealth, that it may not be prejudicial to the public peace and tranquillity. Consequently the State has to take measures, on occasion of any internal conflict in the Church, or on occasion of any collision of the several Churches with each other, that Civil concord is not endangered; and this Right falls within the province of the Police. It is beneath the dignity of the Supreme Power to interpose in determining what particular faith the Church shall profess, or to decree that a certain faith shall be unalterably held, and that the Church may not reform itself. For in doing so, the Supreme Power would be mixing itself up in a scholastic wrangle, on a footing of equality with its subjects; the Monarch would be making himself a priest; and the Churchmen might even reproach the Supreme Power with understanding nothing about matters of faith. Especially would this hold in respect of any prohibition of internal Reform in the Church; for what the People as a whole cannot determine upon for themselves, cannot be determined for the People by the Legislator. But no People can ever rationally determine that they will never advance farther in their insight into matters of faith, or resolve that they will never reform the institutions of the Church; because this would be opposed to the humanity in their own persons, and to their highest Rights. And therefore the Supreme Power cannot of itself resolve and decree in these matters for the People. — As regards the cost of maintaining the Ecclesiastical Establishment, for similar reasons this must be derived not from the public funds of the State, but from the section of the People who profess the particular faith of the Church; and thus only ought it to fall as a burden on the Community. — See Supplementary Explanations, VIII.

D.: The Right of assigning Offices and Dignities in the State.

The Right of the Supreme Authority in the State also includes:

The Distribution of Offices, as public and paid employments;

The Conferring of Dignities, as unpaid distinctions of Rank, founded merely on honour, but establishing a gradation of higher and lower orders in the political scale; the latter, although free in themselves, being under obligation determined by the public law to obey the former so far as they are also entitled to command;

Besides these relatively beneficent Rights, the Supreme Power in the State is also invested with the Right of administering Punishment.

As regards Civil Offices, the question arises as to whether the Sovereign has the Right, after bestowing an office on an individual, to take it again away at his mere pleasure, without any crime having been committed by the holder of the office. I say, No. For what the united Will of the People would never resolve regarding their Civil Officers, cannot (constitutionally) be determined by the Sovereign regarding them. The People have to bear the cost incurred by the appointment of an Official, and undoubtedly it must be their Will that any one in Office should be completely competent for its duties. But such competency can only be acquired by a long preparation and training, and this process would necessarily occupy the time that would be required for acquiring the means of support by a different occupation. Arbitrary and frequent changes would therefore, as a rule, have the effect of filling Offices with functionaries who have not acquired the skill required for their duties, and whose judgments had not attained maturity by practice. All this is contrary to the purpose of the State. And besides it is requisite in the interest of the People, that it should be possible for every individual to rise from a lower office to the higher offices, as these latter would otherwise fall into incompetent hands, and that competent officials generally should have some guarantee of life-long provision.

Civil Dignities include not only such as are connected with a public Office, but also those which make the possessors of them without any accompanying services to the State, members of a higher class or rank. The latter constitute the Nobility, whose members are distinguished from the common citizens who form the mass of the People. The rank of the Nobility is inherited by male descendants; and these again communicate it to wives who are not nobly born. Female descendants of noble families, however, do not communicate their rank to husbands who are not of noble birth, but they descend themselves into the common civil status of the People. This being so, the question then emerges as to whether the Sovereign has the Right to found a hereditary rank and class, intermediate between himself and the other Citizens? The import of this question does not turn on whether it is conformable to the prudence of the Sovereign, from regard to his own and the People's interests, to have such an institution; but whether it is in accordance with the Right of the People that they should have a class of Persons above them, who, while being Subjects like themselves, are yet born as their Commanders, or at least as privileged Superiors? The answer to this question, as in previous instances, is to be derived from the Principle that 'what the People as constituting the whole mass of the Subjects could not determine regarding themselves and their associated citizens, cannot be constitutionally determined by the Sovereign regarding the People.' Now a hereditary Nobility is a Rank which takes precedence of Merit and is hoped for without any good reason, — a thing of the imagination without genuine reality. For if an Ancestor had merit, he could not transmit it to his posterity, but they must always acquire it for themselves. Nature has in fact not so arranged that the Talent and Will which give rise to merit in the State, are hereditary. And because it cannot be supposed of any individual that he will throw away his Freedom, it is impossible that the common Will of all the People should agree to such a groundless Prerogative, and hence the Sovereign cannot make it valid. — It may happen, however, that such an anomaly as that of Subjects who would be more than Citizens, in the manner of born Officials or hereditary Professors, has slipped into the mechanism of the Government in olden times, as in the case of the Feudal System, which was almost entirely organized with reference to War. Under such circumstances, the State cannot deal otherwise with this error of a wrongly instituted Rank in its midst, than by the remedy of a gradual extinction through hereditary positions being left unfilled as they fall vacant. The State has therefore the Right provisorily to let a Dignity in Title continue, until the Public Opinion matures on the subject. And this will thus pass from the threefold division into Sovereign, Nobles, and People, to the twofold and only natural division into Sovereign and People.

No individual in the State can indeed be entirely without Dignity; for he has at least that of being a Citizen, except when he has lost his Civil Status by a Crime. As a Criminal he is still maintained in life, but he is made the mere instrument of the Will of another, whether it be the State or a particular Citizen. In the latter position, in which he could only be placed by a juridical judgment, he would practically become a Slave, and would belong as property (dominium) to another, who would be not merely his Master (herus) but his Owner (dominus). Such an Owner would be entitled to exchange or alienate him as a thing, to use him at will except for shameful purposes, and to dispose of his Powers, but not of his Life and Members. No one can bind himself to such a condition of dependence, as he would thereby cease to be a Person, and it is only as a Person that he can make a Contract. It may, however, appear that one man may bind himself to another by a Contract of Hire, to discharge a certain service that is permissible in its kind, but is left entirely undetermined as regards its measure or amount; and that as receiving wages or board or protection in return, he thus becomes only a Servant subject to the Will of a Master (subditus) and not a Slave (servus). But this is an illusion. For if Masters are entitled to use the powers of such subjects at will, they may exhaust these powers, — as has been done in the case of Negroes in the Sugar Islands, — and they may thus reduce their servants to despair and death. But this would imply that they had actually given themselves away to their Masters as property; which, in the case of persons is impossible. A Person can therefore only contract to perform work that is defined both in quality and quantity, either as a Day-

labourer or as a domiciled Subject. In the latter case he may enter into a Contract of Lease for the use of the land of a Superior, giving a definite rent or annual return for its utilization by himself, or he may contract for his service as a Labourer upon the land. But he does not thereby make himself a slave, or a bondsman, or a serf attached to the soil (glebæ adscriptus), as he would thus divest himself of his personality; he can only enter into a temporary or at most a heritable Lease. And even if by committing a Crime he has personally become subjected to another, this subject-condition does not become hereditary; for he has only brought it upon himself by his own wrong-doing. Neither can one who has been begotten by a slave be claimed as property on the ground of the cost of his rearing, because such rearing is an absolute duty naturally incumbent upon parents; and in case the parents be slaves, it devolves upon their masters or owners, who, in undertaking the possession of such subjects, have also made themselves responsible for the performance of their duties.

E.: The Right of Punishing and of Pardoning.

I.: The Right of Punishing.

The Right of administering Punishment, is the Right of the Sovereign as the Supreme Power to inflict pain upon a Subject on account of a Crime committed by him. The Head of the State cannot therefore be punished; but his supremacy may be withdrawn from him. Any Transgression of the public law which makes him who commits it incapable of being a Citizen, constitutes a Crime, either simply as a private Crime (crimen), or also as a public Crime (crimen publicum). Private crimes are dealt with by a Civil Court; Public Crimes by a Criminal Court. — Embezzlement or peculation of money or goods entrusted in trade, Fraud in purchase or sale, if done before the eyes of the party who suffers, are Private Crimes. On the other hand, Coining false money or forging Bills of Exchange, Theft, Robbery, etc., are Public Crimes, because the Commonwealth, and not merely some particular individual, is endangered thereby. Such Crimes may be divided into those of a base character (indolis abjectæ) and those of a violent character (indolis violentiæ).

Judicial or Juridical Punishment (pæna forensis) is to be distinguished from Natural Punishment (pæna naturalis), in which Crime as Vice punishes itself, and does not as such come within the cognizance of the Legislator. Juridical Punishment can never be administered merely as a means for promoting another Good either with regard to the Criminal himself or to Civil Society, but must in all cases be imposed only because the individual on whom it is inflicted has committed a Crime. For one man ought never to be dealt with merely as a means subservient to the purpose of another, nor be mixed up with the subjects of Real Right. Against such treatment his Inborn Personality has a Right to protect him, even although he may be condemned to lose his Civil Personality. He must first be found guilty and punishable, before there can be any thought of drawing from his Punishment any benefit for himself or his fellow-citizens. The Penal Law is a Categorical Imperative; and woe to him who creeps through the serpent-windings of Utilitarianism to discover some advantage that may discharge him from the Justice of Punishment, or even from the due measure of it, according to the Pharisaic maxim: ‘It is better that one man should die than that the whole people should perish.’ For if Justice and Righteousness perish, human life would no longer have any value in the world. — What, then, is to be said of such a proposal as to keep a Criminal alive who has been condemned to death, on his being given to understand that if he agreed to certain dangerous experiments being performed upon him, he would be allowed to survive if he came happily through them? It is argued that Physicians might thus obtain new information that would be of value to the Commonweal. But a Court of Justice would repudiate with scorn any proposal of this kind if made to it by the Medical Faculty; for Justice would cease to be Justice, if it were bartered away for any consideration whatever.

But what is the mode and measure of Punishment which Public Justice takes as its Principle and Standard? It is just the Principle of Equality, by which the pointer of the Scale of Justice is made to incline no more to the one side than the other. It may be rendered by saying that the undeserved evil which any one commits on another, is to be regarded as perpetrated on himself. Hence it may be said: ‘If you slander another, you slander yourself; if you steal from another, you steal from yourself; if you strike another, you strike yourself; if you kill another, you kill yourself.’ This is the Right of Retaliation (jus talionis); and properly understood, it is the only Principle which in regulating a Public Court, as distinguished from mere private judgment, can definitely assign both the quality and the quantity of a just penalty. All other standards are wavering and uncertain; and on account of other considerations involved in them, they contain no principle conformable to the sentence of pure and strict Justice. It may appear, however, that difference of social status would not admit the application of the Principle of Retaliation, which is that of ‘Like with Like.’ But although the application may not in all cases be possible according to the letter, yet as regards the effect it may always be attained in practice, by due regard being given to the disposition and sentiment of the parties in the higher social sphere. Thus a pecuniary penalty on account of a verbal injury, may have no direct proportion to the injustice of slander; for one who is wealthy may be able to indulge himself in this offence for his own gratification. Yet the attack committed on the honour of the party aggrieved may have its equivalent in the pain inflicted upon the pride of the aggressor, especially if he is condemned by the judgment of the Court, not only to retract and apologize, but to submit to some meaner ordeal, as kissing the hand of the injured person. In like manner, if a man of the highest rank has violently assaulted an innocent citizen of the lower orders, he may be condemned not only to apologize but to undergo a solitary and painful imprisonment, whereby, in addition to the discomfort endured, the vanity of the offender would be painfully affected, and the very shame of his position would constitute an adequate Retaliation after the principle of ‘Like with Like.’ But how then would we render the statement: ‘If you steal from another, you steal from yourself’? In this way, that whoever steals anything makes the property of all insecure; he therefore robs himself of all security in property, according to the Right of Retaliation. Such a one has nothing, and can acquire nothing, but he has the Will to live; and this is only possible by others supporting him. But as the State should not do this gratuitously, he must for this purpose yield his powers to the State to be used in penal labour; and thus he falls for a time, or it may be for life, into a condition of slavery. — But whoever has committed Murder, must die. There is, in this case, no juridical substitute or surrogate, that can be given or taken for the satisfaction of Justice. There is no Likeness or proportion between Life, however painful, and Death; and therefore there is no Equality between the crime of Murder and the retaliation of it but what is judicially accomplished by the execution of the Criminal. His death, however, must be kept free from all maltreatment that would make the humanity suffering in his Person loathsome or abominable. Even if a Civil Society resolved to dissolve itself with the consent of all its members — as might be supposed in the case of a People inhabiting an island resolving to separate and scatter themselves throughout the whole world — the last Murderer lying in the prison ought to be executed before the resolution was carried out. This ought to be done in order that every one may realize the desert of his deeds, and that bloodguiltiness may not remain upon the people; for otherwise they might all be regarded as participators in the murder as a public violation of Justice.

The Equalization of Punishment with Crime, is therefore only possible by the cognition of the Judge extending even to the penalty of Death, according to the Right of Retaliation. This is manifest from the fact that it is only thus that a Sentence can be pronounced over all criminals proportionate to their internal wickedness; as may be seen by considering the case when the punishment of Death has to be inflicted, not on account of a murder, but on account of a political crime that can only be punished capitally. A hypothetical case, founded on history, will illustrate this. In the last Scottish Rebellion there were various participators in it — such as Balmerino and others — who believed that in taking part in the Rebellion

they were only discharging their duty to the House of Stuart; but there were also others who were animated only by private motives and interests. Now, suppose that the Judgment of the Supreme Court regarding them had been this: that every one should have liberty to choose between the punishment of Death or Penal Servitude for life. In view of such an alternative, I say that the Man of Honour would choose Death, and the Knave would choose servitude. This would be the effect of their human nature as it is; for the honourable man values his Honour more highly than even Life itself, whereas a Knave regards a Life, although covered with shame, as better in his eyes than not to be. The former is, without gainsaying, less guilty than the other; and they can only be proportionately punished by death being inflicted equally upon them both; yet to the one it is a mild punishment when his nobler temperament is taken into account, whereas it is a hard punishment to the other in view of his baser temperament. But, on the other hand, were they all equally condemned to Penal Servitude for life, the honourable man would be too severely punished, while the other, on account of his baseness of nature, would be too mildly punished. In the judgment to be pronounced over a number of criminals united in such a conspiracy, the best Equalizer of Punishment and Crime in the form of public Justice is Death. And besides all this, it has never been heard of, that a Criminal condemned to death on account of a murder has complained that the Sentence inflicted on him more than was right and just; and any one would treat him with scorn if he expressed himself to this effect against it. Otherwise it would be necessary to admit that although wrong and injustice are not done to the Criminal by the Law, yet the Legislative Power is not entitled to administer this mode of Punishment; and if it did so, it would be in contradiction with itself.

However many they may be who have committed a murder, or have even commanded it, or acted as art and part in it, they ought all to suffer death; for so Justice wills it, in accordance with the Idea of the juridical Power as founded on the universal Laws of Reason. But the number of the Accomplices (correi) in such a deed might happen to be so great that the State, in resolving to be without such criminals, would be in danger of soon also being deprived of subjects. But it will not thus dissolve itself, neither must it return to the much worse condition of Nature, in which there would be no external Justice. Nor, above all, should it deaden the sensibilities of the People by the spectacle of Justice being exhibited in the mere carnage of a slaughtering bench. In such circumstances the Sovereign must always be allowed to have it in his power to take the part of the Judge upon himself as a case of Necessity, — and to deliver a Judgment which, instead of the penalty of death, shall assign some other punishment to the Criminals, and thereby preserve a multitude of the People. The penalty of Deportation is relevant in this connection. Such a form of Judgment cannot be carried out according to a public law, but only by an authoritative act of the royal Prerogative, and it may only be applied as an act of grace in individual cases.

Against these doctrines, the Marquis Beccaria has given forth a different view. Moved by the compassionate sentimentality of a humane feeling, he has asserted that all Capital Punishment is wrong in itself and unjust. He has put forward this view on the ground that the penalty of death could not be contained in the original Civil Contract; for, in that case, every one of the People would have had to consent to lose his life if he murdered any of his fellow-citizens. But, it is argued, such a consent is impossible, because no one can thus dispose of his own life. — All this is mere sophistry and perversion of Right. No one undergoes Punishment because he has willed to be punished, but because he has willed a punishable Action; for it is in fact no Punishment when any one experiences what he wills, and it is impossible for any one to will to be punished. To say, 'I will to be punished, if I murder any one,' can mean nothing more than, 'I submit myself along with all the other citizens to the Laws;' and if there are any Criminals among the People, these Laws will include Penal Laws. The individual who, as a Co-legislator, enacts Penal Law, cannot possibly be the same Person who, as a Subject, is punished according to the Law; for, quâ Criminal, he cannot possibly be regarded as having a voice in the Legislation, the Legislator being rationally viewed as just and holy. If any one, then, enact a Penal Law against himself as a Criminal, it must be the pure juridically law-giving Reason (homo noumenon), which subjects him as

one capable of crime, and consequently as another Person (homo phenomenon), along with all the others in the Civil Union, to this Penal Law. In other words, it is not the People taken distributively, but the Tribunal of public Justice, as distinct from the Criminal, that prescribes Capital Punishment; and it is not to be viewed as if the Social Contract contained the Promise of all the individuals to allow themselves to be punished, thus disposing of themselves and their lives. For if the Right to punish must be grounded upon a promise of the wrongdoer, whereby he is to be regarded as being willing to be punished, it ought also to be left to him to find himself deserving of the Punishment; and the Criminal would thus be his own Judge. The chief error (πρωˆτον ψενˆδος) of this sophistry consists in regarding the judgment of the Criminal himself, necessarily determined by his Reason, that he is under obligation to undergo the loss of his life, as a judgment that must be grounded on a resolution of his Will to take it away himself; and thus the execution of the Right in question is represented as united in one and the same person with the adjudication of the Right.

There are, however, two crimes worthy of death, in respect of which it still remains doubtful whether the Legislature have the Right to deal with them capitally. It is the sentiment of Honour that induces their perpetration. The one originates in a regard for womanly Honour, the other in a regard for military Honour; and in both cases there is a genuine feeling of honour incumbent on the individuals as a Duty. The former is the Crime of Maternal Infanticide (infanticidium maternale); the latter is the Crime of Killing a fellow-soldier in a Duel (Commilitonicidium). Now Legislation cannot take away the shame of an illegitimate birth, nor wipe off the stain attaching from a suspicion of cowardice, to an officer who does not resist an act that would bring him into contempt, by an effort of his own that is superior to the fear of death. Hence it appears that in such circumstances, the individuals concerned are remitted to the State of Nature; and their acts in both cases must be called Homicide, and not Murder, which involves evil intent (homicidium dolosum). In all instances the acts are undoubtedly punishable; but they cannot be punished by the Supreme Power with death. An illegitimate child comes into the world outside of the Law which properly regulates Marriage, and it is thus born beyond the pale or constitutional protection of the Law. Such a child is introduced, as it were, like prohibited goods, into the Commonwealth, and as it has no legal right to existence in this way, its destruction might also be ignored; nor can the shame of the mother when her unmarried confinement is known, be removed by any legal ordinance. A subordinate Officer, again, on whom an insult is inflicted, sees himself compelled by the public opinion of his associates to obtain satisfaction; and, as in the state of Nature, the punishment of the offender can only be effected by a Duel, in which his own life is exposed to danger, and not by means of the Law in a Court of Justice. The Duel is therefore adopted as the means of demonstrating his courage as that characteristic upon which the Honour of his profession essentially rests; and this is done even if it should issue in the killing of his adversary. But as such a result takes place publicly and under consent of both parties, although it may be done unwillingly, it cannot properly be called Murder (homicidium dolosum). — What then is the Right in both cases as relating to Criminal Justice? Penal Justice is here in fact brought into great straits, having apparently either to declare the notion of Honour, which is certainly no mere fancy here, to be nothing in the eye of the Law, or to exempt the crime from its due punishment; and thus it would become either remiss or cruel. The knot thus tied is to be resolved in the following way. The Categorical Imperative of Penal Justice, that the killing of any person contrary to the Law must be punished with death, remains in force; but the Legislation itself and the Civil Constitution generally, so long as they are still barbarous and incomplete, are at fault. And this is the reason why the subjective motive-principles of Honour among the People, do not coincide with the standards which are objectively conformable to another purpose; so that the public Justice issuing from the State becomes Injustice relatively to that which is upheld among the People themselves. [See Supplementary Explanations, V.]

II.: The Right of Pardoning.

The Right of Pardoning (Jus aggratiandi), viewed in relation to the Criminal, is the Right of mitigating or entirely remitting his Punishment. On the side of the Sovereign this is the most delicate of all Rights, as it may be exercised so as to set forth the splendour of his dignity, and yet so as to do a great wrong by it. It ought not to be exercised in application to the crimes of the subjects against each other; for exemption from Punishment (impunitas criminis) would be the greatest wrong that could be done to them. It is only on occasion of some form of Treason (crimen læsæ majestatis), as a lesion against himself, that the Sovereign should make use of this Right. And it should not be exercised even in this connection, if the safety of the People would be endangered by remitting such Punishment. This Right is the only one which properly deserves the name of a 'Right of Majesty.'

50.: Juridical Relations of the Citizen to his Country and to other Countries. Emigration; Immigration; Banishment; Exile.

The Land or Territory whose inhabitants — in virtue of its political Constitution and without the necessary intervention of a special juridical act — are, by birth, fellow-citizens of one and the same Commonwealth, is called their Country or Fatherland. A Foreign Country is one in which they would not possess this condition, but would be living abroad. If a Country abroad form part of the territory under the same Government as at home, it constitutes a Province, according to the Roman usage of the term. It does not constitute an incorporated portion of the Empire (imperii) so as to be the abode of equal fellow-citizens, but is only a possession of the Government, like a lower House; and it must therefore honour the domain of the ruling State as the 'Mother Country' (regio domina).

A Subject, even regarded as a Citizen, has the Right of Emigration; for the State cannot retain him as if he were its property. But he may only carry away with him his Moveables as distinguished from his fixed possessions. However, he is entitled to sell his immovable property, and take the value of it in money with him.

The Supreme Power as Master of the Country, has the Right to favour Immigration, and the settlement of Strangers and Colonists. This will hold even although the natives of the Country may be unfavourably disposed to it, if their private property in the soil is not diminished or interfered with.

In the case of a Subject who has committed a Crime that renders all society of his fellow-citizens with him prejudicial to the State, the Supreme Power has also the Right of inflicting Banishment to a Country abroad. By such Deportation, he does not acquire any share in the Rights of the Citizens of the territory to which he is banished.

The Supreme Power has also the Right of imposing Exile generally (Jus exilii), by which a Citizen is sent abroad into the wide world as the 'Out-land.' And because the Supreme Authority thus withdraws all legal protection from the Citizen, this amounts to making him an 'outlaw' within the territory of his own country.

51.: The Three Forms of the State. Autocracy; Aristocracy; Democracy.

The three Powers in the State, involved in the conception of a Public Government generally (res publica latius dicta), are only so many Relations of the united Will of the People which emanates from the à priori Reason; and viewed as such it is the objective practical realization of the pure Idea of a Supreme Head of the State. This Supreme Head is the Sovereign; but conceived only as a Representation of the whole People, the Idea still requires physical embodiment in a Person, who may exhibit the Supreme Power of the State, and bring the idea actively to bear upon the popular Will. The relation of the Supreme Power to the People, is conceivable in three different forms: Either One in the State rules over all; or Some, united

in a relation of Equality with each other, rule over all the others; or All together rule over each and all individually, including themselves. The Form of the State is therefore either autocratic, or aristocratic, or democratic. — The expression 'monarchic' is not so suitable as 'autocratic' for the conception here intended; for a 'Monarch' is one who has the highest power, an 'Autocrat' is one who has all power, so that this latter is the Sovereign, whereas the former merely represents the Sovereignty.

It is evident that an Autocracy is the simplest form of Government in the State, being constituted by the relation of One, as King, to the People, so that there is one only who is the Lawgiver. An Aristocracy, as a form of Government, is, however, compounded of the union of two relations: that of the Nobles in relation to one another as the Lawgivers, thereby constituting the Sovereignty, and that of this Sovereign Power to the People. A Democracy, again, is the most complex of all the forms of the State, for it has to begin by uniting the will of all so as to form a People; and then it has to appoint a Sovereign over this common Union, which Sovereign is no other than the United Will itself. — The consideration of the ways in which these Forms are adulterated by the intrusion of violent and illegitimate usurpers of power, as in Oligarchy and Ochlocracy, as well as the discussion of the so-called mixed Constitutions, may be passed over here as not essential, and as leading into too much detail.

As regards the Administration of Right in the State, it may be said that the simplest mode is also the best; but as regards its bearing on Right itself, it is also the most dangerous for the People, in view of the Despotism to which simplicity of Administration so naturally gives rise. It is undoubtedly a rational maxim to aim at simplification in the machinery which is to unite the People under compulsory Laws, and this would be secured were all the People to be passive and to obey only one person over them; but the method would not give Subjects who were also Citizens of the State. It is sometimes said that the People should be satisfied with the reflection that Monarchy, regarded as an Autocracy, is the best political Constitution, if the Monarch is good, that is, if he has the judgment as well as the Will to do right. But this is a mere evasion, and belongs to the common class of wise tautological phrases. It only amounts to saying that 'the best Constitution is that by which the supreme administrator of the State is made the best Ruler;' that is, that the best Constitution is the best!

52.: Historical Origin and Changes. A Pure Republic. Representative Government.

It is vain to inquire into the historical Origin of the political Mechanism; for it is no longer possible to discover historically the point of time at which Civil Society took its beginning. Savages do not draw up a documentary Record of their having submitted themselves to Law; and it may be inferred from the nature of uncivilised men that they must have set out from a state of violence. To prosecute such an inquiry in the intention of finding a pretext for altering the existing Constitution by violence, is no less than penal. For such a mode of alteration would amount to a Revolution, that could only be carried out by an Insurrection of the People, and not by constitutional modes of Legislation. But Insurrection against an already existing Constitution, is an overthrow of all civil and juridical relations, and of Right generally; and hence it is not a mere alteration of the Civil Constitution, but a dissolution of it. It would thus form a mode of transition to a better Constitution by Palingenesis and not by mere Metamorphosis; and it would require a new Social Contract, upon which the former Original Contract, as then annulled, would have no influence.

It must, however, be possible for the Sovereign to change the existing Constitution, if it is not actually consistent with the Idea of the Original Contract. In doing so it is essential to give existence to that form of Government which will properly constitute the People into a State. Such a change cannot be made by the State deliberately altering its Constitution from one of the three Forms to one of the other two. — For example, political changes should not be carried out by the Aristocrats combining to subject themselves to an Autocracy, or resolving to fuse all into a Democracy, or conversely; as if it depended on the arbitrary

choice and liking of the Sovereign what Constitution he may impose on the People. For, even if as Sovereign he resolved to alter the Constitution into a Democracy, he might be doing Wrong to the People, because they might hold such a Constitution in abhorrence, and regard either of the other two as more suitable to them in the circumstances.

The Forms of the State are only the letter (littera) of the original Constitution in the Civil Union; and they may therefore remain so long as they are considered, from ancient and long habit (and therefore only subjectively), to be necessary to the machinery of the political Constitution. But the spirit of that original Contract (anima pacti originarii) contains and imposes the obligation on the constituting Power to make the mode of the Government conformable to its Idea; and, if this cannot be effected at once, to change it gradually and continuously till it harmonize in its working with the only rightful Constitution, which is that of a Pure Republic. Thus the old empirical and statutory Forms, which serve only to effect the political subjection of the People, will be resolved into the original and rational Forms which alone take Freedom as their principle, and even as the condition of all compulsion and constraint. Compulsion is in fact requisite for the realization of a juridical Constitution, according to the proper idea of the State; and it will lead at last to the realization of that Idea, even according to the letter. This is the only enduring political Constitution, as in it the Law is itself Sovereign, and is no longer attached to a particular person. This is the ultimate End of all Public Right, and the state in which every citizen can have what is his own peremptorily assigned to him. But so long as the Form of the State has to be represented, according to the Letter, by many different Moral Persons invested with the Supreme Power, there can only be a provisory internal Right, and not an absolutely juridical state of Civil Society.

Every true Republic is and can only be constituted by a Representative System of the People. Such a Representative System is instituted in name of the People, and is constituted by all the Citizens being united together, in order, by means of their Deputies, to protect and secure their Rights. But as soon as a Supreme Head of the State in person — be it as King, or Nobility, or the whole body of the People in a democratic Union — becomes also representative, the United People then does not merely represent the Sovereignty, but they are themselves sovereign. It is in the People that the Supreme Power originally resides, and it is accordingly from this Power that all the Rights of individual Citizens as mere Subjects, and especially as Officials of the State, must be derived. When the Sovereignty of the People themselves is thus realized, the Republic is established; and it is no longer necessary to give up the reins of Government into the hands of those by whom they have been hitherto held, especially as they might again destroy all the new Institutions by their arbitrary and absolute Will.

It was therefore a great error in judgment on the part of a powerful Ruler in our time, when he tried to extricate himself from the embarrassment arising from great public debts, by transferring this burden to the People, and leaving them to undertake and distribute them among themselves as they might best think fit. It thus became natural that the Legislative Power, not only in respect of the Taxation of the Subjects, but in respect of the Government, should come into the hands of the People. It was requisite that they should be able to prevent the incurring of new Debts by extravagance or war; and in consequence, the Supreme Power of the Monarch entirely disappeared, not by being merely suspended, but by passing over in fact to the People, to whose legislative Will the property of every Subject thus became subjected. Nor can it be said that a tacit and yet obligatory promise must be assumed as having, under such circumstances, been given by the National Assembly, not to constitute themselves into a Sovereignty, but only to administer the affairs of the Sovereign for the time, and after this was done to deliver the reins of the Government again into the Monarch’s hands. Such a supposed contract would be null and void. The Right of the Supreme Legislation in the Commonwealth is not an alienable Right, but is the most personal of all Rights. Whoever possesses it, can only dispose by the collective Will of the People, in respect of the People; he cannot dispose in respect of the Collective Will itself, which is the ultimate foundation of all public

Contracts. A Contract, by which the People would be bound to give back their authority again, would not be consistent with their position as a Legislative Power, and yet it would be made binding upon the People; which, on the principle that ‘No one can serve two Masters,’ is a contradiction.

PUBLIC RIGHT.

II.: The Right of Nations and International Law.

(Jus Gentium.)

53.: Nature and Division of the Right of Nations.

The individuals, who make up a People, may be regarded as Natives of the Country sprung by natural descent from a Common Ancestry (congeniti), although this may not hold entirely true in detail. Again, they may be viewed according to the intellectual and juridical relation, as born of a common political Mother, the Republic, so that they constitute, as it were, a public Family or Nation (gens, natio) whose Members are all related to each other as Citizens of the State. As members of a State, they do not mix with those who live beside them in the state of Nature, considering such to be ignoble. Yet these savages, on account of the lawless freedom they have chosen, regard themselves as superior to civilised peoples; and they constitute tribes and even races, but not States. — The public Right of States (jus publicum Civitatum) in their relations to one another, is what we have to consider under the designation of the 'Right of Nations.' Wherever a State, viewed as a Moral Person, acts in relation to another existing in the condition of natural freedom, and consequently in a state of continual war, such Right takes it rise.

The Right of Nations in relation to the State of War may be divided into: 1. The Right of going to War; 2. Right during War; and 3. Right after War, the object of which is to constrain the nations mutually to pass from this state of war, and to found a common Constitution establishing Perpetual Peace. The difference between the Right of individual men or families as related to each other in the state of Nature, and the Right of the Nations among themselves, consists in this, that in the Right of Nations we have to consider not merely a relation of one State to another as a whole, but also the relation of the individual persons in one State to the individuals of another State, as well as to that State as a whole. This difference, however, between the Right of Nations and the Right of Individuals in the mere State of Nature, requires to be determined by elements which can easily be deduced from the conception of the latter.

54.: Elements of the Right of Nations.

The elements of the Right of Nations are as follow: —

States, viewed as Nations, in their external relations to one another — like lawless savages — are naturally in a non-juridical condition;

This natural condition is a State of War in which the Right of the stronger prevails; and although it may not in fact be always found as a state of actual war and incessant hostility, and although no real wrong is done to any one therein, yet the condition is wrong in itself in the highest degree, and the Nations which form States contiguous to each other are bound mutually to pass out of it;

An Alliance of Nations, in accordance with the idea of an original Social Contract, is necessary to protect each other against external aggression and attack, but not involving interference with their several internal difficulties and disputes;

This mutual connection by Alliance must dispense with a distinct Sovereign Power, such as is set up in the Civil Constitution; it can only take the form of a Federation, which as such may be revoked on any occasion, and must consequently be renewed from time to time.

This is therefore a Right which comes in as an accessory (in subsidium) of another original Right, in order to prevent the Nations from falling from Right, and lapsing into the state of actual war with each other. It thus issues in the idea of a Fædus Amphictyonum.

55.: Right of Going to War as related to the Subjects of the State.

We have then to consider, in the first place, the original Right of free States to go to War with each other as being still in a state of Nature, but as exercising this Right in order to establish some condition of society approaching the juridical state. And, first of all, the question arises as to what Right the State has in relation to its own Subjects, to use them in order to make war against other States, to employ their property and even their lives for this purpose, or at least to expose them to hazard and danger; and all this in such a way that it does not depend upon their own personal judgment whether they will march into the field of war or not, but the Supreme Command of the Sovereign claims to settle and dispose of them thus.

This Right appears capable of being easily established. It may be grounded upon the Right which every one has to do with what is his own as he will. Whatever one has made substantially for himself, he holds as his incontestable property. The following, then, is such a deduction as a mere Jurist would put forward.

There are various natural Products in a country which, as regards the number and quantity in which they exist, must be considered as specially produced (artefacta) by the work of the State; for the country would not yield them to such extent were it not under the Constitution of the State and its regular administrative Government, or if the inhabitants were still living in the State of Nature. Sheep, cattle, domestic fowl, — the most useful of their kind, — swine, and such like, would either be used up as necessary food or destroyed by beasts of prey in the district in which I live, so that they would entirely disappear, or be found in very scant supplies, were it not for the Government securing to the inhabitants their acquisitions and property. This holds likewise of the population itself, as we see in the case of the American deserts; and even were the greatest industry applied in those regions — which is not yet done — there might be but a scanty population. The inhabitants of any country would be but sparsely sown here and there were it not for the protection of Government; because without it they could not spread themselves with their households upon a territory which was always in danger of being devastated by enemies or by wild beasts of prey; and further, so great a multitude of men as now live in any one country could not otherwise obtain sufficient means of support. Hence, as it can be said of vegetable growths, such as potatoes, as well as of domesticated animals, that because the abundance in which they are found is a product of human labour, they may be used, destroyed, and consumed by man; so it seems that it may be said of the Sovereign as the Supreme Power in the State, that he has the Right to lead his Subjects, as being for the most part productions of his own, to war, as if it were to the chase, and even to march them to the field of battle, as if it were on a pleasure excursion.

This principle of Right may be supposed to float dimly before the mind of the Monarch, and it certainly holds true at least of the lower animals which may become the property of man. But such a principle will not at all apply to men, especially when viewed as citizens who must be regarded as members of the State, with a share in the legislation, and not merely as means for others but as Ends in themselves. As such they must give their free consent, through their representatives, not only to the carrying on of war generally, but to every separate declaration of war; and it is only under this limiting condition that the State has a Right to demand their services in undertakings so full of danger.

We would therefore deduce this Right rather from the duty of the Sovereign to the people than conversely. Under this relation the people must be regarded as having given their sanction; and, having the Right of voting, they may be considered, although thus passive in reference to themselves individually, to be active in so far as they represent the Sovereignty itself.

56.: Right of Going to War in relation to Hostile States.

Viewed as in the state of Nature, the Right of Nations to go to War and to carry on hostilities is the legitimate way by which they prosecute their Rights by their own power when they regard themselves as

injured; and this is done because in that state the method of a juridical Process, although the only one proper to settle such disputes, cannot be adopted.

The threatening of War is to be distinguished from the active injury of a first Aggression, which again is distinguished from the general outbreak of Hostilities. A threat or menace may be given by the active preparation of Armaments, upon which a Right of Prevention (jus præventionis) is founded on the other side, or merely by the formidable increase of the power of another State (potestas tremenda) by acquisition of Territory. Lesion of a less powerful country may be involved merely in the condition of a more powerful neighbour prior to any action at all; and in the State of Nature an attack under such circumstances would be warrantable. This international relation is the foundation of the Right of Equilibrium, or of the 'balance of Power,' among all the States that are in active contiguity to each other.

The Right to go to War is constituted by any overt act of Injury. This includes any arbitrary Retaliation or act of Reprisal (retorsio) as a satisfaction taken by one people for an offence committed by another, without any attempt being made to obtain reparation in a peaceful way. Such an act of retaliation would be similar in kind to an outbreak of hostilities without a previous Declaration of War. For if there is to be any Right at all during the state of war, something analogous to a Contract must be assumed, involving acceptance on the one side of the declaration on the other, and amounting to the fact that they both will to seek their Right in this way.

57.: Right during War.

The determination of what constitutes Right in War, is the most difficult problem of the Right of Nations and International Law. It is very difficult even to form a conception of such a Right, or to think of any Law in this lawless state without falling into a contradiction. Inter arma silent leges. It must then be just the right to carry on War according to such principles as render it always still possible to pass out of that natural condition of the states in their external relations to each other, and to enter into a condition of Right.

No war of independent States against each other, can rightly be a war of Punishment (bellum punitivum). For punishment is only in place under the relation of a Superior (imperantis) to a Subject (subditum); and this is not the relation of the States to one another. Neither can an international war be 'a war of Extermination' (bellum internicinum), nor even 'a war of Subjugation' (bellum subjugatorium); for this would issue in the moral extinction of a State by its people being either fused into one mass with the conquering State, or being reduced to slavery. Not that this necessary means of attaining to a condition of peace is itself contradictory to the right of a State; but because the idea of the Right of Nations includes merely the conception of an antagonism that is in accordance with principles of external freedom, in order that the State may maintain what is properly its own, but not that it may acquire a condition which, from the aggrandizement of its power, might become threatening to other States.

Defensive measures and means of all kinds are allowable to a State that is forced to war, except such as by their use would make the Subjects using them unfit to be citizens; for the State would thus make itself unfit to be regarded as a person capable of participating in equal rights in the international relations according to the Right of Nations. Among these forbidden means are to be reckoned the appointment of Subjects to act as spies, or engaging Subjects or even strangers to act as assassins, or poisoners (in which class might well be included the so-called sharpshooters who lurk in ambush for individuals), or even employing agents to spread false news. In a word, it is forbidden to use any such malignant and perfidious means as would destroy the confidence which would be requisite to establish a lasting peace thereafter.

It is permissible in war to impose exactions and contributions upon a conquered enemy; but it is not legitimate to plunder the people in the way of forcibly depriving individuals of their property. For this would be robbery, seeing it was not the conquered people but the State under whose government they

were placed that carried on the war by means of them. All exactions should be raised by regular Requisition, and Receipts ought to be given for them, in order that when peace is restored the burden imposed on the country or the province may be proportionately borne.

58.: Right after War.

The Right that follows after War, begins at the moment of the Treaty of Peace and refers to the consequences of the war. The conqueror lays down the conditions under which he will agree with the conquered power to form the conclusion of Peace. Treaties are drawn up; not indeed according to any Right that it pertains to him to protect, on account of an alleged lesion by his opponent, but as taking this question upon himself, he bases the right to decide it upon his own power. Hence the conqueror may not demand restitution of the cost of the war; because he would then have to declare the war of his opponent to be unjust. And even although he should adopt such an argument, he is not entitled to apply it; because he would have to declare the war to be punitive, and he would thus in turn inflict an injury. To this right belongs also the Exchange of Prisoners, which is to be carried out without ransom and without regard to equality of numbers.

Neither the conquered State nor its Subjects, lose their political liberty by conquest of the country, so as that the former should be degraded to a colony, or the latter to slaves; for otherwise it would have been a penal war, which is contradictory in itself. A colony or a province is constituted by a people which has its own constitution, legislation, and territory, where persons belonging to another State are merely strangers, but which is nevertheless subject to the supreme executive power of another State. This other State is called the 'mother-country.' It is ruled as a daughter, but has at the same time its own form of government, as in a separate Parliament under the presidency of a Viceroy (civitas hybrida). Such was Athens in relation to different islands; and such is at present the relation of Great Britain to Ireland.

Still less can Slavery be deduced as a rightful institution, from the conquest of a people in war; for this would assume that the war was of a punitive nature. And least of all can a basis be found in war for a hereditary Slavery, which is absurd in itself, since guilt cannot be inherited from the criminality of another.

Further, that an Amnesty is involved in the conclusion of a Treaty of Peace, is already implied in the very idea of a Peace.

59.: The Rights of Peace.

The Rights of Peace are: —

The Right to be in Peace when War is in the neighbourhood, or the Right of Neutrality.

The Right to have Peace secured so that it may continue when it has been concluded, that is, the Right of Guarantee.

The Right of the several States to enter into a mutual Alliance, so as to defend themselves in common against all external or even internal attacks. This Right of Federation, however, does not extend to the formation of any League for external aggression or internal aggrandizement.

60.: Right as against an Unjust Enemy.

The Right of a State against an unjust Enemy has no limits, at least in respect of quality as distinguished from quantity or degree. In other words, the injured State may use — not, indeed, any means, but yet — all those means that are permissible and in reasonable measure in so far as they are in its power, in order to assert its Right to what is its own. But what then is an unjust enemy according to the conceptions of the Right of Nations, when, as holds generally of the state of Nature, every State is judge in its own cause? It

is one whose publicly expressed Will, whether in word or deed, betrays a maxim which, if it were taken as a universal rule, would make a state of Peace among the nations impossible, and would necessarily perpetuate the state of Nature. Such is the violation of public Treaties, with regard to which it may be assumed that any such violation concerns all nations by threatening their freedom, and that they are thus summoned to unite against such a wrong, and to take away the power of committing it. But this does not include the Right to partition and appropriate the country, so as to make a State as it were disappear from the earth; for this would be an injustice to the people of that State, who cannot lose their original Right to unite into a Commonwealth, and to adopt such a new Constitution as by its nature would be unfavourable to the inclination for war.

Further, it may be said that the expression ‘an unjust enemy in the state of Nature’ is pleonastic; for the state of Nature is itself a state of injustice. A just Enemy would be one to whom I would do wrong in offering resistance; but such a one would really not be my Enemy.

61.: Perpetual Peace and a Permanent Congress of Nations.

The natural state of Nations as well as of individual men is a state which it is a duty to pass out of, in order to enter into a legal state. Hence, before this transition occurs, all the Right of Nations and all the external property of States acquirable or maintainable by war, are merely provisory; and they can only become peremptory in a universal Union of States analogous to that by which a Nation becomes a State. It is thus only that a real state of Peace could be established. But with the too great extension of such a Union of States over vast regions any government of it, and consequently the protection of its individual members, must at last become impossible; and thus a multitude of such corporations would again bring round a state of war. Hence the Perpetual Peace, which is the ultimate end of all the Right of Nations, becomes in fact an impracticable idea. The political principles, however, which aim at such an end, and which enjoin the formation of such unions among the States as may promote a continuous approximation to a Perpetual Peace, are not impracticable; they are as practicable as this approximation itself, which is a practical problem involving a duty, and founded upon the Right of individual men and States.

Such a Union of States, in order to maintain Peace, may be called a Permanent Congress of Nations; and it is free to every neighbouring State to join in it. A union of this kind, so far at least as regards the formalities of the Right of Nations in respect of the preservation of peace, was presented in the first half of this century, in the Assembly of the States-General at the Hague. In this Assembly most of the European Courts, and even the smallest Republics, brought forward their complaints about the hostilities which were carried on by the one against the other. Thus the whole of Europe appeared like a single Federated State, accepted as Umpire by the several nations in their public differences. But in place of this agreement, the Right of Nations afterwards survived only in books; it disappeared from the cabinets, or, after force had been already used, it was relegated in the form of theoretical deductions to the obscurity of Archives.

By such a Congress is here meant only a voluntary combination of different States that would be dissoluble at any time, and not such a union as is embodied in the United States of America, founded upon a political constitution, and therefore indissoluble. It is only by a Congress of this kind that the idea of a Public Right of Nations can be established, and that the settlement of their differences by the mode of a civil process, and not by the barbarous means of war, can be realized.

PUBLIC RIGHT.

III.: The Universal Right of Mankind.

(Jus cosmopoliticum.)

62.: Nature and Conditions of Cosmopolitical Right.

The rational idea of a universal, peaceful, if not yet friendly, Union of all the Nations upon the earth that may come into active relations with each other, is a juridical Principle, as distinguished from philanthropic or ethical principles. Nature has enclosed them altogether within definite boundaries, in virtue of the spherical form of their abode as a globus terraqueus; and the possession of the soil upon which an inhabitant of the earth may live, can only be regarded as possession of a part of a limited whole, and consequently as a part to which every one has originally a Right. Hence all nations originally hold a community of the soil, but not a juridical community of possession (communio), nor consequently of the use or proprietorship of the soil, but only of a possible physical intercourse (commercium) by means of it. In other words, they are placed in such thoroughgoing relations of each to all the rest, that they may claim to enter into intercourse with one another, and they have a right to make an attempt in this direction, while a foreign nation would not be entitled to treat them on this account as enemies. This Right, in so far as it relates to a possible Union of all Nations, in respect of certain laws universally regulating their intercourse with each other, may be called 'Cosmopolitical Right' (jus cosmopoliticum).

It may appear that seas put nations out of all communion with each other. But this is not so; for by means of commerce, seas form the happiest natural provision for their intercourse. And the more there are of neighbouring coast-lands, as in the case of the Mediterranean Sea, this intercourse becomes the more animated. And hence communications with such lands, especially where there are settlements upon them connected with the mother countries giving occasion for such communications, bring it about that evil and violence committed in one place of our globe are felt in all. Such possible abuse cannot, however, annul the Right of man as a citizen of the world to attempt to enter into communion with all others, and for this purpose to visit all the regions of the earth, although this does not constitute a right of settlement upon the territory of another people (jus incolatus), for which a special contract is required.

But the question is raised as to whether, in the case of newly discovered countries, a people may claim the right to settle (accolatus), and to occupy possessions in the neighbourhood of another people that has already settled in that region; and to do this without their consent.

Such a Right is indubitable, if the new settlement takes place at such a distance from the seat of the former, that neither would restrict or injure the other in the use of their territory. But in the case of nomadic peoples, or tribes of shepherds and hunters (such as the Hottentots, the Tungusi, and most of the American Indians), whose support is derived from wide desert tracts, such occupation should never take place by force, but only by contract; and any such contract ought never to take advantage of the ignorance of the original dwellers in regard to the cession of their lands. Yet it is commonly alleged that such acts of violent appropriation may be justified as subserving the general good of the world. It appears as if sufficiently justifying grounds were furnished for them, partly by reference to the civilisation of barbarous peoples (as by a pretext of this kind even Busching tries to excuse the bloody introduction of the Christian religion into Germany), and partly by founding upon the necessity of purging one's own country from depraved criminals, and the hope of their improvement or that of their posterity, in another continent like New Holland. But all these alleged good purposes cannot wash out the stain of injustice in the means employed to attain them. It may be objected that had such scrupulousness about making a beginning in founding a legal State with force been always maintained, the whole earth would still have been in a state of lawlessness. But such an objection would as little annul the conditions of Right in question as the

pretext of the political revolutionaries, that when a constitution has become degenerate, it belongs to the people to transform it by force. This would amount generally to being unjust once and for all, in order thereafter to found justice the more surely, and to make it flourish.

CONCLUSION.

If one cannot prove that a thing is, he may try to prove that it is not. And if he succeeds in doing neither (as often occurs), he may still ask whether it is in his interest to accept one or other of the alternatives hypothetically, from the theoretical or the practical point of view. In other words, a hypothesis may be accepted either in order to explain a certain Phenomenon (as in Astronomy to account for the retrogression and stationariness of the planets), or in order to attain a certain end, which again may be either pragmatic as belonging merely to the sphere of Art, or moral as involving a purpose which it is a duty to adopt as a maxim of action. Now it is evident that the assumption (suppositio) of the practicability of such an End, though presented merely as a theoretical and problematical judgment, may be regarded as constituting a duty; and hence it is so regarded in this case. For although there may be no positive obligation to believe in such an End, yet even if there were not the least theoretical probability of action being carried out in accordance with it, so long as its impossibility cannot be demonstrated, there still remains a duty incumbent upon us with regard to it.

Now, as a matter of fact, the morally practical Reason utters within us its irrevocable Veto: ‘There shall be no War.’ So there ought to be no war, neither between me and you in the condition of Nature, nor between us as members of States which, although internally in a condition of law, are still externally in their relation to each other in a condition of lawlessness; for this is not the way by which any one should prosecute his Right. Hence the question no longer is as to whether Perpetual Peace is a real thing or not a real thing, or as to whether we may not be deceiving ourselves when we adopt the former alternative, but we must act on the supposition of its being real. We must work for what may perhaps not be realized, and establish that Constitution which yet seems best adapted to bring it about (mayhap Republicanism in all States, together and separately). And thus we may put an end to the evil of wars, which have been the chief interest of the internal arrangements of all the States without exception. And although the realization of this purpose may always remain but a pious wish, yet we do certainly not deceive ourselves in adopting the maxim of action that will guide us in working incessantly for it; for it is a duty to do this. To suppose that the moral Law within us is itself deceptive, would be sufficient to excite the horrible wish rather to be deprived of all Reason than to live under such deception, and even to see oneself, according to such principles, degraded like the lower animals to the level of the mechanical play of Nature.

It may be said that the universal and lasting establishment of Peace constitutes not merely a part, but the whole final purpose and End of the Science of Right as viewed within the limits of Reason. The state of Peace is the only condition of the Mine and Thine that is secured and guaranteed by Laws in the relationship of men living in numbers contiguous to each other, and who are thus combined in a Constitution whose rule is derived not from the mere experience of those who have found it the best as a normal guide for others, but which must be taken by the Reason à priori from the ideal of a juridical Union of men under public laws generally. For all particular examples or instances, being able only to furnish illustration but not proof, are deceptive, and at all events require a Metaphysic to establish them by its necessary principles. And this is conceded indirectly even by those who turn Metaphysics into ridicule, when they say, as they often do, ‘The best Constitution is that in which not Men but Laws exercise the power.’ For what can be more metaphysically sublime in its own way than this very Idea of theirs, which according to their own assertion has, notwithstanding, the most objective reality? This may be easily shown by reference to actual instances. And it is this very Idea which alone can be carried out

practically, if it is not forced on in a revolutionary and sudden way by violent overthrow of the existing defective Constitution; for this would produce for the time the momentary annihilation of the whole juridical state of Society. But if the idea is carried forward by gradual Reform, and in accordance with fixed Principles, it may lead by a continuous approximation to the highest political Good, and to Perpetual Peace.

SUPPLEMENTARY EXPLANATIONS of the PRINCIPLES OF RIGHT.

[Written by Kant in 1797, and added to the Second Edition in 1798.]

The Occasion for these Explanations was furnished mainly by a Review of this work that appeared in the Göttingen Journal, No. 28, of 18th February 1797. The Review displays insight, and with sympathetic appreciation it expresses 'the hope that this Exposition of Principles will prove a permanent gain for juridical Science.' It is here taken as a guide in the arrangement of some critical Remarks, and at the same time as suggesting some expansion of the system in certain points of detail.

Objection as to the Faculty of Desire.

In the very first words of the General Introduction the acute Reviewer stumbles on a Definition. He asks what is meant by 'the Faculty of Desire.' In the said Introduction it is defined as 'the Power which Man has, through his mental representations, of becoming the cause of objects corresponding to these representations.' To this Definition the objection is taken, 'that it amounts to nothing as soon as we abstract from the external conditions of the effect or consequence of the act of Desire.''But the Faculty of Desire,' it is added, 'is something even to the Idealist, although there is no external world according to his view.' — Answer: Is there not likewise a violent and yet consciously ineffective form of Desire as a mere mental longing, which is expressed by such words as 'Would to God such a one were still alive!' Yet although this Desire is actless in the sense of not issuing in overt action, it is not effectless in the sense of having no consequence at all; in short, if it does not produce a change on external things, it at least works powerfully upon the internal condition of the Subject, and even may superinduce a morbid condition of disease. A Desire, viewed as an active Striving (nisus) to be a cause by means of one's own mental representations, even although the individual may perceive his incapacity to attain the desired effect, is still a mode of causality within his own internal experience. — There is therefore a misunderstanding involved in the objection, that because the consciousness of one's Power in a case of Desire may be at the same time accompanied with a consciousness of the Want of Power in respect of the external world, the definition is therefore not applicable to the Idealist. But as the question only turns generally upon the relation of a Cause (the Representation) to an Effect (the Feeling), the Causality of the Representation in respect of its object — whether it be external or internal — must inevitably be included by thought in the conception of the Faculty of Desire.

I.: Logical Preparation for the Preceding Conception of Right.

If philosophical Jurists would rise to the Metaphysical Principles of the Science of Right, without which all their juridical Science will be merely statutory, they must not be indifferent to securing completeness in the Division of their juridical conceptions. Apart from such internal completeness their science would not be a rational System, but only an Aggregate of accidental details. The topical arrangement of Principles as determined by the form of the System, must therefore be made complete; that is to say, there must be a proper place assigned to each conception (locus communis) as determined by the synthetic form of the Division. And it would have to be afterwards made apparent that when any other conception were put in the place of the one thus assigned, it would be contradictory to itself and out of its own place.

Now Jurists have hitherto received only two formal commonplaces in their Systems, namely, the conceptions of Real Right and of Personal Right. But since there are other two conceptions possible even

à priori by a mere formal combination of these two as members of a rational Division, giving the conception of a Personal Right of a Real Kind, and that of a Real Right of a Personal Kind, — it is natural to ask whether these further conceptions, although viewed as only problematical in themselves, should not likewise be incorporated in the scheme of a complete Division of the juridical System? This in fact does not admit of doubt. The merely logical Division, indeed, as abstracting from the object of Knowledge, is always in the form of a Dichotomy; so that every Right is either a Real or a not-Real Right. But the metaphysical Division, here under consideration, may also be in the fourfold form of a Tetrachotomy; for in addition to the two simple members of the Division, there are also two relations between them, as conditions of mutual limitation arising from the one Right entering into combination with the other; and the possibility of this requires a special investigation. — But the conception of a Real Right of a Personal Kind falls out at once; for the Right of a Thing as against a Person is inconceivable. It remains, therefore, only to consider, whether the converse of this relation is likewise inconceivable; or whether the conception of a Personal Right of a Real Kind is not only free from internal contradiction, but is even contained à priori in Reason and belongs as a necessary constituent to the conception of the external Mine and Thine in its completeness, in order that Persons may be viewed so far in the same way as Things; not indeed to the extent of treating them in all respects alike, but by regard to the possession of them, and to proceeding with Persons in certain relations as if they were Things.

II.: Justification of the Conception of a Personal Right of a Real Kind.

The Definition of a Personal Right of a Real Kind may be put shortly and appropriately thus: ‘it is the Right which a man has to have another Person than himself as his.’ I say intentionally a ‘Person;’ for one might have another man who had lost his civil personality and become enslaved as his; but such a Real Right is not under consideration here.

Now we have to examine the question whether this conception — described as ‘a new phenomenon in the juristic sky’ — is a stella mirabilis in the sense of growing into a star of the first magnitude, unseen before but gradually vanishing again, yet perhaps destined to return, or whether it is to be regarded as merely a shooting and falling star!

III.: Examples of Real-Personal Right.

To have anything external as one’s own, means to possess it rightfully; and Possession is the condition of the possibility of using a thing. If this condition is regarded merely as physical, the possession is called detention or holding. But legal detention alone does not suffice to make an object mine, or to entitle me so to regard it. If, however, I am entitled, on any ground whatever, to press for the possession of an object which has escaped from my power or been taken from me, this conception of right is a sign in effect that I hold myself entitled to conduct myself towards it as being mine and in my rational possession, and so to use it as my object.

The ‘Mine’ in this connection does not mean that it is constituted by ownership of the Person of another; for a man cannot even be the owner of himself, and much less of another person. It means only the right of Usufruct (jus utendi fruendi) in immediate reference to this person, as if he were a thing, but without infringing on the right of his personality, even while using him is a means for my own ends.

These ends, however, as conditioning the rightfulness of such use, must necessarily be moral. A man may neither desire a wife in order to enjoy her as if she were a thing by the immediate pleasure in mere physical intercourse, nor may the wife surrender herself for this purpose; for otherwise the rights of personality would be given up on both sides. In other words, it is only under the condition of a marriage having been previously concluded that there can be such a reciprocal surrender of the two persons into the

possession of each other that they will not dehumanize themselves by making a corporeal use of each other.

When this condition is not respected, the carnal enjoyment referred to, is in principle, although not always in effect, on the level of cannibalism. There is merely a difference in the manner of the enjoyment between the exhaustion which may thus be produced and the consumption of bodies by the teeth and maw of the savage; and in such reciprocal use of the sexes the one is really made a res fungibilis to the other. Hence a contract that would bind any one for such mere use would be an illegal contract (pactum turpe).

In like manner, a husband and wife cannot produce a child as their mutual offspring (res artificialis) without both coming under the obligation towards it and towards each other to maintain it as their child. This relation accordingly involves the acquisition of a human being as if it were a thing, but it holds only in form according to the idea of a merely Personal Right of a real kind. The parents have a Right against any possessor of the child who may have taken it out of their power (jus in re), and they have likewise a Right to compel the child to perform and obey all their commands in so far as they are not opposed to any law of freedom (jus ad rem); and hence they have also a Personal Right over the child.

Finally, if, on attaining the age of majority, the duty of the parents in regard to the maintenance of their children ceases, they have still the Right to use them as members of the house subjected to their authority, in order to maintain the household until they are released from parental control. This Right of the parents follows from the natural limitation of the former Right. Until the children attain maturity, they belong as members of the household to the family; but thereafter they may belong to the domestics (famulatus) as servants of the household, and they can enter into this relation only by a contract whereby they are bound to the master of the house as his domestics. In like manner, a relation of master and servant may be formed outside of the family, in accordance with a personal right of a real kind on the part of the master; and the domestics are acquired to the household by contract (famulatus domesticus). Such a contract is not a mere letting and hiring of work (locatio conductio operæ); but it further includes the giving of the person of the domestic into the possession of the master, as a letting and hiring of the person (locatio conductio personæ). The latter relation is distinguished from the former in that the domestic enters the contract on the understanding that he will be available for everything that is allowable in respect of the well-being of the household, and is not merely engaged for a certain assigned and specified piece of work. On the other hand, an artisan or a day-labourer who is hired for a specific piece of work, does not give himself into the possession of another, nor is he therefore a member of his household. As the latter is not in the legal possession of his employer, who has bound him only to perform certain things, the employer, even though he should have him dwelling in his house (inquilinus), is not entitled to seize him as a thing (via facti), but must press for the performance of his engagement on the ground of personal right, by the legal means that are at his command (via juris).

So much, then, for the explanation and vindication of this new Title of Right in the Science of Natural Law, which may at first appear strange, but which has nevertheless been always tacitly in use.

IV.: Confusion of Real and Personal Right.

The proposition ‘Purchase breaks Hire’ (§ 31,) has further been objected to as a heterodoxy in the doctrine of Natural Private Right. It certainly appears at first sight to be contrary to all the Rights of contract, that any one should intimate the termination of the lease of a house to the present Lessee before the expiry of the period of occupation agreed upon; and that the former can thus, as it appears, break his promise to the latter, if he only gives him the usual warning determined by the customary and legal practice. But let it be supposed that it can be proved that the Lessee when he entered upon his contract of hire knew, or must have known, that the promise given to him by the Lessor or proprietor was naturally (without needing to be expressly stated in the contract, and therefore tacitly) connected with the condition

‘in so far as he should not sell his house within this time, or might have to renounce it on the occasion of an action on the part of his creditors.’ On this supposition the Lessor does not break his promise, which is already conditioned in itself according to reason, and the Lessee does not suffer any infringement of his Right by such an intimation being made to him before the period of lease has expired. For the Right of the latter arising from the contract of hire, is a Personal Right to what a certain person has to perform for another (jus ad rem); it is not a Real Right (jus in re) that holds against every possessor of the thing.

The Lessee might indeed secure himself in his lease and acquire a Real Right in the house; but he could do this only by having it engrossed by a reference to the house of the Lessor as attached to the soil. In this way he would provide against being dispossessed before the expiry of the time agreed upon, either by the intimation of the proprietor or by his natural death, or even by his civil death as a bankrupt. If he did not do this, because he would rather be free to conclude another lease on better conditions, or because the proprietor would not have such a burden (onus) upon his house, it is to be inferred that, in respect of the period of intimation, both parties were conscious of having made a tacit contract to dissolve their relation at any time, according to their convenience, — subject, however, to the conditions determined by the municipal law. The confirmation of the Right to break hire by purchase, may be further shown by certain juridical consequences that follow from such a naked contract of hire as is here under consideration. Thus the Heirs of the Lessee when he dies should not have the obligation imposed upon them to continue the hire, because it is only an obligation as against a certain person and should cease with his death, although here again the legal period of intimation must be always kept in view. The right of the Lessee as such can thus only pass to his heirs by a special contract. Nor, for the same reason, is he entitled even during the life of both parties, to sublet to others what he has hired for himself, without express agreement to that effect.

V.: Addition to the Explanation of the Conceptions of Penal Right.

The mere idea of a political Constitution among men involves the conception of a punitive Justice as belonging to the supreme Power. The only question, then, is to consider whether the legislator may be indifferent to the modes of punishment, if they are only available as means for the removal of crime, regarded as a violation of the Security of property in the State; or whether he must also have regard to respect for the Humanity in the person of the criminal, as related to the species; and if this latter alternative holds, whether he is to be guided by pure principles of Right, taking the jus talionis as in form the only à priori idea and determining principle of Penal Right, rather than any generalization from experience as to the remedial measures most effective for his purpose. But if this is so, it will then be asked how he would proceed in the case of crimes which do not admit of the application of this Principle of Retaliation, as being either impossible in itself, or as in the circumstances involving the perpetration of a penal offence against Humanity generally. Such, in particular, are the relations of rape, pæderasty, and bestiality. The former two would have to be punished by castration (after the manner of the white or black eunuchs in a seraglio), and the last by expulsion for ever from civil society, because the individual has made himself unworthy of human relations. Per quod quis peccat per idem punitur et idem. These crimes are called unnatural, because they are committed against all that is essential to Humanity. To punish them by arbitrary penalties, is literally opposed to the conception of a penal Justice. But even then the criminal cannot complain that wrong is done to him, since his own evil deed draws the punishment upon himself; and he only experiences what is in accordance with the spirit, if not the letter, of the penal Law which he has broken in his relation to others.

Every punishment implies something that is rightly degrading to the feeling of honour of the party condemned. For it contains a mere one-sided compulsion. Thus his dignity as a citizen is suspended, at least in a particular instance, by his being subjected to an external obligation of duty, to which he may not

oppose resistance on his side. Men of rank and wealth, when mulcted in a fine, feel the humiliation of being compelled to bend under the will of an inferior in position, more than the loss of the money. Punitive Justice (justitia punitiva), in which the ground of the penalty is moral (quia peccatum est), must be distinguished from punitive Expediency, the foundation of which is merely pragmatic (ne peccetur) as being grounded upon the experience of what operates most effectively to prevent crime. It has consequently an entirely distinct place (locus justi) in the topical arrangement of the juridical conceptions. It is neither the conception of what is conducible to a certain effect (conducibilis), nor even that of the pure Honestum, which must be properly placed in Ethics.

VI.: On the Right of Usucapion.

Referring to § 33, , it is said that 'the Right of Usucapion ought to be founded on natural right; for if it were not assumed that an ideal acquisition, as it is here called, is established by bona fide possession, no acquisition would be ever peremptorily secured.' — But I assume a merely provisory acquisition in the state of nature; and, for this reason, insist upon the juridical necessity of the civil constitution. — Further, it is said, 'I assert myself as bona fide possessor only against any one who cannot prove that he was bona fide possessor of the same thing before me, and who has not ceased by his own will to be such.' But the question here under consideration is not as to whether I can assert myself as owner of a thing although another should put in a claim as an earlier real owner of it, the cognizance of his existence as possessor and of his possessorship as owner having been absolutely impossible; which case occurs when such a one has given no publicly valid indication of his uninterrupted possession, — whether owing to his own fault or not, — as by Registration in public Records, or uncontested voting as owner of the property in civil Assemblies.

The question really under consideration is this: Who is the party that ought to prove his rightful Acquisition? This obligation as an onus probandi cannot be imposed upon the actual Possessor, for he is in possession of the thing so far back as his authenticated history reaches. The former alleged owner of it is, however, entirely separated, according to juridical principles, from the series of successive possessors by an interval of time within which he gave no publicly valid indications of his ownership. This intromission or discontinuance of all public possessory activity reduces him to an untitled claimant. But here, as in theology, the maxim holds that conservatio est continua creatio. And although a claimant, hitherto unmanifested but now provided with discovered documentary evidence, should afterwards arise, the doubt again would come up with regard to him as to whether a still older claimant might not yet appear and found a claim upon even earlier possession. — Mere length of time in possession effects nothing here in the way of finally acquiring a thing (acquirere per usucapionem). For it is absurd to suppose that what is wrong, by being long continued, would at last become right. The use of the thing, be it ever so long, thus presupposes a Right in it; whereas the latter cannot be founded upon the former. Hence Usucapion, viewed as acquisition of a thing merely by long use of it, is a contradictory conception. The prescription of claims, as a mode of securing possession (conservatio possessionis meæ per præscriptionem), is not less contradictory, although it is a different conception as regards the basis of appropriation. It is in fact a negative Principle; and it takes the complete disuse of a Right, even such as is necessary to manifest possessorship, as equivalent to a renunciation of the thing (derelictio). But such renunciation is a juridical act, and it implies the use of the Right against another, in order to exclude him by any claim (per perscriptionem) from acquiring the object; which involves a contradiction.

I acquire therefore without probation, and without any juridical act; I do not require to prove, but I acquire by the law (lege). What then do I acquire? The public release from all further claims; that is, the legal security of my possession in virtue of the fact that I do not require to bring forward the proof of it, and may now found upon uninterrupted possession. And the fact that all Acquisition in the state of Nature

is merely provisory, has no influence upon the question of Security in the Possession of what has been acquired, this consideration necessarily taking precedence before the former.

VII.: On Inheritance and Succession.

As regards the ‘Right of Inheritance,’ the acuteness of the Reviewer has here failed him, and he has not reached the nerve of the proof of my position. I do not say (§ 34,) that ‘every man necessarily accepts every thing that is offered to him, when by such acceptance he can only gain and can lose nothing;’ for there are no things of such a kind. But what I say is, that every one always in fact accepts the Right of the offer of the thing, at the moment in which it is offered, inevitably and tacitly, but yet validly; that is, when the circumstances are such that revocation of the offer is impossible, as at the moment of the Testator’s death. For the Promiser cannot then recall the offer; and the nominated Beneficiary, without the intervention of any juridical act, becomes at the moment the acceptor, not of the promised inheritance, but of the Right to accept it or decline it. At that moment he sees himself, on the opening of the Testament and before any acceptance of the inheritance, become possessed of more than he was before; for he has acquired exclusively the Right to accept, which constitutes an element of property. A Civil state is no doubt here presupposed, in order to make the thing in question the property of another person when its former owner is no more; but this transmission of the possession from the hand of the dead (mort-main) does not alter the possibility of Acquisition according to the universal Principles of Natural Right, although a Civil Constitution must be assumed in order to apply them to cases of actual experience. A thing which it is in my free choice to accept or to refuse unconditionally, is called a res jacens. If the owner of a thing offers me gratuitously a thing of this kind, — as, for instance, the furniture of a house out of which I am about to remove, — or promises it shall be mine, so long as he does not recall his offer or promise, which is impossible if he dies when it is still valid, then I have exclusively a Right to the acceptance of the thing offered (jus in re jacente); in other words, I alone can accept or refuse it, as I please. And this Right, exclusively to have the choosing of the thing, I do not obtain by means of a special juridical act, as by a declaration that ‘I will that this Right shall belong to me;’ but I obtain it without any special act on my part, and merely by the law (lege). I can therefore declare myself to this effect: ‘I will that the thing shall not belong to me’ (for the acceptance of it might bring me into trouble with others). But I cannot will to have exclusively the choice as to whether it shall or shall not belong to me; for this Right of accepting or of refusing it, I have immediately by virtue of the Offer itself, apart from any declaration of acceptance on my part. If I could refuse even to have the choice, I might choose not to choose; which is a contradiction. Now this right to choose passes at the moment of the death of the Testator to me; but although instituted heir by his Will (institutio hæredis), I do not yet, in fact, acquire any of the property of the Testator, but merely the juridical or rational possession of that property or part of it, and I can renounce it for the benefit of others. Hence this possession is not interrupted for a moment, but the Succession, as in a continuous series, passes by acceptance from the dying Testator to the heir appointed by him; and thus the proposition testamenta sunt juris naturæ is established beyond all dispute.

VIII.: The Right of the State in relation to Perpetual Foundations for the Benefit of the Subjects.

A Foundation (Sanctio testamentaria beneficii perpetui) is a voluntary beneficent institution, confirmed by the State and applied for the benefit of certain of its members, so that it is established for all the period of their existence. It is called perpetual when the ordinance establishing it is connected with the Constitution of the State; for the State must be regarded as instituted for all time. The beneficence of such a foundation applies either to the people generally, or to a class as a part of the people united by certain particular principles, or to a certain family and their descendants for ever. Hospitals present an example of the first

kind of foundations; Churches of the second; the Orders in the State (spiritual and secular) of the third; Primogeniture and Entail of the fourth.

Of these corporate institutions and their Rights of succession, it is said that they cannot be abolished; because the Right has been made the property of the appointed heirs in virtue of a legacy, and to abrogate such a constitution (corpus mysticum) would amount to taking from some one what was his.

A.: Hospitals.

Such benevolent institutions as Hospitals and other Foundations for the poor, for invalids, and for the sick, when they have been founded by the property of the State, are certainly to be regarded as indissoluble. But if the spirit, rather than the mere letter, of the will of a private Testator is to form the ground of determination, it may be that circumstances will arise in the course of time such as would make the abolition of such foundations advisable, at least in respect of their form. Thus it has been found that the poor and the sick may be better and more cheaply provided for by giving them the assistance of a certain sum of money proportionate to the wants of the time, and allowing them to board with relatives or friends, than by maintaining them in magnificent and costly institutions like Greenwich Hospital, or other similar institutions which are maintained at great expense and yet impose much restriction on personal liberty. Lunatic asylums, however, must be regarded as exceptions. In abolishing any such institutions in favour of other arrangements, the State cannot be said to be taking from the people the enjoyment of a benefit to which they have a right as their own; rather does it promote their interest by choosing wiser means for the maintenance of their rights and the advancement of their well-being.

B.: Churches.

A spiritual order, like that of the Roman Catholic Church, which does not propagate itself in direct descendants, may, under the favour of the State, possess lands with subjects attached to them, and may constitute a spiritual corporation called the Church. To this corporation the laity may, for the salvation of their souls, bequeath or give lands which are to be the property of the Church. The Roman Clergy have thus in fact acquired possessions which have been legally transmitted from one age to another, and which have been formally confirmed by Papal Bulls. Now, can it be admitted that this relation of the clergy to the laity may be annulled by the supreme power of the secular State; and would not this amount to taking violently from them what was their own, as has been attempted, for example, by the unbelievers of the French Republic?

The question really to be determined here is whether the Church can belong to the State or the State to the Church, in the relation of property; for two supreme powers cannot be subordinated to one another without contradiction. It is clear that only the former constitution (politico-hierarchica), according to which the property of the Church belongs to the State, can have proper existence; for every Civil Constitution is of this world, because it is an earthly human power that can be incorporated with all its consequences and effects in experience. On the other hand, the believers whose Kingdom is in Heaven as the other world, in so far as a hierarchico-political constitution relating to this world is conceded to them, must submit themselves to the sufferings of the time, under the supreme power of the men who act in the world. Hence the former Constitution is only in place.

Religion, as manifested in the form of belief in the dogmas of the Church and the power of the Priests who form the aristocracy of such a constitution, even when it is monarchical and papal, ought not to be forced upon the people, nor taken from them by any political power. Neither should the citizen — as is at present the case in Great Britain with the Irish Nation — be excluded from the political services of the

State, and the advantages thence arising, on account of a religion that may be different from that of the Court.

Now, it may be that certain devout and believing souls, in order to become participators of the grace which the Church promises to procure for believers even after their death, establish an institution for all time, in accordance with which, after their death, certain lands of theirs shall become the property of the Church. Further, the State may make itself to a certain extent, or entirely, the vassal of the Church, in order to obtain by the prayers, indulgences, and expiations administered by the clergy as the servants of the Church, participation in the boon promised in the other world. But such a Foundation, although presumably made for all time, is not really established as a perpetuity; for the State may throw off any burden thus imposed upon it by the Church at will. For the Church itself is an institution established on faith, and if this faith be an illusion engendered by mere opinion, and if it disappear with the enlightenment of the people, the terrible power of the Clergy founded upon it also falls. The State will then, with full right, seize upon the presumed property of the Church, consisting of the land bestowed upon it by legacies. However, the feudatories of the hitherto existing institution, may of their own right demand to be indemnified for their life interests.

In like manner, Foundations established for all time, in behoof of the poor as well as educational Institutions even supposing them to have a certain definite character impressed by the idea of their founder, cannot be held as founded for all time, so as to be a burden upon the land. The State must have the liberty to reconstitute them, in accordance with the wants of the time. No one may be surprised that it proves always more and more difficult to carry out such ideas, as for instance a provision that poor foundationers must make up for the inadequacy of the funds of their benevolent institution by singing as mendicants; for it is only natural that one who has founded a beneficent institution should feel a certain desire of glory in connection with it, and that he should be unwilling to have another altering his ideas, when he may have intended to immortalize himself by it. But this does not change the conditions of the thing itself, nor the right, and even the duty of the State, to modify any foundation when it becomes inconsistent with its own preservation and progress; and hence no such institution can be regarded as unalterably founded for all time.

C.: The Orders in the State.

The nobility of a country which is not under an aristocratic but a monarchical Constitution, may well form an institution that is not only allowable for a certain time, but even necessary from circumstances. But it cannot be maintained that such a class may be established for all time, and that the Head of the State should not have the right entirely to abolish the privileges of such a class; nor, if this be done, can it be held that thereby what belonged to the Nobility as Subjects, by way of a hereditary possession, has been taken from them. The Nobility, in fact, constitute a temporary corporation or guild, authorized by the State; and it must adapt itself to the circumstances of the time, nor may it do violence to the universal right of man, however long that may have been suspended. For the rank of the nobleman in the State is not only dependent upon the Constitution itself, but is only an accident, with a merely contingent inherence in the Constitution. A nobleman can be regarded as having a place only in the Civil Constitution, but not as having his position grounded on the state of Nature. Hence, if the State alters its constitution, no one who thereby loses his title and rank would be justified in saying that what was his own had been taken from him; because he could only call it his own under the condition of the continued duration of the previous form of the State. But the State has the right to alter its form, and even to change it into a pure Republic. The Orders in the State, and the privilege of wearing certain insignia distinctive of them, do not therefore establish any right of perpetual possession.

D.: Primogeniture and Entail.

By the Foundation of Primogeniture and Entail is meant that arrangement by which a proprietor institutes a succession of inheritance, so that the next proprietor in the series shall always be the eldest born heir of the family, after the analogy of a hereditary monarchy in the State. But such a Foundation must be regarded as always capable of being annulled with the consent of all the Agnates; and it may not be held to be instituted as for all time, like a hereditary Right attaching to the Soil. Nor, consequently, can it be said that the abrogation of it is a violation of the Foundation and Will of the first ancestral Founder. On the contrary, the State has here a Right and even a duty, in connection with gradually emerging necessity for its own Reform, if it has been once extinguished, not to allow the resuscitation of such a federative system of its subjects, as if they were viceroys or sub-kings, after the analogy of the ancient Satraps and Heads of Dynasties.

IX.: Concluding Remarks on Public Right and Absolute Submission to the Sovereign Authority.

With regard to the ideas presented under the Heading of Public Right, the Reviewer says that 'the want of room does not permit him to express himself in detail.' But he makes the following remarks on one point: 'So far as we know, no other philosopher has recognised this most paradoxical of all paradoxes, that the mere idea of a Sovereign Power should compel me to obey as my master any one who gives himself out to be my master, without asking who has given him the Right to command me? That a Sovereign Power and a Sovereign are to be recognised, and that the one or the other whose existence is not given in any way à priori is also to be regarded à priori as a master, are represented so as to be one and the same thing.' Now, while this view is admitted to be paradoxical, I hope when it is more closely considered, it will not at least be convicted of heterodoxy. Rather, indeed, may it be hoped that this penetrating, thoughtful, and modestly censuring Critic may not grudge to make a second examination of this point, nor regret to have taken the whole discussion under his protection against the pretentious and shallow utterances of others. And this all the more, in view of his statement that he 'regards these Metaphysical Principles of the Science of Right as a real gain for the Science.'

Now, it is asserted that obedience must be given to whoever is in possession of the supreme authoritative and legislative power over a people; and this must be done so unconditionally by right, that it would even be penal to inquire publicly into the title of a power thus held, with the view of calling it in doubt, or opposing it in consequence of its being found defective. Accordingly it is maintained, that 'Obey the authority which has power over you' (in everything which is not opposed to morality), is a Categorical Imperative. This is the objectionable proposition which is called in question; and it is not merely this principle which founds a right upon the fact of occupation as its condition, but it is even the very idea of a sovereignty over a people obliging me as belonging to it, to obey the presumptive right of its power, without previous inquiry (§ 44), that appears to arouse the reason of the Reviewer.

Now every fact is an object which presents itself to the senses, whereas what can only be realized by pure Reason must be regarded as an idea for which no adequately corresponding object can be found in experience. Thus a perfect juridical Constitution among men is an ideal Thing in itself.

If then a people be united by laws under a sovereign power, it is conformable to the idea of its unity as such under a supreme authoritative will, when it is in fact so presented as an object of experience. But this holds only of its phenomenal manifestation. In other words, a juridical constitution so far exists in the general sense of the term; and although it may be vitiated by great defects and coarse errors, and may be in need of important improvements, it is nevertheless absolutely unallowable and punishable to resist it. For if the people regarded themselves as entitled to oppose force to the Constitution, however defective it may be, and to resist the supreme authority, they would also suppose they had a right to substitute force for

the supreme Legislation that establishes all rights. But this would result in a supreme will that would destroy itself.

The idea of a political Constitution in general, involves at the same time an absolute command of a practical Reason that judges according to conceptions of right, and is valid for every people; and as such it is holy and irresistible. And although the organization of a State were defective in itself, yet no subordinate power in the State is entitled to oppose active resistance to its legislative Head. Any defects attaching to it ought to be gradually removed by reforms carried out on itself; for otherwise, according to the opposite maxim, that the subject may proceed according to his own private will, a good Constitution can only be realized by blind accident. The precept, 'Obey the authority that has power over you,' forbids investigating into how this power has been attained, at least with any view to undermining it. For the Power which already exists, and under which any one may be living, is already in possession of the power of Legislation; and one may, indeed, rationalize about it, but not set himself up as an opposing lawgiver.

The will of the people is naturally un-unified, and consequently it is lawless; and its unconditional subjection under a sovereign Will, uniting all particular wills by one law, is a fact which can only originate in the institution of a supreme power, and thus is public Right founded. Hence to allow a Right of resistance to this sovereignty, and to limit its supreme power, is a contradiction; for in that case it would not be the supreme legal power, if it might be resisted, nor could it primarily determine what shall be publicly right or not. This principle is involved à priori in the idea of a political Constitution generally as a conception of the practical Reason. And although no example adequately corresponding to this principle can be found in experience, yet neither can any Constitution be in complete contradiction to it when it is taken as a standard or rule.

APOLOGIA. KANT'S VINDICATION OF HIS PHILOSOPHICAL STYLE.

[IN THE PREFACE TO THE FIRST EDITION, 1796-97.]

The reproach of obscurity, and even of a studied indefiniteness affecting the appearance of profound insight, has been frequently raised against my philosophical style of exposition. I do not know how I could better meet or remove this objection than by readily accepting the condition which Garve, a philosopher in the genuine sense of the term, has laid down as a duty incumbent upon every writer, and especially on philosophical authors. And for my part, I would only restrict his injunction by the condition, that it is to be followed only so far as the nature of the science which is to be improved or enlarged will allow.

Garve wisely and rightly demands, that every philosophical doctrine must be capable of being presented in a popular form, if the expounder of it is to escape the suspicion of obscurity in his ideas; that is, it must be capable of being conveyed in expressions that are universally intelligible. I readily admit this, with the exception only of the systematic Critique of the Faculty of Reason, and all that can only be determined and unfolded by it; for all this relates to the distinction of the sensible in our knowledge from the supersensible, which is attainable by Reason. This can never be made popular, nor can any formal Metaphysic as such be popular; although their results may be made quite intelligible to the common reason, which is metaphysical without its being known to be so. In this sphere, popularity in expression is not to be thought of. We are here forced to use scholastic accuracy, even if it should have to bear the reproach of troublesomeness; because it is only by such technical language that the precipitancy of reason can be arrested, and brought to understand itself in face of its dogmatic assertions.

But if pedants presume to address the public in technical phraseology from pulpits or in popular books, and in expressions that are only fitted for the Schools, the fault of this must not be laid as a burden upon the critical philosophers, any more than the folly of the mere wordmonger (logodædalus) is to be imputed to the grammarian. The laugh should here only turn against the man and not against the science.

It may sound arrogant, egotistical, and, to those who have not yet renounced their old system, even derogatory, to assert 'that before the rise of the Critical Philosophy, there was not yet a philosophy at all.' Now, in order to be able to pronounce upon this seeming presumption, it is necessary to resolve the question as to whether there can really be more than one philosophy. There have, in fact, not only been various modes of philosophizing and of going back to the first principles of Reason in order to found a system upon them, with more or less success; but there must be many attempts of this kind of which every one has its own merit at least for the present. However, as objectively considered there can only be one human Reason, so there cannot be many Philosophies; in other words, there is only one true System of Philosophy founded upon principles, however variously and however contradictorily men may have philosophized over one and the same proposition. Thus the Moralist rightly says, there is only one virtue, and only one doctrine regarding it; that is, one single system connects all the duties of virtue by one principle. The Chemist, in like manner, says there is only one chemistry, that which is expounded by Lavoisier. The Physician, in like manner, says there is only one principle, according to Brown, in the system of classifying Diseases. But because it is held that the new systems exclude all the others, it is not thereby meant to detract from the merit of the older Moralists, Chemists, and Physicians; for without their discoveries, and even their failures, we would not have attained to the unity of the true principle of a complete philosophy in a system. Accordingly, when any one announces a system of philosophy as a production of his own, this is equivalent to saying that 'before this Philosophy there was properly no

philosophy.’ For should he admit that there had been another and a true philosophy, it would follow that there may be two true systems of philosophy regarding its proper objects; which is a contradiction. If, therefore, the Critical Philosophy gives itself forth as that System before which there had been properly no true philosophy at all, it does no more than has been done, will be done, and even must be done, by all who construct a Philosophy on a plan of their own.

Another objection has been made to my System which is of less general significance, and yet is not entirely without importance. It has been alleged that one of the essentially distinguishing elements of this Critical Philosophy is not a growth of its own, but has been borrowed from some other philosophy, or even from an exposition of Mathematics. Such is the supposed discovery, which a Tübingen Reviewer thinks he has made, in regard to the Definition of Philosophy which the author of the Critique of the Pure Reason gives out as his own, and as a not insignificant product of his system, but which it is alleged had been given many years before by another writer, and almost in the same words. I leave it to any one to judge whether the words: ‘intellectualis quædam constructio,’ could have originated the thought of the presentation of a given conception in an intuitive perception à priori, by which Philosophy is at once entirely and definitely distinguished from Mathematics. I am certain that Hausen himself would have refused to recognise this as an explanation of his expression; for the possibility of an intuitive perception à priori, and the recognition of Space as such an intuition and not the mere outward coexistence of the manifold objects of empirical perception (as Wolf defines it), would have at once repelled him, on the ground that he would have felt himself thus entangled in wide philosophical investigations. The presentation, constructed, as it were, by the Understanding, referred to by the acute Mathematician, meant nothing more than the (empirical) representation of a Line corresponding to a conception, in making which representation attention is to be given merely to the Rule, and abstraction is to be made from the deviations from it that inevitably occur in actual execution, as may be easily perceived in the geometrical construction of Equalities.

And least of all is there any importance to be laid upon the objection made regarding the spirit of this Philosophy, on the ground of the improper use of some of its terms by those who merely ape the system in words. The technical expressions employed in the Critique of the Pure Reason cannot well be replaced by others in current use, but it is another thing to employ them outside of the sphere of Philosophy in the public interchange of ideas. Such a usage of them deserves to be well castigated, as Nicolai has shown; but he even shrinks from adopting the view that such technical terms are entirely dispensable in their own sphere, as if they were adopted merely to disguise a poverty of thought. However, the laugh may be much more easily turned upon the unpopular pedant than upon the uncritical ignoramus; for in truth the Metaphysician who sticks rigidly to his system without any concern about Criticism, may be reckoned as belonging to the latter class, although his ignorance is voluntary, because he will only not accept what does not belong to his own older school. But if, according to Shaftesbury’s saying, it is no contemptible test of the truth of a predominantly practical doctrine, that it can endure Ridicule, then the Critical Philosophy must, in the course of time, also have its turn; and it may yet laugh best when it will be able to laugh last. This will be when the mere paper systems of those who for a long time have had the lead in words, crumble to pieces one after the other; and it sees all their adherents scattering away, — a fate which inevitably awaits them.

OF THE INJUSTICE OF COUNTERFEITING BOOKS

Anonymous translation, 1798

CONTENTS

Of The Injustice of Counterfeiting Books
I. Deduction of the Editor’s Right against the Counterfeiter
II. Refutation of the Counterfeiter’s pretended Right against the Editor.

Of The Injustice of Counterfeiting Books

Those who consider the publication of a book to be equivalent to the use of an author’s property in the form of a copy (whether the possessor came by it as a manuscript from the author or as a transcript of it from an actual editor), and then, however, via the reservation of certain rights, whether of the author’s or of the editor’s, who is appointed by the author, want to limit the use of the book only to this, that is, want to impose the rule that it is not permitted to counterfeit the book, cannot, based upon the rationale of this aforementioned consideration, attain this anti-counterfeiting objective. For the author’s property in his thoughts or sentiments (even if it were not granted that the concept of such thought or sentiment property has legal merit according to external laws) would remain to him regardless of whether or not that property was used or represented in the form of a counterfeit; and, since an express legal consent given by the purchaser of a book to such a limitation of their property would not likely be granted,* how much less would a merely presumed consent suffice to determine the purchaser’s obligation?

[*Footnote: Would an editor attempt to bind everybody who purchased his work to the condition, to be accused of embezzling the property of another entrusted to him, if, either intentionally, or by the purchaser’s lack of oversight, the copy which the purchaser purchased were used for the purpose of counterfeiting? Scarcely anyone would consent to this: because he would thereby expose himself to every sort of trouble about the inquiry and the defense. The work would therefore remain exclusively in the editor’s hands.]

I believe, however, that I am justified to consider the publication of a book to be not the trading of a good [in the form of a book] in the trader’s own name, but as the transacting of business in the name of another, namely, the author. [By considering the act of publication to be such a transaction], I am able to represent easily and distinctly the wrongfulness of counterfeiting books. My argument, which also proves the editor’s right, is contained in a ratiocination; after which follows a second, wherein the counterfeiter’s pretension shall be refuted.

I. Deduction of the Editor’s Right against the Counterfeiter

Whoever transacts another’s business in his name and yet against his will is obliged to give up to him, or to his attorney, all the profits that may arise therefrom, and to repair all the loss which is thereby occasioned to either the one or the other.

Now the counterfeiter is he who transacts another’s business (the author’s) against the other’s will. Therefore the counterfeiter is obliged to give up to the author or to his attorney (or the editor) [any profits from the transaction].

Proof of the Major

As the agent, who intrudes himself, acts in the name of another in a manner not permitted, he has no claim to the profit which arises from this business; but the author or editor in whose name he carries on the business, or another authorized controller of the work to whose charge the former has committed the work, possesses the right to appropriate this profit to himself, as the fruit of his property. Besides, as this agent injures the possessor’s right by intermeddling, “nullo jure,” in another’s business, he must of necessity compensate for all damages sustained. This lies without a doubt in the elementary conceptions of natural right.

Proof of the Minor

The first point of the minor is: that the editor transacts the business of the author by the publication. Here, everything depends on the conception of a book, or of a writing in general, as a labour of the author’s, and on the conception of the editor in general (be he an attorney or not). Whether a book be a commodity which the author, either through the author’s own efforts or by means of another, can traffic with the public, and can therefore transfer the ownership rights of the book, either with or without reservation of certain rights; or whether the book is instead a mere use of his works, which the author can indeed concede to others, but never transfer the ownership rights of; Again: whether the editor transacts his business in his own name, or transacts another’s business in the name of another?

In a book, as a writing, the author speaks to his reader; and he who printed it speaks by his copies not for himself, but entirely in the name of the author. The editor exhibits the author as speaking publicly, and mediates only the delivery of this speech to the public. Let the copy of this speech, whether it be in handwriting or in print, belong to whom it will; yet to use this for one’s self, or to traffic with it, is a business which every owner of it may conduct in his own name and at pleasure. But to let any one speak publicly, to publish his speech as such, means to speak in his name, and, in a way, to say to the public:

“A writer lets you know, or teaches you, this or that, etc., through me. I answer for nothing, not even for the liberty, which the writer takes, to speak publicly through me; I am but the mediator of the writer’s thoughts coming to you.”

That is no doubt a business which one can execute only in the name of another, and never in one’s own (as editor). The editor furnishes in his own name the mute instrument of the delivering of a speech of the author’s to the public;* * the editor can publish the said speech by printing, which consequently shows himself as the person through whom the author addresses the public, but he can do so only in the name of the author.

[* *Footnote: A book is the instrument of the delivering of a speech to the public, not merely of the thoughts, as pictures of a symbolical representation of an idea or of an event. What is here the most essential about it is that it is not a thing, which is thereby delivered, but is rather an opera, namely a speech, and certainly literal. In naming it a mute instrument, I distinguish it from what delivers the speech by a sound, such as a trumpet in music, or the mouths of others.]

The second point of the minor is: that the counterfeiter undertakes the author’s business, not only

without any permission from the owner, but even contrary to the owner's will. Given that he is a counterfeiter because he invades the province of another, who is authorized by the author himself to publish the work: the question is, whether the author can confer the same permission on yet another, and consent thereto. It is, however, clear that, as then each of them — the first editor and the person afterwards usurping the publication of the work (the counterfeiter) — would manage the author's business with one and the same public, the labour of the one must render that of the other useless and be ruinous to both; therefore a contract between the author and an editor that contains the corollary, to allow yet another besides the editor to venture the publication of the author's work, is impossible; consequently the author was not entitled to give the permission to any other, [including by implication a] counterfeiter), and the counterfeiter should not have even presumed this; by consequence the counterfeiting of books is a business totally contrary to the will of the proprietor, and yet undertaken in the proprietor's name.

From this ground it follows that not the author, but the editor authorized by him, suffers damages. For as the author has entirely, without reservation, given up to the editor his right to the managing of his business with the public, or to dispose of it otherwise, so the editor is the only proprietor of the transaction of this business, and the counterfeiter encroaches on the editor, but not on the author.

But as this right of transacting a business, which may be done just as well by another, is not inalienable (jus personalissimum), assuming that no corollary exists otherwise in the author's contractual agreement with the editor, so the editor, as he has been authorized to have power over the work, also has the right to transfer his right of publication to another; and as the author must consent to this, he who undertakes the business from the second hand is not a counterfeiter, but a rightfully authorized editor, i.e. one to whom the editor, who was appointed by the author, has transferred his power over the work.

II. Refutation of the Counterfeiter’s pretended Right against the Editor.

The question remains still to be answered: since the editor projects to the public the ownership over the work of the author, does not the consent of the editor (and by implication also the author, who gave the editor legal control over it) to every use of the work, including reprinting it, result automatically from ownership of a copy of the work, such that such consent is automatically furnished to whoever purchases a copy of the work, however disagreeable such consent to permit counterfeiting may be to the editor? For the prospect of profit has perhaps enticed the editor to undertake, with the risk of having the published work counterfeited, the business of editor, where this risk is more likely since the purchaser has not been excluded from counterfeiting via an express contract, because it would hurt the editor’s business if the editor tried to obligate all potential purchasers of the work to agree to a contract forbidding counterfeiting, because potential purchases would generally not consent to such an agreement and therefore would be less likely to purchase a copy of the work. My answer to this question is that the ownership of the copy does not furnish the right of counterfeiting. I prove this by the following ratiocination:

A personal positive right against another can never be derived from the ownership of a thing only.

But the right of publishing a work is a personal positive right.

Therefore, the right of publishing never can be derived from the ownership of a thing (the copy) only.

Proof of the Major

With the ownership of a thing is indeed accompanied the negative right to resist any one who would hinder me from the use of it at pleasure; but a positive right against a person, to demand of him to perform something or to be obliged to serve me in anything, cannot arise from the mere ownership of a thing. It is true this positive right might by a particular agreement be added to the purchase contract whereby I acquire a property from anybody; e.g. that, when I purchase a commodity, the seller shall also send it to a certain place free from expenses. But then the right against the person, to do something for me, does not proceed from the mere ownership of my purchased thing, but from a particular contract.

Proof of the Minor

If someone can dispose of something at pleasure in his own name, then that someone has a right to that thing. But if someone can perform only in the name of another, he transacts this business such that the other is thereby bound, as if the business were transacted by himself. (Quod quis facit per alium, ipse fecisse putandus set). Therefore my right to the transacting of a business in the name of another is a personal positive right, to necessitate the author of the business to guarantee something, namely, to answer for everything which he has done through me, or to which he obliges himself through me. The publishing of the work is now a speech to the public (by printing) in the name of the author, and is consequently a business in the name of another. Therefore the right to it is a right of the editor’s against a person: not merely to defend himself in the use of his property at pleasure against him; but to necessitate him to acknowledge and to answer for as his own a certain business, which the editor transacts in his name; consequently this is a personal positive right.

The copy, according to which the editor prints, is a work of the author’s and belongs totally to the editor after he has purchased it, either in the manuscript form or the printed form, to do with it everything the editor pleases, where said doings can be done in the editor’s own name; for that is a requisite of the complete right in a thing, i.e. ownership. But the use, which the editor cannot make of it except only in the name of another (namely the author’s), is a business (opera) that this other transacts through the owner of the copy, where in addition to the ownership of the copy, a particular contract is still requisite for other

rights to be provided to the owner of the copy.

Now, the publication of a book is a business which can only be transacted in the name of another (namely the author, whom the editor presents as speaking to the public through him); therefore the rights of transacting the business of publishing the book is separate from the rights that are associated with the ownership of a copy of the book. The right to publish the book can legally be acquired only by a particular contract with the author. Who publishes without such a contract with the author (or, if the author has already granted this right to another, i.e. to an authorized editor, without a contract with that authorized editor) is the counterfeiter, who then damages the authorized editor, and must make amends to him for all damages.

Universal Observation

That the editor transacts his business of editor not merely in his own name, but in the name of another* * * (namely the author), and without whose consent cannot transact this business at all, is confirmed from certain obligations which fix themselves according to universal acknowledgement.

[* * *Footnote: If the editor is at the same time also the author, then, however, both businesses (writing versus publishing) are different; the editor publishes as a tradesman, whereas what he published he originally wrote as a scholar or man of letter. But we may set aside such an unusual example of two different roles being held simultaneously by the same person, and restrict our exposition only to that where the editor is not at the same time the author: it will afterwards be easy to extend the consequence to the first case likewise.]

Were the author to die after he had delivered his manuscript to the editor to be printed, and the editor had previously bound himself as the authorized publisher: then the editor would not have the liberty to suppress the manuscript’s publication on the grounds that it is his property; but the public has a right, if the author left no heirs, either to force the editor to publish the book or to give up the manuscript to another who offers to publish it. For the publishing of his manuscript is a business which the author, prior to dying, had the intention to transact with the public through the editor, and for which the editor succeeds the author by becoming the agent. The public does not even need to know whether or not the author had this intention, or to agree with the author’s intention; the public acquires this right against the editor (to perform something) by the law only. For he possesses the manuscript only on the condition to use it for the purpose of a business of the author’s with the public; but this obligation towards the public remains, though that towards the author has ceased by his death. Here the argument is not built upon a right of the public to the manuscript, but upon a business with the author. Should the editor give out the author’s work, after his death, mutilated or falsified, or let the necessary number of copies for the demand be wanting; the public would thus be entitled to force him to more justness or to augment the publication, but otherwise to provide for this elsewhere. All of which would not be legally justifiable, were the editor’s right not deduced from the legal concept that the editor is transacting a business between the author and the public in the name of the author.

However, to this obligation of the editor’s, which will probably be granted, a corresponding right exists, namely, the right to all that, without which the editor’s obligation could not be fulfilled. This is: that he exercises the right of publication exclusively, because the rivalry of others in his business would render the transaction of it practically impossible for him.

Works of art, as things, may, on the other hand, be imitated or otherwise modeled, at will, from a copy of them which was rightfully acquired, and those imitations may be publicly sold, without requiring the consent of the author of the original or of the master who supervised the artist in developing the artist’s ideas. A drawing, which anyone has drawn, or had engraved by another, or executed in stone, metal, or stucco, may be copied, and the copies publicly sold; as everything, that one can perform with his thing in his own name, does not require the consent of another. Lippert’s “Dactyliotec” may be imitated by every possessor of it who understands it, and exposed to sale, and the inventor of it has no right to complain of

encroachment on his business. For it is a work (an opus, not an opera; these terms are mutually exclusive) which everybody who possesses it may, without even mentioning the name of the inventor, assume title over it, and also imitate it and use it in public trade, in his own name, as his own.

But the writing of another is the speech of a person (opera); and whoever publishes it can speak to the public only in the name of this other, and say nothing more of himself than that the author makes the following speech to the public through him (Impensis Bibliopola). For it is a contradiction, to make in his own name a speech which he knows, and conformably to the demand of the public, must be the speech of another.

The reason why all works of art of others may be imitated for public sale, but books, to which an editor is designated, dare not be counterfeited, lies in this: that artworks are works (opera), but books are acts (operae); artworks may be as things existing for themselves, but books can have their existence only in a person. Consequently, books belong to the person of the author exclusively;* * * * and the author has an inalienable right (jus personalissimum) always to speak himself through every other, that is, nobody dares make the same speech to the public except in the author's name.

[* * * *Footnote: The author, and the owner of the copy, may both say of it with equal right: "It is my book!" However, each would say this in a different sense. The author takes the book as a writing or a speech; the owner interprets the book as being the mute instrument merely of the delivering of the speech to him or to the public, that is, as a copy. The author does not have ownership rights over the thing, namely, the copy of the book (for the owner may burn that copy before the author's face); instead, the author has an innate right, in the author's own person, to wit, to hinder another from reading the copy to the public without the author's consent, which consent can by no means be presumed, because the author may have already given it exclusively to another editor.]

But while altering (abridging, augmenting or retouching) the book of another, such as to re-work the book into what is substantially a new book, such that it would be wrong to publish the new book in the name of the author of the original book, the retouching of a book, in the proper name of the publisher, is no counterfeit, and therefore is not prohibited. For here, another author transacts, via his editor, another business transaction that is different from the initial business transaction transacted by the initial author, and consequently does not intrude upon the initial author's initial business transaction with the public; he represents not that author, as speaking through him, but another. Similarly, [I believe that the unauthorized] translation of an author's work into another language cannot be considered to be a counterfeit; for the translated book is not the same speech of the author, though the thoughts may be exactly the same.

If the idea of a copyright, or of the publication of books in general, that were demonstrated in this essay, were well-understood, and precisely elaborated (which, flattering myself, I think is possible), with a formality that was at the level of Roman juridical learning, a complaint against a counterfeiter might be brought before a court, without first needing to ask for a new law to structure the due process proceedings that would govern such a lawsuit against a counterfeiter.

ON EDUCATION

Translated by Annette Churton

CONTENTS

INTRODUCTION
TRANSLATOR'S PREFACE
CHAPTER I: INTRODUCTION
CHAPTER II: PHYSICAL EDUCATION
CHAPTER III: INSTRUCTION (CULTURE)
CHAPTER IV: CULTIVATION OF THE MIND
CHAPTER V: MORAL CULTURE
CHAPTER VI: PRACTICAL EDUCATION

INTRODUCTION

Nearly a century after its original publication in Germany Immanuel Kant über Pädagogik is now for the first time presented to English readers in the translation made by Miss Annette Churton. The little work, as is well known, was not compiled for publication by the master himself. In the last years of his long life he handed over to his younger friend and former pupil, Theodor Rink, the notes he had written for his professorial courses on Physical Geography and on Pædagogics, and commissioned the latter to select and compile from the loose leaflets as much as he thought might prove serviceable to the reading public. Rink set to work and brought out the notes on education in 1803, the year before Kant's death. The lectures, it seems, were not intended, nor à fortiori the notes, to give an exhaustive theory of education, nor do they present any well-formulated body of philosophical doctrine based on either metaphysical or psychological or sociological data. Kant's chair at Königsberg University was that of logic and metaphysic, but his lecturing work — both as professor and, before that, as Privat-docent — included a number of subsidiary subjects. During the last quarter of the eighteenth century pædagogics was included as a subject of instruction in the university, certain professors taking it in turn to deliver a course of lectures thereon. When the course fell to Kant he conformed, as was his wont, to the not unusual custom of taking a standard text-book on his theme — in this connection it was that of his colleague, Prof. Bock, Ueber die Erziehungskunst (Königsberg, 1780) — as a nominal guide to procedure. But he did not allow the exposition of the book to hamper him in the original and constructive treatment of his subject. There is, indeed, no very apparent trace of Bock in these notes. The text-book, being in his hand and accessible to his hearers, probably required no memoranda for exposition and criticism of it. Whether he expounded and criticised or not, the legacy transmitted through his pupil to posterity consists simply of a number of independent reflections, of criticisms not relating to Bock, of series of apophthegms, suggestive points, aperçus, with here and there digression and repetition. Above all we feel that, according to his usual method, the master is addressing the average youth among his listeners. The toughest things of the Critiques are not drawn upon, nor is there any terminological paraphernalia to deter the listener. The Kantian ethic is there, right enough, but the teacher is feeling out after a theory of education. He is deeply interested in his theme, but his attitude towards it is inductive and experimental. He realised its importance and the magnitude of its issues, but also the imperfect and provisional nature of existing conclusions on the subject. There was his nine years' experience as a private tutor to correct any rash theorising — he used to say he had never been able to apply his own precepts in any specific case among his pupils! And his long academic career must have afforded him very varied insight into the nature of youthful development.

But it was above all the time and the man that left the thoughtful minds of the last quarter of the eighteenth century no option but to be intensely concerned with the problem of education. The doctrine of the rights of man, the conviction of the worth of the individual as such, was taking flesh to dwell among us. The child too, quâ child, had rights to be let live his child-life and enjoy his youth. Laissez mûrir l'enfance dans les enfants! pleaded the book which was the charter of the rights of the child — I allude, of course, to the Émile — they have their own ways of seeing, thinking, feeling. Be not for ever seeking the man in the child, heedless of what the child is in and for himself. He is not simply 'undeveloped man, but diverse.' His plane of being is one of transition, no doubt, yet in a way it is independent, positive, integral, a microcosm. If he die young, look on him not merely as a failure, a bud nipped off, but as one who for a while and in his own way has tasted sweet life. And see to it that life to such has been made sweet! Let the child, echoed Kant, be trained as a child and not as a Bürger. He had, of course, to be trained up in the duties he owed to a social macrocosm, but this entity was not so much a definitely

conceived state — that ideal was of the past and not yet re-born — as a vaguely comprehensive humanity of independent individuals. The child was to graduate as a Weltbürger. Nor was the community of children, nor were their claims on each other, very definitely taken into account. That also was to come. The individualism of the time saw only the Child and the Man, the nature of him overlaid by a crust of privilege, convention, and corrupt tradition. This was to be broken away; and the common nature that lay stifled beneath elicited and developed by a wholesome culture that should be all-powerful to redeem and reform. So would the moral sense innate in him sprout and burgeon, till the dignity of Man in the blossom of the Youth should stand confessed and vindicated.

Such and much more was in the air when these lecture-notes were written. And its Conjunktur had brought forth the man. Comenius and Locke, over and under a century earlier, had been fashioning him. And now Voltaire had gone to Locke comme l'enfant prodigue qui retourne chez son père, and had brought that father home to the adopted land of Rousseau. Émile saw the light in 1762, and the effect of its absorbing fascination on Kant when he opened the book is an old story. The next two decades witnessed the ideas therein put forth taking root and germinating in Kant's native land. Educational innovations were tried; educational reformers were maturing. The Philanthropist schools were founded in Germany in and after 1774, Kant taking a lively interest in the parent Philanthropin at Dessau. Bahrdt, Basedow, Campe, were avowed Rousseauists. Pestalozzi was preparing his aphorisms. Oberlin, Herder, Lessing, were in their prime; Olivier yet a youth. Herbart was in the nursery; Fichte and Froebel in the cradle.

If these slight suggestions be worked out, the reader of these Thoughts on Education will get a more lifelike background to them than if he held in his hand the defunct text-book on which Kant embroidered his lectures. Rousseau far more than Bock — the pioneer and not the pedant — is the real inspirer, I do not say of Kant's underlying principles, but of so much in these notes as indicates an inductive search for a fresh theory of education. This is patent throughout. Bock, as I have said, is never quoted. Apparently his colleague's views did not get woven up into the tissue of Kant's theorising. Rousseau, on the other hand, appears throughout, explicit and implicit, though the tender insight of the father is replaced by the relatively rigid and crude standpoints of one who had never gone in and out among infants of his own. It is Rousseau's Baby who sits enthroned in the Chair of Logic and Metaphysics of the elderly bachelor philosopher, and hears curious things said respecting his temperature, a Spartan treatment prescribed for his many tears, an impossible reasonableness in expressing his wants required of him, but a glorious freedom in dress and limb declared essential to his happiness. It is Rousseau's Child for whom Kant claims that he be brought up independent of the stunting assistance of tools and apparatus generally; that his nature, devoid of original perversity, but depending for its moral growth on right nurture, be drawn out, not repressed — be allowed the play of regulated freedom and not moulded into an automaton of habits, nor be worried by arguments appealing to faculties yet undeveloped. We do not catch distinctly in Kant's teaching the real Leitmotif of Émile, viz. education not by precepts but by 'things' — in other words by the laws of Nature. What, again, we find in Kant and not in the Émile I will outline presently. But through both works, while the ideals of liberty and equality are held up as supremely worthy, both the Stoic Prussian and the sympathetic Genevan submerge that of fraternity in the concept of the free Weltbürger, jealous of his own liberty so it encroach not on that of others, jealous for the dignity of humanity in himself and others. To the ideal of liberty Kant attained by a road peculiar to his own philosophy. As to that of equality, by his own admission it was Rousseau — l'ami de l'égalité — who had dragged him from his exclusive and aristocratic standpoint, and had made him sensible of the claims of all men on him in virtue of the common humanity in all. At times, offended by Rousseau's extreme and paradoxical conclusions couched in a style of great charm, Kant accused him, just as Rousseau himself had accused many old and newer philosophers, of attempting to trick out well-worn doctrines in new forms. Yet the profound impression made by Rousseau remained, and so too does Kant's confession remain, that never before were sagacity of mind, loftiness of genius, and sensitiveness of soul so

combined as in this man.

Thus it was during the dawn of a new era of social philosophy, during the re-birth of the art of education, that Kant compiled his lectures on pædagogics. They bear the impress of these conditions. Both dogmatic and inductive, like his critical philosophy, they show also a standpoint which is characteristic of an age that was passing, and yet affords glimpses into the future. There is the optimistic construction of man's destiny; the antithesis between man and beast, reason and instinct; there is the familiar analogy between family and state; values are not an evolutional growth, but are essential and intrinsic; nurture is all-important; nature as handicapped by heredity is not yet a problem. 'Man is nothing but what education makes of him.' There is no account taken of the wear and tear of the career, of the strain and stress of competition. That the boy's education is to be compressed or expanded from such considerations as the overcrowding of professions, the struggle for life, the race for wealth, the commercial status of his fatherland, is undreamt of in these quiet, hazy horizons.

I say 'the boy's education' — for we do not find nor should we expect to find, the problem of the education of the girl faced and discussed, even though (and indeed just because) Rousseau had supplemented Émile by Sophie. Sophie was not an individual, an integer, a potential equal among equals; she was an adjunct. In a Königsberg Chair especially she was a negligible quantity. It is true that the question of intellectual development for her, in so far as it was raised by Rousseau, made its impression upon Kant. And possibly his tutorial experience may have given him glimpses of the needs and capacities of girls for more adequate cultivation. Nevertheless the indefinite sex of his child becomes solely masculine when its more advanced training is discussed. In the second appendix to Vogt's edition of these lectures we find the problem cautiously raised — and put aside, for the same reason as Kant put aside the problem of teaching theology inductively, viz. the practical exigencies of current tradition. So the Woman bode her time.

Thus far for peruke and powder. But Kant is too great to be merely historically interesting. There is much in these lecture-notes worthy to be considered by educators for many a generation to come. Now and again the hand of the writer is on the pulse of the future. Always he is earnest, wise, and sane.

Broadly divided, education for Kant is either physical or moral, is either cultivation or moralisation of the individual. In the former what the child is capable of knowing and performing is elicited and practised. His φύσις — bodily, intellectual, emotional — is developed by nurture, discipline, and training. The pupil is 'passive' (that is, receptive) and not self-determined. In the latter the Character is formed; the reason becomes established as 'practical or pragmatic;' that is, as moral and self-determining. This can only be effected through those 'maxims' or subjective laws which are implicate in the reason, but are not evolved till the reason attains to self-expression; that is, to the concepts of duty and law. Till then the child is unmoral. Then he does good because it is good, and not from specific motives. This is the coming of age of the moralisation of the individual. And as compared with the amount of 'physical' education bestowed, Kant held we were very far from realising the need for that other kind of culture. For to 'moralise' a child, recourse must not be had to the usual incentives of discipline — habits, imitation, rewards, punishments. Moral conduct entails a fresh fiat of the practical reason every time the individual is confronted by the need of moral choice. If the child infringe the moral law, the teacher must resent it as an offence against one or more individuals as moral. For Kant, then, the problem of education resolved itself into that of Indeterminism — how to constrain the child without enslaving his moral freedom; how to compel the will, while fitting it to use its liberty. For Rousseau, mindful of an external cosmos of Nature, it resolved itself into an equation between faculties and desires in man's task of 'measuring himself avec tout ce qui l'environne.'

That the ultimate ideal of education is nothing less than the perfection of human nature was set by Kant in the forefront of his course. And it is not a goal to be attained by a few elect individuals. Academic aristocracy is waved aside by his all-embracing faith: 'Not particular human beings but the human race is

to attain it.’ He does not in these notes attempt any philosophical definition or criterion of perfection. We of to-day, as he here says, are not by any means clear on that point. But it is impressive to find the old man not only demanding much of human character, but believing to the last in his dictum: Du kannst denn du sollst.

It is worth while noticing that both Kant and Rousseau, at least implicitly, teach that the proximate ideal best conducing towards that ultimate end is not citizenship, nor fraternity, but fatherhood. For Kant the boy’s training culminates and ceases when he is old enough to have children of his own. And there is nothing wanting in the emphasis laid on the mission of the father in the Émile. What, truly, would be left of most of our painful social problems were all parents always at their best and wisest in intercourse with their children? And who shall say whether we may not come to see progress in concentrating the goal of boyhood in proportion as we expand that of girlhood?

Finally, as to those who should educate the fathers of the coming generation, Kant has left a word pregnant with the future far more than he himself was aware, and going far beyond the educational range of the time. ‘The whole race’ — not a group of cities here and there, or an epoch now and then— ‘the whole race must educate the individual.’ Though, as he has said, it be chiefly through the agency of ‘those who know,’ it is all humanity, past and present, that must minister to the development of the child, by whom in his or her turn, when rightly trained, the whole race, both present and future and past, is served.

Our modern pædagogics will in no wise suffer from keeping in view Kant’s wide and high prospect. And for the general English reader, in whose eyes Kant still counts, most inaccurately, as a mainly speculative thinker, it should prove a benefit to come to know, through Miss Churton’s translation, some of the less known workings of a mind whose influence on modern philosophic and scientific thought has scarcely been surpassed.

C. A. Foley Rhys Davids.

TRANSLATOR'S PREFACE

The text adopted in this translation of Kant's 'Pädagogik' is that of Dr. Theodor Vogt (Langensalza, second edition, 1883). I have, however, compared this throughout with the original edition of Friedrich Theodor Rink (Königsberg, 1803) and with that of Rosenkranz and Schubert (Kant's Werke, 1838), and wherever Vogt differs materially from the older editions the different reading has been quoted in a footnote. In a few places where Vogt's text was obviously corrupt it has been supplemented by the reading of the original edition.

I should like to take this opportunity of expressing my thanks to Dr. Winternitz of Oxford for his kindness in revising the MS., and to Mrs. Rhys Davids for many valuable suggestions.

CHAPTER I: INTRODUCTION

Education includes nurture, discipline, instruction, and moral training

1. Man is the only being who needs education. For by education we must understand nurture (the tending and feeding of the child), discipline (Zucht), and teaching, together with culture. According to this, man is in succession infant (requiring nursing), child (requiring discipline), and scholar (requiring teaching).

Man needs nurture: animals do not

2. Animals use their powers, as soon as they are possessed of them, according to a regular plan — that is, in a way not harmful to themselves.

It is indeed wonderful, for instance, that young swallows, when newly hatched and still blind, are careful not to defile their nests.

Animals therefore need no nurture, but at the most, food, warmth, and guidance, or a kind of protection. It is true, most animals need feeding, but they do not require nurture. For by nurture we mean the tender care and attention which parents must bestow upon their children, so as to prevent them from using their powers in a way which would be harmful to themselves. For instance, should an animal cry when it comes into the world, as children do, it would surely become a prey to wolves and other wild animals, which would gather round, attracted by its cry.

Man needs discipline: animals have instinct to guide them

3. Discipline changes animal nature into human nature. Animals are by their instinct all that they ever can be; some other reason has provided everything for them at the outset. But man needs a reason of his own. Having no instinct, he has to work out a plan of conduct for himself. Since, however, he is not able to do this all at once, but comes into the world undeveloped, others have to do it for him.

Discipline is merely negative

4. All the natural endowments of mankind must be developed little by little out of man himself, through his own effort.

One generation educates the next. The first beginnings of this process of educating may be looked for either in a rude and unformed, or in a fully developed condition of man. If we assume the latter to have come first, man must at all events afterwards have degenerated and lapsed into barbarism.

It is discipline, which prevents man from being turned aside by his animal impulses from humanity, his appointed end. Discipline, for instance, must restrain him from venturing wildly and rashly into danger. Discipline, thus, is merely negative, its action being to counteract man's natural unruliness. The positive part of education is instruction.

Unruliness consists in independence of law. By discipline men are placed in subjection to the laws of mankind, and brought to feel their constraint. This, however, must be accomplished early. Children, for instance, are first sent to school, not so much with the object of their learning something, but rather that they may become used to sitting still and doing exactly as they are told. And this to the end that in later life they should not wish to put actually and instantly into practice anything that strikes them.

The necessity of discipline in early life

5. The love of freedom is naturally so strong in man, that when once he has grown accustomed to freedom, he will sacrifice everything for its sake. For this very reason discipline must be brought into play very early; for when this has not been done, it is difficult to alter character later in life. Undisciplined men are apt to follow every caprice.

We see this also among savage nations, who, though they may discharge functions for some time like Europeans, yet can never become accustomed to European manners. With them, however, it is not the

noble love of freedom which Rousseau and others imagine, but a kind of barbarism — the animal, so to speak, not having yet developed its human nature. Men should therefore accustom themselves early to yield to the commands of reason, for if a man be allowed to follow his own will in his youth, without opposition, a certain lawlessness will cling to him throughout his life. And it is no advantage to such a man that in his youth he has been spared through an over-abundance of motherly tenderness, for later on all the more will he have to face opposition from all sides, and constantly receive rebuffs, as soon as he enters into the business of the world.

It is a common mistake made in the education of those of high rank, that because they are hereafter to become rulers they must on that account receive no opposition in their youth. Owing to his natural love of freedom it is necessary that man should have his natural roughness smoothed down; with animals, their instinct renders this unnecessary.

Man needs instruction: animals, as a rule, do not

6. Man needs nurture and culture. Culture includes discipline and instruction. These, as far as we know, no animal needs, for none of them learn anything from their elders, except birds, who are taught by them to sing; and it is a touching sight to watch the mother bird singing with all her might to her young ones, who, like children at school, stand round and try to produce the same tones out of their tiny throats. In order to convince ourselves that birds do not sing by instinct, but that they are actually taught to sing, it is worth while to make an experiment. Suppose we take away half the eggs from a canary, and put sparrow’s eggs in their place, or exchange young sparrows for young canaries; if the young birds are then brought into a room where they cannot hear the sparrows outside, they will learn the canary’s song, and we thus get singing sparrows. It is, indeed, very wonderful that each species of bird has its own peculiar song, which is preserved unchanged through all its generations; and the tradition of the song is probably the most faithful in the world.

It is only through education that the perfecting of man’s nature can be accomplished

7. Man can only become man by education. He is merely what education makes of him. It is noticeable that man is only educated by man — that is, by men who have themselves been educated. Hence with some people it is want of discipline and instruction on their own part, which makes them in turn unfit educators of their pupils. Were some being of higher nature than man to undertake our education, we should then be able to see what man might become. It is, however, difficult for us accurately to estimate man’s natural capabilities, since some things are imparted to man by education, while other things are only developed by education. Were it possible, by the help of those in high rank, and through the united forces of many people, to make an experiment on this question, we might even by this means be able to gain some information as to the degree of eminence which it is possible for man to attain. But it is as important to the speculative mind, as it is sad to one who loves his fellow-men, to see how those in high rank generally care only for their own concerns, and take no part in the important experiments of education, which bring our nature one step nearer to perfection.

There is no one who, having been neglected in his youth, can come to years of discretion without knowing whether the defect lies in discipline or culture (for so we may call instruction). The uncultivated man is crude, the undisciplined is unruly. Neglect of discipline is a greater evil than neglect of culture, for this last can be remedied later in life, but unruliness cannot be done away with, and a mistake in discipline can never be repaired. It may be that education will be constantly improved, and that each succeeding generation will advance one step towards the perfecting of mankind; for with education is involved the great secret of the perfection of human nature. It is only now that something may be done in this direction, since for the first time people have begun to judge rightly, and understand clearly, what actually belongs to a good education. It is delightful to realise that through education human nature will be continually improved, and brought to such a condition as is worthy of the nature of man. This opens out to us the prospect of a happier human race in the future.

The theory of education is a glorious ideal; none the less worthy of our aim because it has not yet been realised

8. The prospect of a theory of education is a glorious ideal, and it matters little if we are not able to realise it at once. Only we must not look upon the idea as chimerical, nor decry it as a beautiful dream, notwithstanding the difficulties that stand in the way of its realisation.

An idea is nothing else than the conception of a perfection which has not yet been experienced. For instance, the idea of a perfect republic governed by principles of justice — is such an idea impossible, because it has not yet been experienced?

Our idea must in the first place be correct, and then, notwithstanding all the hindrances that still stand in the way of its realisation, it is not at all impossible. Suppose, for instance, lying to become universal, would truth-speaking on that account become nothing but a whim? And the idea of an education which will develop all man's natural gifts is certainly a true one.

This plan of an adequate education may be gradually realised

9. Under the present educational system man does not fully attain to the object of his being; for in what various ways men live! Uniformity can only result when all men act according to the same principles, which principles would have to become with them a second nature. What we can do is to work out a scheme of education better suited to further its objects, and hand down to posterity directions as to how this scheme may be carried into practice, so that they might be able to realise it gradually. Take the auricula as an example. When raised from a root this plant bears flowers of one colour only; when raised from seed, the flowers are of the most varied colours. Nature has placed these manifold germs in the plant, and their development is only a question of proper sowing and planting. Thus it is with man.

True education should have for its aim the development of natural gifts, and the fulfilment of man's destiny

10. There are many germs lying undeveloped in man. It is for us to make these germs grow, by developing his natural gifts in their due proportion, and to see that he fulfils his destiny. Animals accomplish this for themselves unconsciously. Man must strive to attain it, but this he cannot do if he has not even a conception as to the object of his existence. For the individual it is absolutely impossible to attain this object. Let us suppose the first parents to have been fully developed, and see how they educate their children. These first parents set their children an example, which the children imitate and in this way develop some of their own natural gifts. All their gifts cannot, however, be developed in this way, for it all depends on occasional circumstances what examples children see. In times past men had no conception of the perfection to which human nature might attain — even now we have not a very clear idea of the matter. This much, however, is certain: that no individual man, no matter what degree of culture may be reached by his pupils, can insure their attaining their destiny. To succeed in this, not the work of a few individuals only is necessary, but that of the whole human race.

Since such development can only be brought about gradually in the course of generations, education is an art

11. Education is an art which can only become perfect through the practice of many generations. Each generation, provided with the knowledge of the foregoing one, is able more and more to bring about an education which shall develop man's natural gifts in their due proportion and in relation to their end, and thus advance the whole human race towards its destiny. Providence has willed, that man shall bring forth for himself the good that lies hidden in his nature, and has spoken, as it were, thus to man. 'Go forth into the world! I have equipped thee with every tendency towards the good. Thy part let it be to develop those tendencies. Thy happiness and unhappiness depend upon thyself alone.'

This development must be a development towards the good: a great and most difficult problem

12. Man must develop his tendency towards the good. Providence has not placed goodness ready formed in him, but merely as a tendency and without the distinction of moral law. Man's duty is to

improve himself; to cultivate his mind; and, when he finds himself going astray, to bring the moral law to bear upon himself. Upon reflection we shall find this very difficult. Hence the greatest and most difficult problem to which man can devote himself is the problem of education. For insight depends on education, and education in its turn depends on insight. It follows therefore that education can only advance by slow degrees, and a true conception of the method of education can only arise when one generation transmits to the next its stores of experience and knowledge, each generation adding something of its own before transmitting them to the following. What vast culture and experience does not this conception presuppose? It could only be arrived at at a late stage, and we ourselves have not fully realised this conception. The question arises, Should we in the education of the individual imitate the course followed by the education of the human race through its successive generations?

There are two human inventions which may be considered more difficult than any others — the art of government, and the art of education; and people still contend as to their very meaning.

The development is more conceivable in an already civilised state of society

13. But in developing human talents where are we to take our stand? Shall we begin with a rude, or with an already developed state of society?

It is difficult to conceive a development from a state of rudeness (hence it is so difficult to understand what the first man was like), and we see that in a development out of such a condition man has invariably fallen back again into that condition, and has raised himself out of it. In the earliest records of even very civilised nations we still find a distinct taint of barbarism, and yet how much culture is presupposed for mere writing to be possible! So much so that, with regard to civilised people, the beginning of the art of writing might be called the beginning of the world.

The origin and the carrying out of the art of education must not be merely mechanical; they must involve the exercise of judgment

14. Since the development of man's natural gifts does not take place of itself, all education is an art. Nature has placed no instinct in him for that purpose. The origin as well as the carrying out of this art is either mechanical and without plan, ruled by given circumstances, or it involves the exercise of judgment. The art of education is only then mechanical, when on chance occasions we learn by experience whether anything is useful or harmful to man. All education which is merely mechanical must carry with it many mistakes and deficiencies, because it has no sure principle to work upon. If education is to develop human nature so that it may attain the object of its being, it must involve the exercise of judgment. Educated parents are examples which children use for their guidance. If, however, the children are to progress beyond their parents, education must become a study, otherwise we can hope for nothing from it, and one man whose education has been spoilt will only repeat his own mistakes in trying to educate others. The mechanism of education must be changed into a science, and one generation may have to pull down what another had built up.

15. One principle of education which those men especially who form educational schemes should keep before their eyes is this — children ought to be educated, not for the present, but for a possibly improved condition of man in the future; that is, in a manner which is adapted to the idea of humanity and the whole destiny of man. This principle is of great importance. Parents usually educate their children merely in such a manner that, however bad the world may be, they may adapt themselves to its present conditions. But they ought to give them an education so much better than this, that a better condition of things may thereby be brought about in the future.This principle is overlooked by parents when they look merely to worldly position, and by princes when they look merely to the usefulness of individuals for the state

16. Here, however, we are met by two difficulties — (a) parents usually only care that their children make their way in the world, and (b) Sovereigns look upon their subjects merely as tools for their own purposes.

Parents care for the home, rulers for the state. Neither have as their aim the universal good and the

perfection to which man is destined, and for which he has also a natural disposition. But the basis of a scheme of education must be cosmopolitan. And is, then, the idea of the universal good harmful to us as individuals?The basis of education should be cosmopolitan Never! for though it may appear that something must be sacrificed by this idea, an advance is also made towards what is the best even for the individual under his present conditions. And then what glorious consequences follow! It is through good education that all the good in the world arises. For this the germs which lie hidden in man need only to be more and more developed; for the rudiments of evil are not to be found in the natural disposition of man. Evil is only the result of nature not being brought under control. In man there are only germs of good.

We must approach this goal chiefly through the efforts of private individuals

17. But by whom is the better condition of the world to be brought about? By rulers or by their subjects? Is it by the latter, who shall so improve themselves that they meet half-way the measures for their good which the government might establish? Were it to depend upon rulers, their own education will first have to be improved, for this has for a long time suffered, owing to the great mistake that they have been allowed to meet with no opposition in their youth.

A tree which stands in a field alone grows crooked and spreads wide its branches; while a tree which stands in the middle of a forest, with the pressure of other trees around, grows tall and straight, seeking air and sunshine from above. It is the same with rulers. In any case it is always better that they should be educated by some one among their subjects, rather than by one of themselves. We can therefore only expect progress to be brought about by rulers if their education has been of a higher kind than that of their subjects.

It depends, then, mainly upon private effort, and not so much on the help of rulers, as Basedow and others supposed; for we find by experience that they have not the universal good so much in view, as the well-being of the state, whereby they may attain their own ends. If, however, they provide funds for this object, the drawing up of the scheme must be deferred to them. So it is with everything which concerns the perfection of man’s intellect and the widening of his knowledge. Influence and money alone cannot do it; they can only lighten the task. They might do it, if only the financial authorities of the state were not so anxious to calculate beforehand the interests which any sums spent for this purpose might bear for the treasury. Even academic bodies hitherto have not undertaken the task, and the likelihood that they will do so in the future is now as small as ever.

The management of schools ought, then, to depend entirely upon the judgment of the most enlightened experts. All culture begins with the individual, one man gradually influencing others. It is only through the efforts of people of broader views, who take an interest in the universal good, and who are capable of entertaining the idea of a better condition of things in the future, that the gradual progress of human nature towards its goal is possible. Do we not still meet, now and then, with a ruler who looks upon his people merely as forming part of the animal kingdom, and whose aim it is merely to propagate the human species? If he considers the subject of training the intellect at all, it is merely in order that his people may be of more use to him in working out his own ends. It is, of course, necessary for private individuals to keep this natural end in view, but they must also bear in mind more particularly the development of mankind, and see to it that men become not only clever, but good; and, what is most difficult, they must seek to bring posterity nearer to a state of perfection than they have themselves attained.

Education includes (1) Discipline (2) Culture (3) Discretion (4) Moral training

18. Through education, then, man must be made —

First, subject to discipline; by which we must understand that influence which is always restraining our animal nature from getting the better of our manhood, either in the individual as such, or in man as a member of society. Discipline, then, is merely restraining unruliness.

Secondly, education must also supply men with culture. This includes information and instruction. It is culture which brings out ability. Ability is the possession of a faculty which is capable of being adapted

to various ends. Ability, therefore, does not determine any ends, but leaves that to circumstances as they arise afterwards.

Some accomplishments are essentially good for everybody — reading and writing, for instance; others, merely in the pursuit of certain objects, such as music, which we pursue in order to make ourselves liked. Indeed, the various purposes to which ability may be put are almost endless.

Thirdly, education must also supply a person with discretion (Klugheit), so that he may be able to conduct himself in society, that he may be liked, and that he may gain influence. For this a kind of culture is necessary which we call refinement (Civilisierung). The latter requires manners, courtesy, and a kind of discretion which will enable him to use all men for his own ends. This refinement changes according to the ever-changing tastes of different ages. Thus some twenty or thirty years ago ceremonies in social intercourse were still the fashion.

Fourthly, moral training must form a part of education. It is not enough that a man shall be fitted for any end, but his disposition must be so trained that he shall choose none but good ends — good ends being those which are necessarily approved by everyone, and which may at the same time be the aim of everyone.

Moral training is still too much neglected

19. Man may be either broken in, trained, and mechanically taught, or he may be really enlightened. Horses and dogs are broken in; and man, too, may be broken in.

It is, however, not enough that children should be merely broken in; for it is of greater importance that they shall learn to think. By learning to think, man comes to act according to fixed principles and not at random. Thus we see that a real education implies a great deal. But as a rule, in our private education the fourth and most important point is still too much neglected, children being for the most part educated in such a way that moral training is left to the Church. And yet how important it is that children should learn from their youth up to detest vice; — not merely on the ground that God has forbidden it, but because vice is detestable in itself. If children do not learn this early, they are very likely to think that, if only God had not forbidden it, there would be no harm in practising wickedness, and that it would otherwise be allowed, and that therefore He would probably make an exception now and then. But God is the most holy being, and wills only what is good, and desires that we may love virtue for its own sake, and not merely because He requires it.

We live in an age of discipline, culture, and refinement, but we are still a long way off from the age of moral training. According to the present conditions of mankind, one might say that the prosperity of the state grows side by side with the misery of the people. Indeed, it is still a question whether we should not be happier in an uncivilised condition, where all the culture of the present time would find no place, than we are in the present state of society; for how can man be made happy, unless he is first made wise and good? And until this is made our first aim the amount of evil will not be lessened.

The need of experimental schools

20. Experimental schools must first be established before we can establish normal schools. Education and instruction must not be merely mechanical; they must be founded upon fixed principles; although at the same time education must not merely proceed by way of reasoning, but must be, in a certain sense, mechanical.

In Austria the greater number of schools used to be normal schools, and these were founded and carried on after a fixed plan, against which much has been said, not without reason. The chief complaint against them was this, that the teaching in them was merely mechanical. But all other schools were obliged to form themselves after the pattern of these normal schools, because government even refused to promote persons who had not been educated in these schools. This is an example of how government might interfere in the education of subjects, and how much evil might arise from compulsion.

People imagine, indeed, that experiments in education are unnecessary, and that we can judge from our

reason whether anything is good or not. This is a great mistake, and experience teaches us that the results of an experiment are often entirely different from what we expected.

Thus we see that, since we must be guided by experiments, no one generation can set forth a complete scheme of education. The only experimental school which had in a measure made a beginning to clear the way was the Dessau Institute. This must be said in its praise, in spite of the many mistakes with which we might reproach it — mistakes which attend all conclusions made from experiments — namely, that still more experiments are required.

This school was in a certain way the only one in which the teachers were free to work out their own methods and plans, and in which the teachers were in communication with each other and with all the learned men of Germany.

For educators we may say education consists of (1) Maintenance (the work of parents), (2) Instruction (the work of school-teachers), and (3) Guidance (the work of private tutors)

21. Education includes the nurture of the child and, as it grows, its culture. The latter is firstly negative, consisting of discipline; that is, merely the correcting of faults. Secondly, culture is positive, consisting of instruction and guidance (and thus forming part of education). Guidance means directing the pupil in putting into practice what he has been taught. Hence the difference between a private teacher who merely instructs, and a tutor or governor who guides and directs his pupil. The one trains for school only, the other for life.

Education is either private or public

22. Education is either private or public. The latter is concerned only with instruction, and this can always remain public. The carrying out of what is taught is left to private education. A complete public education is one which unites instruction and moral culture. Its aim is to promote a good private education. A school which does this is called an educational institute. There cannot be many such institutions, and the number of children in them can be but small, since the fees must of necessity be high, for the institutions require elaborate management, which entails a good deal of expense. It is the same as with almshouses and hospitals. The buildings required for them, and the salaries of directors, overseers, and servants, take away at once half of the funds, so that there can be no doubt that the poor would be better provided for, if all that money were sent direct to their houses. For this reason it is also difficult to provide that any but the children of rich people should share in these institutions.

The aim of public education is the perfecting of home education

23. The object of such public institutions as these is the improvement of home education. If only parents, or those who are their fellowhelpers in the work of education, were well educated themselves, the expense of public institutions might be avoided. The purpose of these institutions is to make experiments, and to educate individuals, so that in time a good private education may arise out of these public institutions.

Home education and its chief difficulty

24. Home education is carried on either by the parents themselves, or, should the parents not have the time, aptitude, or inclination for it, by others who are paid to assist them in it. But in education which is carried on by these assistants one very great difficulty arises — namely, the division of authority between parent and teacher. The child is called upon to obey the teacher's rule, and at the same time to follow his parents' whims. The only way out of this difficulty is for the parents to surrender the whole of their authority to the tutor.

Public education is, on the whole, the best

25. How far, then, has home education an advantage over public education, or vice versâ? Regarded not only from the point of view of developing ability, but also as a preparation for the duties of a citizen, it must, I am inclined to think, be allowed that, on the whole, public education is the best. Home education frequently not only fosters family failings, but tends to continue these failings in the new

generation.

Education should continue till about the sixteenth year

26. How long, then, should education last? Till the youth has reached that period of his life when nature has ordained that he shall be capable of guiding his own conduct; when the instinct of sex has developed in him, and he can become a father himself, and have to educate his own children. This period is generally reached about the sixteenth year. After this we may still make use of some means of culture, and secretly exercise some discipline; but of education in the ordinary sense of the word we shall have no further need.

The first period of a child's training is one of mechanical, the second one of moral constraint

27. In the first period of childhood the child must learn submission and positive obedience. In the next stage he should be allowed to think for himself, and to enjoy a certain amount of freedom, although still obliged to follow certain rules. In the first period there is a mechanical, in the second a moral constraint.

Submission is either positive or negative

28. The child's submission is either positive or negative. Positive in that he is obliged to do what he is told, because he cannot judge for himself, and the faculty of imitation is still strong in him; or negative, in that he is obliged to do what others wish him to do, if he wishes others to do him a good turn. In the former case, the consequence of not obeying is punishment; in the latter, the fact that people do not comply with his wishes. He is in this case, though capable of thinking for himself, dependent on others with regard to his own pleasure.

In the development of moral constraint it is necessary to unite submission with the exercise of freewill by the child

29. One of the greatest problems of education is how to unite submission to the necessary restraint with the child's capability of exercising his freewill — for restraint is necessary. How am I to develop the sense of freedom in spite of the restraint? I am to accustom my pupil to endure a restraint of his freedom, and at the same time I am to guide him to use his freedom aright. Without this all education is merely mechanical, and the child, when his education is over, will never be able to make a proper use of his freedom. He should be made to feel early the inevitable opposition of society, that he may learn how difficult it is to support himself, to endure privation, and to acquire those things which are necessary to make him independent.

The child should be allowed perfect liberty, while at the same time he must be taught to respect the liberty of others, and submit himself to a restraint which will lead to a right use of future liberty

30. Here we must observe the following: —

First, we must allow the child from his earliest childhood perfect liberty in every respect (except on those occasions when he might hurt himself — as, for instance, when he clutches at a knife), provided that in acting so he does not interfere with the liberty of others. For instance, as soon as he screams or is too boisterously happy, he annoys others.

Secondly, he must be shown that he can only attain his own ends by allowing others to attain theirs. For instance, should he be disobedient, or refuse to learn his lessons, he ought to be refused any treat he may have been looking forward to.

Thirdly, we must prove to him that restraint is only laid upon him that he may learn in time to use his liberty aright, and that his mind is being cultivated so that one day he may be free; that is, independent of the help of others. This is the last thing a child will come to understand. It is much later in life that children realise such facts as that they will afterwards have to support themselves; for they imagine that they can always go on as they are in their parents' house, and that food and drink will always be provided for them without any trouble on their part. Indeed, unless children, and especially the children of rich parents and princes, are made to realise this, they are like the inhabitants of Otaheiti, who remain children all their lives.

The wholesome competition of school life

Again, we see the advantage of public education in that under such a system, we learn to measure our powers with those of others, and to know the limits imposed upon us by the rights of others. Thus we can have no preference shown us, because we meet with opposition everywhere, and we can only make our mark and obtain an advantage over others by real merit. Public education is the best school for future citizens.

There is yet another difficulty to be mentioned here — that is, the difficulty of anticipating the knowledge of sexual matters in such a manner as to prevent vice at the very outset of manhood. This, however, will be discussed later on.

Education may be divided into physical and ‘practical’

31. Education is either physical or ‘practical.’ One part of physical education is that which man has in common with animals, namely, feeding and tending. ‘Practical’ or moral training is that which teaches a man how to live as a free being. (We call anything ‘practical’ which has reference to freedom.) This is the education of a personal character, of a free being, who is able to maintain himself, and to take his proper place in society, keeping at the same time a proper sense of his own individuality.

(1) Instruction makes man valuable as an individual (for himself) (2) Practical education makes him valuable as a citizen (for the state and society) (3) Moral training makes him valuable as a human being (for mankind)

32. This ‘practical’ education consists, then, of three parts: —

(a) The ordinary curriculum of the school, where the child’s general ability is developed — the work of the schoolmaster.

(b) Instruction in the practical matters of life — to act with wisdom and discretion — the work of the private tutor or governess.

(c) The training of moral character.

Men need the training of school-teaching or instruction to develop the ability necessary to success in the various vocations of life. School-teaching bestows upon each member an individual value of his own.

Next, by learning the lesson of discretion in the practical matters of life, he is educated as a citizen, and becomes of value to his fellow-citizens, learning both how to accommodate himself to their society and also how to profit by it.

Lastly, moral training imparts to man a value with regard to the whole human race.

School-teaching is the earliest, moral training the last, in order of time

33. Of these three divisions of education school-teaching comes first in order of time; for a child’s abilities must first be developed and trained, otherwise he is incapable of gaining knowledge in the practical matters of life. Discretion is the faculty of using our abilities aright.

Moral training, in as far as it is based upon fundamental principles which a man must himself comprehend, comes last in order of time. In so far, however, as it is based on common sense merely, it must be taken into account from the beginning, at the same time with physical training; for if moral training be omitted, many faults will take root in the child, against which all influences of education at a later stage will be powerless. As to ability and the general knowledge of life, everything must depend entirely upon the age of the pupil. Let a child be clever after the manner of children; let him be shrewd and good-natured in a childish way, but not cunning (listig) like a man. The latter is as unsuitable for a child as a childish mind is for a grown-up person.

CHAPTER II: PHYSICAL EDUCATION

The private tutor, as the confidant of the parents, should know something of the physical training of children

34. Although those who undertake the home education of children do not have them entrusted to their care so early as to have charge of their physical education, at the same time it is useful for them to know all that is necessary to carry out this part of a child's education from first to last. Though the tutor may only have to do with older children, it may happen that others may be born in the house, and if he conducts himself wisely he will always have a claim to become the confidant of the parents, and to be consulted about the physical training of the little ones; the more so as often the tutor is the only well-educated person in the house. He should therefore have previously made himself acquainted with the subject of the physical education of children.

35. Physical training, properly speaking, consists merely in the tending and feeding of the child, usually the work of parents or nurses.

The mother's milk is the best nourishment for infants

The nourishment which Nature has provided for the infant is the mother's milk, and it is better for both when the mother is able to nurse her child. That the child's disposition is affected in this way, however, is mere prejudice, though one often hears it said of some trait of character: 'You have imbibed that with your mother's milk.'

We must, however, make an exception in extreme cases, such as when the mother's condition is unhealthy. It was formerly believed that the first milk given by the mother after the birth of the infant, which resembles whey, is unwholesome, and must first be removed before the child is nursed.

Rousseau, however, called the attention of physicians to this point, to ascertain whether this first milk might not be useful to the child, since Nature has made nothing in vain, and it was actually found that the refuse which is always met with in a new-born child, which is known among doctors as meconium, is best removed by this milk, which is therefore useful and not harmful to the child.

Animal's milk is a poor substitute

36. The question has been asked whether an infant might not be as well brought up on the milk of animals; but human milk is very different in substance from the milk of animals. The milk of all those animals which live on grass and vegetables very soon curdles, if anything sour is added to it — tartaric acid, for instance, citric acid, or especially the acid of rennet. Human milk, on the other hand, does not curdle. But should the mother or nurse take a vegetable diet for a few days, her milk will curdle in the same way as cows' milk, &c.; though when she has returned to a meat diet for a little while, her milk will again become as good as ever. From this it has been concluded that it is best and most healthy for the mother or nurse to eat meat during the nursing period. When children throw up the milk, it is found to be curdled. The acid in the child's stomach must therefore accelerate the curdling of the milk more than any other kind of acid, since human milk cannot be brought to curdle in the ordinary way. How much worse would it be if milk were given to the child which curdled of itself! We see, however, from the customs of other nations with regard to the bringing up of their infants, that everything does not depend on this.

There is a certain tribe of Russians in Asia who eat scarcely anything but meat, and are a strong and healthy people. They are not, however, very long lived, and are of such a slight build that a full-grown youth, whom one would hardly expect to be so light, can be carried as easily as a child. On the other hand Swedes, and more particularly Indian nations, eat scarcely any meat, and yet their men are tall and well-formed. It seems, then, from these cases that all depends on the good health of the nurse, and that the best diet for mother or nurse is that which best agrees with her.

After milk meal may be given, but no wine, spices, or salt

37. The question here arises as to how the child is to be fed if the mother's milk should cease. For some time past all sorts of farinaceous foods have been tried, but such food is not good for the child from the beginning.

We must especially bear in mind that nothing stimulating be given to the child, such as wine, spices, salt, &c. It is a singular fact, however, that children have such a strong craving for things of this sort; this is because they act as a stimulant, and arouse their as yet undeveloped appetites in a manner pleasant to them. In Russia, it is true, children are given brandy to drink by their parents, who are great brandy-drinkers themselves, and it has been noticed that the Russians are a strong and healthy people. Certainly the fact of their being able to stand such a habit proves that they must have a good constitution: nevertheless, it is a fact that many who otherwise might have lived die in consequence of it. For such early stimulus to the nerves is the cause of many disorders. Children should be carefully kept even from too warm foods and drinks, as they are very apt to weaken the constitution.

Children ought not to be kept very warm, neither should their hunger be artificially excited

38. Further we should notice that children need not be very warmly clad, for their blood is already naturally warmer than that of the full-grown. The heat of a child's blood reaches 110° Fahr., while the blood of a grown man or woman reaches only 96°. A child would be stifled in the same degree of warmth which his elders would enjoy. It is not good even for grown-up people to dress too warmly, to cover themselves up, and to accustom themselves to too warm drinks, for cool habits above all make people strong. Therefore it is good for a child to have a cool and hard bed. Cold baths also are good. No stimulant must be allowed in order to excite the child's hunger, for hunger must only be the consequence of activity and occupation. However, the child must not be allowed so to accustom himself to anything as to feel the loss of it. It is better not to encourage artificially the formation of habits either good or bad.

The custom of swathing children is useless and even harmful

39. Among savage nations the custom of swathing infants is never observed. Savage nations in America, for instance, make holes in the earth, and strew them with dust from rotting trees, which serves to keep the children to a certain extent clean and dry. In these holes the children lie, covered with leaves, having except for this covering, the free use of their limbs.

It is simply for the sake of our own convenience that we swathe our children like mummies, so that we may not have the trouble of watching them in order to prevent their limbs from getting broken or bent. And yet it often happens that they do get bent, just by swathing them. Also it makes the children themselves uneasy, and they are almost driven to despair on account of their never being able to use their limbs. And then people imagine that by calling to the child they stop its crying. But suppose a grown man were to be subjected to the same treatment, and we shall soon see whether he, too, would not cry and fall into uneasiness and despair.

In general we must bear in mind that early education is only negative — that is, we have not to add anything to the provision of Nature, but merely to see that such provision is duly carried out. If any addition to this is necessary on our part, it must be the process of hardening the child. For this reason, also, we must give up the habit of swathing our children. If, however, we want to use some kind of caution, the most suitable arrangement would be a kind of box covered with leather straps, such as the Italians use and call arcuccio. The child is never taken out of this box, even when nursed by its mother. This protects the child from the chance of being smothered when sleeping with its mother at night, while with us many children lose their lives in this way. This arrangement is better than swathing the child, since it allows greater freedom for the limbs, while at the same time it serves as a protection against anything that might hurt or bend its body.

Rocking, also, is objectionable

40. Another custom belonging to early education is the rocking of babies. The easiest way of doing this

is the way some peasants do it. The cradle is hung by a cord to the rafter, and, when the cord is pulled, the cradle rocks of itself from side to side. Rocking, however, is altogether objectionable, for the swinging backwards and forwards is bad for the child. We see this among grown people, in whom swinging often produces a feeling of sickness and giddiness. By swinging, nurses want to stun the child, so that he should not cry. But crying is a wholesome thing for a child, for when a child is born and draws its first breath the course of the blood in its veins is altered, which causes a painful sensation; the child immediately cries, and the energy expended in crying develops and strengthens the various organs of its body. To run at once to a child's help when he cries — to sing to him, as the way of nurses is — is very bad for the child, and is often the beginning of spoiling him, for when he sees he gets things by crying for them he will cry all the more.

Leading-strings and gocarts are superfluous, and the former, at any rate, hurtful

41. Children are usually taught to walk by means of leading-strings and go-carts; but, when one comes to think of it, it seems a surprising thing that people should insist upon teaching children how to walk, as if ever a human being had been found to be unable to walk for want of instruction. Besides, leading-strings are especially bad for the child. A writer once remarked that he had no doubt that the asthma from which he suffered was due to the use of leading-strings when he was a child, which he thought had narrowed his chest. For since a child takes hold of everything or picks up everything from the floor, his chest is confined by the leading-strings; and since the chest is still undeveloped, any pressure tends to flatten it, and the form it then takes is retained in after-life. Besides this, children do not learn to walk so surely as when they walk by themselves. The best plan is to let children crawl, until by degrees they learn of themselves to walk. To prevent them from hurting themselves with splinters from the floor, a woollen rug might be laid down, which would serve at the same time to break their fall.

It is commonly said that children fall very heavily; they do not, however; and it does them no harm to fall sometimes. They learn all the sooner to find their balance, and to fall without hurting themselves.

It is customary to protect the child's head with a kind of wide-brimmed bonnet, which is supposed to prevent it from falling on its face. But it is a merely negative education which consists in employing artificial instruments, instead of teaching the child to use those with which Nature has already provided him. Here the natural instruments are the child's hands, which he will manage to use to steady himself. The more artificial instruments we use, the more do we become dependent on instruments.

Instruments should, as far as possible, be dispensed with

42. Generally speaking, it would be better if fewer instruments were used, and children were allowed to learn more things by themselves. They would then learn them more thoroughly.

For example, it is quite possible that a child might learn to write by itself; for some one must at one time have discovered this for himself, and the discovery is not such a very difficult one. For instance, if a child asked one for bread, one might ask him to draw a picture of what he wanted — he might then, perhaps, draw a rough oval; on being asked to describe his wants a little more accurately — for an oval might as well be a stone as a loaf — he might then be led on to express the letter B in some way, and so on. The child might invent his own alphabet in this way, which he would afterwards only have to exchange for other signs.

Stays, which are sometimes used to remedy defects in the figure, generally increase the mischief

43. There are some children who come into the world with certain defects. Are there no means of remedying these defects? It has been decided, according to the opinion of many learned writers, that stays are of no use in such cases, but rather tend to aggravate the mischief by hindering the circulation of the blood and humours, and the healthy expansion of both the outer and inner parts of the body. If the child is left free he will exercise his body, and a man who has worn stays is weaker on leaving them off than a man who has never put them on. Perhaps some good might be done for those who are born crooked by more weight being put upon the side where the muscles are stronger. This, however, is a dangerous

practice, too, for who is to decide what is the right balance?

It seems best that the child should learn to use his limbs, and remedy this defect by keeping his body in a certain position, even though he may find it troublesome, for no instruments are of any use in such cases.

An enervating influence is as much to be avoided as an over-hardenin process

44. All these artificial contrivances are the more hurtful in that they run counter to the aim of Nature in making organised and reasonable beings; for Nature requires them to keep their freedom, in order that they may learn how to use their powers. All that education can do in this matter is to prevent children from becoming effeminate. This might be done by accustoming them to habits of hardiness, which is the opposite of effeminacy. It is venturing too much to want to accustom children to everything. Russians have made the mistake of going too far in this direction, and consequently an enormous number of their children die young, from the over-hardening process. Habit is the result of the constant repetition of any one enjoyment or action, until such enjoyment or action becomes a necessity of our nature. There is nothing to which children become more easily accustomed, and which should be more carefully kept from them, than such highly stimulating things as tobacco, brandy, and warm drinks. Once acquired, it is very difficult to give up these things; and giving them up causes physical disturbances at first, since the repeated use of anything effects a change in the functions of the different organs of our body. The more habits a man allows himself to form, the less free and independent he becomes; for it is the same with man as with all other animals; whatever he has been accustomed to early in life always retains a certain attraction for him in after life. Children, therefore, must be prevented from forming any habits, nor should habits be fostered in them.

Regular times should be observed for eating and drinking

45. Many parents want to get their children used to anything and everything. But this is no good. For human nature in general, as well as the nature of certain individuals in particular, will not allow of such training, and consequently many children remain apprentices all their lives. Some parents, for instance, would have their children go to sleep, get up, and have their meals whenever they please; but in order that they may do this with impunity, they must follow a special diet, a diet which will strengthen the body, and repair the evil which this irregularity causes. We find, indeed, many instances of periodicity in Nature also. Animals have their appointed time to sleep, and man should accustom himself to a certain time, that the functions of the body be not disturbed. As to the other matter, that children ought to eat at any hour, we cannot well adduce here the case of the animal as an example; as, for instance, all grass-eating animals get but little nourishment each time they eat, therefore grazing is necessarily a constant occupation with them. It is, however, very important for man always to eat at regular hours. Many parents try to accustom their children to endure great cold, bad smells, and noises; this, however, is quite unnecessary, the only thing needful being to prevent them from forming habits. And for this it is best that they shall not always be subject to the same conditions.

A severe education is helpful to the body

46. A hard bed is much more healthy than a soft one; and, generally speaking, a severe education is very helpful in strengthening the body. By a severe education we must understand merely that which tends to prevent one from taking one’s ease. Remarkable examples in confirmation of this assertion are not lacking, only they are not observed, or, to speak more correctly, people will not observe them.

Discipline must be strict without being slavish

47. With regard to the training of character — which we may indeed call also, in a certain sense, physical culture — we must chiefly bear in mind that discipline should not be slavish. For a child ought always to be conscious of his freedom, but always in such a way as not to interfere with the liberty of others — in which case he must be met with opposition. Many parents refuse their children everything they ask, in order that they may exercise their patience, but in doing so they require from their children more patience than they have themselves. This is cruel. One ought rather to give a child as much as will

agree with him, and then tell him ‘that is enough’; but this decision must be absolutely final. No attention should ever be given to a child when he cries for anything, and children’s wishes should never be complied with if they try to extort something by crying; but if they ask properly, it should be given them, provided it is for their good. By this the child will also become accustomed to being open-minded; and since he does not annoy anyone by his crying, everybody will be friendly towards him.

Providence seems indeed to have given children happy, winning ways, in order that they may gain people’s hearts. Nothing does children more harm than to exercise a vexatious and slavish discipline over them with a view to breaking their self-will.

From the time the child begins to cry from some conscious reason, caution is the more necessary to prevent his being spoilt

48. During the first eight months of a child’s life its sense of sight is not fully developed. It experiences, it is true, the sensation of light, but cannot as yet distinguish one object from another. To convince ourselves of this, we have only to hold up a glittering object before the child’s eyes and then remove it; we may at once notice that he does not follow it with his eyes.

At the same time as the sense of sight, the power of laughing and crying is developed. When the child has once reached that stage, there is always some reasoning, however vague it may be, connected with his crying. He cries with the idea that some harm has been done him. Rousseau says that if you merely tap a child of six months on the hand, it will scream as if a bit of burning wood had touched it. Here the child has actually a sense of grievance besides the mere bodily hurt. Parents talk a great deal about breaking the will of their children, but there is no need to break their will unless they have already been spoilt. The spoiling begins when a child has but to cry to get his own way. It is very difficult to repair this evil later on; indeed, it can scarcely be done. We may keep the child from crying or otherwise worrying us, but he swallows his vexation, and is inwardly nursing anger all the more.How children are made dissemblers In this way the child becomes accustomed to dissembling and agitation of mind. It is, for instance, very strange that parents should expect their children to turn and kiss their hand (vide) after they have just beaten them. That is the way to teach them dissembling and falsehood. For the child surely does not look on the rod with any special favour, so that he should feel any gratitude for its chastisement, and one can easily imagine with what feelings the child kisses the hand which has punished him.

Terms of abuse should never be used to children, for they lead merely to timidity and concealment

49. We often say to a child: ‘Fie, for shame! you shouldn’t do that,’ &c. But such expressions are futile in this early stage of education; for the child has, as yet, no sense of shame or of seemliness. He has nothing to be ashamed of, and ought not to be ashamed. These expressions therefore will simply make him timid. He will become embarrassed before others, and inclined to keep away from their company — and from this arises reserve and harmful concealment. He is afraid to ask for anything, when he ought to ask for all he wants. He conceals his true character, and always appears to be other than he is, when he ought to be able to speak frankly and freely. Instead of being always near his parents he shuns them, preferring to make friends with the servants of the house.

To be constantly playing with and caressing children makes them self-willed and deceitful

50. No better than this vexatious system of bringing up children is that of perpetually playing with and caressing the child; this makes him self-willed and deceitful, and by betraying to him their weakness, parents lose the necessary respect in the eyes of the child. If, on the other hand, he is so trained that he gets nothing by crying for it, he will be frank without being bold, and modest without being timid. Boldness, or, what is almost the same thing, insolence, is insufferable. There are many men whose constant insolence has given them such an expression that their very look leads one to expect rudeness from them, while you have only to look at others to see at once that they are incapable of being rude to anyone. Now we can always be frank in our demeanour, provided our frankness be united with a certain kindness. People often speak of men of rank having a royal air, but this is nothing but a certain self-

sufficient manner in consequence of having met with no opposition all their life.

Working-class parents are specially wont to spoil their children in this way, causing them to become head-strong and unruly

51. It may be said with truth that the children of the working classes are more spoilt than the children of those of higher rank, for the working classes play with their children like monkeys, singing to them, caressing, kissing, and dancing with them. They think indeed they are doing a kindness to their child in always running to him when he cries, and playing with him, &c.; but he only cries the oftener. If, on the other hand, no notice is taken of the child's crying, he will leave off at last — for no one cares to continue a fruitless task. Once a child has become accustomed to having all his whims gratified, it is afterwards too late to begin to cross his will. On the other hand, if you do not mind the child's crying, he will soon get tired of it. But should his fancies always be gratified, both his character and his manners will be spoilt.

The child has as yet, indeed, no idea of manners, but it goes far towards spoiling his natural disposition, so that afterwards sharp measures are necessary to undo the evil caused by early indulgence. When attempts are made later on to break off the habit of giving way to all the child's wishes, his crying is then accompanied by a rage as fierce as any of which grown-up people are capable, only that he has not the physical strength to exercise it. This is but what we must expect, for children who have been for so long accustomed merely to cry to get what they want, become veritable despots, and are naturally aggrieved when their rule comes suddenly to an end; for even grown-up people who have been for some time in a high position find it very difficult if they are suddenly called upon to abdicate.

The training of the sense of pleasure and pain must be of a negative kind

52. Here we have also to discuss the training of the sense of pleasure or pain. In this our work must be negative; we must see that the child's sensibility be not spoilt by over-indulgence. Love of ease does more harm than all the ills of life.We must guard against over-indulgence, dislike of work, and daintiness Therefore it is of the utmost importance that children should be taught early to work. If they have not been over-indulged, children are naturally fond of amusements which are attended with fatigue, and occupations which require exercise of strength. With regard to pleasures, it is best not to let them be dainty, nor to allow them to pick and choose. As a rule, mothers spoil their children in this way and indulge them altogether too much. In spite of this we very often notice that children, and especially boys, are fonder of their father than of their mother. This is probably because mothers are timid, and do not allow them to use their limbs as freely as they would wish, for fear of the children hurting themselves. While fathers, on the other hand, although they are stern to them, and perhaps punish them severely when they are naughty, yet take them out sometimes into the fields and do not try to hinder their boyish games.

The patience of children should not be unnecessarily put to the proof

53. Some people believe that in making children wait a long time for what they want they teach them patience. This is, however, hardly necessary, though doubtless in times of illness, &c., patience is needed. Patience is two-fold, consisting either in giving up all hope or in gaining new courage to go on. The first is not necessary, provided what we hope to gain is possible; the second we should always desire, as long as what we strive for is right. In cases of illness, however, hopelessness spoils what has been made good by cheerfulness. But he who is still capable of taking courage with regard to his physical or moral condition is not likely to give up all hope.

The will of children should be bent, not broken — though at first their obedience is necessarily blind

54. The will of children, as has been already remarked, must not be broken, but merely bent in such a way that it may yield to natural obstacles. At the beginning, it is true, the child must obey blindly. It is unnatural that a child should command by his crying, and that the strong should obey the weak. Children should never, even in their earliest childhood, be humoured because they cry, nor allowed to extort anything by crying. Parents often make a mistake in this, and then, wishing to undo the result of their over-

indulgence, they deny their children in later life whatever they ask for. It is, however, very wrong to refuse them without cause what they may naturally expect from the kindness of their parents, merely for the sake of opposing them, and that they, being the weaker, should be made to feel the superior power of their parents.

We should not yield to a child's every wish; nor, on the other hand, should we unnecessarily thwart him

55. To grant children their wishes is to spoil them; to thwart them purposely is an utterly wrong way of bringing them up. The former generally happens as long as they are the playthings of their parents, and especially during the time when they are beginning to talk. By spoiling a child, however, very great harm is done, affecting its whole life. Those who thwart the wishes of children prevent them (and must necessarily prevent them) at the same time from showing their anger; but their inward rage will be all the stronger, for children have not yet learned to control themselves.

The following rules should accordingly be observed with children from their earliest days: — When they cry, and we have reason to believe they are hurt, we should go to their help. On the other hand, when they cry simply from temper, they should be left alone. And this way of dealing with them should be continued as they grow older. In this case the opposition the child meets with is quite natural, and, properly speaking, merely negative, consisting simply in his not being indulged. Many children, on the other hand, get all they want from their parents by persistent asking. If children are allowed to get whatever they want by crying, they become ill-tempered; while if they are allowed to get whatever they want by asking, their characters are weakened. Should there, then, be no important reason to the contrary, a child's request should be granted; should there be a reason to the contrary, it should not be granted, no matter how often the request is repeated. A refusal should always be final. This will shortly have the effect of making its repetition unnecessary.

Obstinacy should be met by natural opposition

56. Supposing — what is of extremely rare occurrence — that a child should be naturally inclined to be stubborn, it is best to deal with him in this way: — If he refuses to do anything to please us, we must refuse to do anything to please him.

Breaking a child's will makes him a slave, while natural opposition makes him docile.

Many fears are due to false impressions

57. All this we may consider as negative training, for many weaknesses of mankind proceed not so much from lack of teaching as from false impressions. For instance, fear of spiders and toads, &c., is suggested to children by their nurses. A child would probably pick up a spider as readily as anything else, were it not that the nurse's horror at the sight of spiders has affected the child by a sort of sympathy. Many children retain this fear all their lives, and in this matter always remain childish; for spiders, though dangerous to flies, for whom their bite is poisonous, are harmless to men. In the same way the toad is as harmless as the beautiful green frog or any other animal.

CHAPTER III: INSTRUCTION (CULTURE)

In physical training artificial aids should, as far as possible, be dispensed with

58. The positive part of physical education is culture. It is this which distinguishes man from the animals. Culture consists chiefly in the exercise of the mental faculties. Parents, then, should give their children opportunities for such exercise. The first and most important rule is that all artificial aids should, as far as possible, be dispensed with. Thus in early childhood leading-strings and go-carts should be discarded, and the child allowed to crawl about on the ground till he learns to go by himself — he will then walk more steadily. For the use of tools is the ruin of natural quickness. Thus we want a cord to measure a certain distance, though we might as well measure it by the eye; or a clock to tell the time, when we might do this by the position of the sun; or a compass to find our way in a forest, when we might instead be guided by the position of the sun by day, of the stars by night. Indeed, we might even say that instead of needing a boat we might swim across the water. The celebrated Franklin wondered why everyone didn’t learn to swim, since swimming is so pleasant and so useful. He also suggested an easy way by which to teach oneself to swim: — Standing in a brook with the water up to your neck, you drop an egg into the water, and then try to reach it. In bending forward to do this you will be carried off your feet, and, in order to prevent the water getting into your mouth, you will throw your head back. You are now in the proper position for swimming, and have only to strike out with the arms to find yourself actually swimming.

What has to be done is to see that natural ability is cultivated. Sometimes instruction is necessary; sometimes the child’s mind is inventive enough, or he invents tools for himself.

Physical exercises should be such as will develop strength and skill, quickness and self-confidence

59. What should be observed in physical education, with respect to the training of the body, relates either to the use of voluntary movements or to the organs of sense. As to the first of these, what is wanted is that the child should always help himself. For this, both strength and skill, quickness and self-confidence, are necessary, so as to be able, for instance, to go along narrow paths, or to climb steep places with an abyss before one’s eye, or to cross a slender plank. If a man cannot do this, he is not entirely what he might be.

Since the Philanthropinon of Dessau set the example, many attempts of this kind have been made with children in other institutions. It is wonderful to read how the Swiss accustom themselves from early childhood to climb mountains, how readily they venture along the narrowest paths with perfect confidence, and leap over chasms, having first measured the distance with the eye, lest it should prove to be beyond their powers.

Most people, however, fear some imaginary danger of falling, and this fear actually paralyses their limbs, so that for them such a proceeding would be really fraught with danger. This fear generally grows with age, and is chiefly found in those men who work much with their heads. For children to make such attempts is not really very dangerous; they are much lighter in proportion to their strength than grown-up people, and for this reason do not fall so heavily. Besides this, their bones are not so inflexible and brittle as they become with age. Children often put their strength to the proof of their own accord. We often see them climbing, for instance, for no particular reason. Running is a healthy exercise and strengthens the body. Jumping, lifting weights, carrying, slinging, throwing towards a mark, wrestling, running races, and all such exercises are good. Dancing, so far as it is of an elaborate kind, is not so well suited to actual childhood.

To exercise the senses certain games should be encouraged which will further this object

60. Exercises in throwing, whether it be throwing a distance or hitting a mark, have the additional

advantage of exercising the senses, especially the eyesight. Games with balls are among the best for children, as they necessitate healthy running.

Generally speaking, those games are the best which unite the development of skill with the exercise of the senses — for example, those that exercise the eyesight in correctly judging distance, size and proportion, in finding the position of places in different regions by means of the sun, &c. All these are good training. Of great advantage also is local imagination, by which we mean the capability of recalling the exact position of places where we have seen certain things — as, for example, when we are able to find our way out of a forest by having noticed the trees we have passed. In the same way the memoria localis, by which we recall, not only in what book we have read a certain thing, but in what part of the book. Thus the musician has the keys before his mind's eye, and does not need to have the actual instrument before him while he composes. It is very useful also to cultivate the ear of children, so that they may know whether a sound comes from far or near, from this side or that.

Different games and their uses

61. The children's game of 'blindman's buff' was already known among the Greeks, who called it μυῖνδα. Generally speaking, children's games are the same everywhere; those which are found in Germany being also found in France and England, and so on. They have their principle in a certain instinct common to all children. In 'blindman's buff,' for instance, there is the desire to know how they would help themselves were they deprived of one of their senses.

Spinning tops is a singular game. Such games as these furnish matter for further reflection to grown-up men, and occasionally lead even to important discoveries. Thus Segner has written a treatise on the top; and the top has furnished an English sea-captain with material for inventing a mirror, by means of which the height of the stars may be measured from a ship.

Children are fond of noisy instruments, such as trumpets, drums, and the like; but these are objectionable, since they become a nuisance to others. It would be less objectionable, however, were children to learn how to cut a reed so as to play on it.

Swinging is also a healthy exercise, as well for grown-up people as for children. Children, however, should be watched, lest they swing too fast.

Kite-flying is also an unobjectionable game. It calls forth skill, the flight of the kite depending on its being in a certain position relatively to the wind.

By games the child learns endurance, maintains his natural cheerfulness, and gains in candour

62. For the sake of these games the boy will deny himself in his other wants, and thus train himself unconsciously for other and greater privations. Further, he will accustom himself to constant occupation; nevertheless for that very reason these games must not be mere games, but games having some end and object. For the more a child's body is strengthened and hardened in this way, the more surely will he be saved from the ruinous consequences of over-indulgence. Gymnastics also are intended merely to direct Nature; hence we must not aim at artificial grace.

On social training

Discipline must precede instruction. Here, however, in training the bodies of children we must also take care to fit them for society. Rousseau says: 'You will never get an able man, unless you have a street urchin first.' A lively boy will sooner become a good man than a conceited and priggish lad.

A child must learn to be neither troublesome nor insinuating in company. He must be confident at the invitation of others without being obtrusive, and frank without being impertinent. As a means to this end all we have to do is not to spoil the child's nature, either by giving him such ideas of good behaviour as will only serve to make him timid and shy, or, on the other hand, by suggesting to him a wish to assert himself. Nothing is more ridiculous than precocious good behaviour and priggish self-conceit in a child. In this last instance we must let the child see his weakness all the more, but at the same time we must not overpower him with a sense of our own superiority and power; so that, though the child may develop his

own individuality, he should do so only as a member of society — in a world which must, it is true, be large enough for him, but also for others. Toby in 'Tristram Shandy' says to a fly which has been annoying him for some time, and which he at last puts out of the window, 'Go away, tiresome creature; the world is large enough for us both.' We may each of us take these words for our motto. We need not be troublesome to one another; the world is large enough for all of us.

CHAPTER IV: CULTIVATION OF THE MIND

Mental culture may also in a certain sense be called physical, so far as it is distinguished from ‘practical’

63. We come now to the cultivation of the mind, which also we may call, in a certain sense, physical. We must, however, distinguish between nature and freedom. To give laws to freedom is quite another thing to cultivating nature. The nature of the body and the nature of the mind agree in this, that culture goes to prevent the spoiling of either, and that art adds something to both. We may, therefore, call the cultivation of the mind physical, in a certain sense, just as well as the cultivation of the body.

This physical cultivation of the mind, however, must be distinguished from moral training, in that it aims only at nature, while moral training aims at freedom. A man may be highly cultivated physically, he may have a well-cultivated mind; but if he lacks moral culture, he will be a wicked man.

Physical culture must, however, be distinguished from ‘practical’ culture, which last is pragmatic or moral. In this last case morality is the aim rather than culture.

‘Free’ and ‘scholastic’ culture

64. The physical cultivation of the mind may be divided into (i) free and (ii) scholastic culture. Free culture is, as it were, but a pastime, while scholastic culture constitutes a business. Free culture is that which must always be observed with the child. In scholastic culture, on the other hand, the child is looked upon as under restraint. We may be occupied in games, which we call being occupied in our leisure time, and we may be occupied by compulsion, which we call work. Scholastic culture constitutes work for the child, free culture constitutes play.

Work and play are both necessary, but they should not be confused by trying to make play of work

65. Various plans of education have been drawn up by different people, in order to discover the best methods — a most praiseworthy undertaking. One among others suggests that children should be allowed to learn everything as it were in play. In an article in the ‘Göttingen Magazine’ Lichtenberg ridicules the folly of trying to make everything like play for boys, while they ought to be accustomed to serious business at an early period, since they must some time enter a business life. This is an utterly preposterous notion. A child must play, must have his hours of recreation; but he must also learn to work. It is a good thing, doubtless, to exercise skill, as it is to cultivate the mind, but these two kinds of culture should have their separate hours. Moreover, it is a great misfortune for man that he is by nature so inclined to inaction. The longer a man gives way to this inclination, the more difficult will he find it to make up his mind to work.

Work is to be distinguished from play by having some ulterior end in view

66. In work the occupation is not pleasant in itself, but it is undertaken for the sake of the end in view. In games, on the other hand, the occupation is pleasant in itself without having any other end in view. When we go for a walk, we do so for the sake of the walk, and therefore the further we go the pleasanter it is; while when we go to a certain place, our object is the company which we shall find there, or something else, and therefore we shall naturally choose the shortest way. The same thing happens in card games. It is really extraordinary how reasonable men can sit by the hour and shuffle cards. It is not, it seems, so easy for men to leave off being children. For how is this a better game than the children’s game of ball? It is true that grown men do not care to ride hobby-horses, but they ride other hobbies.

Man needs occupation and restraint; therefore schoollife, with its compulsory occupation and restraint, is a good training for the child

67. It is of the greatest importance that children should learn to work. Man is the only animal who is obliged to work. He must go through a long apprenticeship before he can enjoy anything for his own sustenance. The question whether Heaven would not have shown us greater kindness by supplying all our

wants without the necessity of work on our part must certainly be answered in the negative, for man needs occupation, even occupation that involves a certain amount of restraint. Just as false a notion is it that if Adam and Eve had only remained in Paradise they would have done nothing there but sit together singing pastoral songs and admiring the beauty of Nature. Were this so, they would have been tormented with ennui, just as much as other people in the same position.

Men ought to be occupied in such a way that, filled with the idea of the end which they have before their eyes, they are not conscious of themselves, and the best rest for them is the rest which follows work. In the same way a child must become accustomed to work, and where can the inclination to work be cultivated so well as at school? School is a place of compulsory culture. It is very bad for a child to learn to look upon everything as play. He must, it is true, have his time for recreation, but he must also have his time for work. Even though the child does not at once understand the use of this restraint, later in life he will recognise its value. It would be merely training the child to bad habits of inquisitiveness were one always to answer his questions: 'What is the use of this?' or, 'What is the use of that?' Education must be compulsory, but it need not therefore be slavish.

The mental faculties ought not to be cultivated separately, but each one in relation to others — the inferior with a view to the superior

68. With regard to the 'free' cultivation of the mental faculties, we must remember that this cultivation is going on constantly. It really deals with the superior faculties. The inferior faculties must be cultivated along with them, but only with a view to the superior; for instance, the intelligence with a view to the understanding — the principal rule that we should follow being that no mental faculty is to be cultivated by itself, but always in relation to others; for instance, the imagination to the advantage of the understanding.

The inferior faculties have no value in themselves; for instance, a man who has a good memory, but no judgment. Such a man is merely a walking dictionary. These beasts of burden of Parnassus are of some use, however, for if they cannot do anything useful themselves they at least furnish material out of which others may produce something good. Intelligence divorced from judgment produces nothing but foolishness. Understanding is the knowledge of the general. Judgment is the application of the general to the particular. Reason is the power of understanding the connection between the general and the particular. This free culture runs its course from childhood onwards till the time that the young man is released from all education. When a young man, for instance, quotes a general rule, we may make him quote examples drawn from history or fable in which this rule is disguised, passages from the poets where it is expressed, and thus encourage him to exercise both his intelligence and his memory, &c.

The memory should be carefully trained to retain such things as are important

69. The maxim Tantum scimus, quantum memoria tenemus is quite true — hence it is very necessary to cultivate the memory. Things are so constituted that the understanding first follows the mental impression, and the memory must preserve this impression. So it is, for instance, in languages. We learn them either by the formal method of committing them to memory or by conversation — this last being the best method for modern languages. The learning of words is really necessary, but the best plan is for the youth to learn words as he comes across them in the author he is reading. The youth should have a certain set task. In the same way geography is best learnt mechanically. What is learnt in a mechanical way is best retained by the memory, and in a great many cases this way is indeed very useful. The proper mechanism for the study of history has yet to be found. An attempt has been made in this direction consisting of a system of tables, but the result has not been very satisfactory. History, however, is an excellent means of exercising the understanding in judging rightly. Learning by heart is very necessary, but doing it merely for the sake of exercising the memory is of no use educationally — for instance, the learning of a speech by heart. At all events, it only serves to encourage forwardness. Besides this, declamation is only proper for grown-up men. The same may be said of all those things which we learn merely for some future examination or with

a view to futuram oblivionem. The memory should only be occupied with such things as are important to be retained, and which will be of service to us in real life.Novel-reading is bad for children Novel-reading is the worst thing for children, since they can make no further use of it, and it merely affords them entertainment for the moment. Novel-reading weakens the memory. For it would be ridiculous to remember novels in order to relate them to others. Therefore all novels should be taken away from children. Whilst reading them they weave, as it were, an inner romance of their own, rearranging the circumstances for themselves; their fancy is thus imprisoned, but there is no exercise of thought.

Distractions must never be allowed, least of all in school, for the result will be a certain propensity in that direction which might soon grow into a habit. Even the finest talents may be wasted when once a man is subject to distraction. Although children are inattentive at their games, they soon recall their attention. We may notice, however, that they are most distracted when they are thinking of some mischief, for then they are contriving either how to hide it, or else how to repair the evil done. They then only half hear anything, give wrong answers, and know nothing about what they are reading, &c.

The memory should be cultivated by learning names, by reading and writing, and by learning languages

70. The memory must be cultivated early, but we must be careful to cultivate the understanding at the same time.

The memory is cultivated (i) by learning the names which are met with in tales, (ii) by reading and writing. But as to reading, children should practise it with the head, without depending on the spelling. (iii) By languages, which children should first learn by hearing, before they read anything.

Then a well-constructed so-called orbis pictus will prove very useful. We might begin with botany, mineralogy, and natural history in general. In order to make sketches of these objects, drawing and modelling will have to be learned, and for this some knowledge of mathematics is necessary. The first lessons in science will most advantageously be directed to the study of geography, mathematical as well as physical. Tales of travel, illustrated by pictures and maps, will lead on to political geography. From the present condition of the earth's surface we go back to its earlier condition, and this leads us to ancient geography, ancient history, and so on.

Knowing and doing should be combined

But in teaching children we must seek insensibly to unite knowledge with the carrying out of that knowledge into practice. Of all the sciences, mathematics seems to be the one that best fulfils this. Further, knowledge and speech (ease in speaking, fluency, eloquence) must be united. The child, however, must learn also to distinguish clearly between knowledge and mere opinion and belief. Thus we prepare the way for a right understanding, and a right — not a refined or delicate — taste. This taste must at first be that of the senses, especially the eyes, but ultimately of ideas.

The understanding should be cultivated by rules which should be studied side by side with their application

71. It is necessary to have rules for everything which is intended to cultivate the understanding. It is very useful mentally to separate the rules, that the understanding may proceed not merely mechanically, but with the consciousness of following a rule.

It is also very useful to bring these rules into a set form, and thus commit them to memory. If we keep the rule in our memory, though we forget its application, we shall soon find our way again.

Here the question arises whether the rules shall first be studied in abstracto, and whether they ought to be studied after they have been applied, or whether the rule and its application should be studied side by side. This last is the only advisable course; otherwise the application of the rule is very uncertain till the rule itself is learned.

But from time to time the rules must also be arranged in classes, for it is difficult to keep them in memory when they are not associated together. Consequently in learning languages the study of grammar must always, to a certain extent, come first.

The general cultivation of the mental faculties is in part physical — consisting of discipline and exercise; and in part moral — consisting of 'maxims'

72. We must now give a systematic idea of the whole aim of education, and the means of obtaining it.

I. The general cultivation of the mental faculties, as distinguished from the cultivation of particular mental faculties. — This aims at skill and perfection, and has not for its object the imparting of any particular knowledge, but the general strengthening of the mental faculties.

This culture is either (a) physical — here everything depends upon exercise and discipline, without the child needing to learn any 'maxims'; it is passive for the pupil, who has only to follow the guidance of others — or (b) it is moral. This depends not upon discipline, but upon 'maxims.' All will be spoilt if moral training rests upon examples, threats, punishments, and so on. It would then be merely discipline. We must see that the child does right on account of his own 'maxims,' and not merely from habit; and not only that he does right, but that he does it because it is right. For the whole moral value of actions consists in 'maxims' concerning the good.

Physical education, then, is distinguished from moral in the former being passive, while the latter is active, for the child. He should always understand the principle of an action, and its relation to the idea of duty.

The cultivation of particular mental faculties includes, first, the inferior faculties: such as cognition, the senses, imagination, memory, and power of concentration

73. II. The cultivation of particular mental faculties. — This includes the cultivation of the faculty of cognition, of the senses, the imagination, memory, power of attention, and intelligence — in a word, the inferior powers of the understanding.

Of the cultivation of the senses — eyesight, for instance — we have already spoken. As to the cultivation of the imagination, the following is to be noticed: — Children generally have a very lively imagination, which does not need to be expanded or made more intense by the reading of fairy tales. It needs rather to be curbed and brought under rule, but at the same time should not be left quite unoccupied. There is something in maps which attracts everybody, even the smallest children. When they are tired of everything else, they will still learn something by means of maps. And this is a good amusement for children, for here their imagination is not allowed to rove, since it must, as it were, confine itself to certain figures. We might really begin with geography in teaching children. Figures of animals, plants, and so on, might be added at the same time; these will make the study of geography more lively. History, however, would probably have to come later on.

With regard to the power of attention, we may remark that this faculty needs general strengthening. The power of rigidly fixing our thoughts upon one object is not so much a talent as a weakness of our mind, which in this case is inflexible, and does not allow itself to be applied at pleasure. But distraction is the enemy of all education. Memory depends upon our attention.

Secondly, the cultivation of the superior mental faculties: understanding, judgment, and reason

74. As regards the cultivation of the superior mental faculties, this includes the cultivation of the understanding, judgment, and reason. The understanding may at first be cultivated, in a certain way, passively also, either by quoting examples which prove the rules, or, on the contrary, by discovering rules for particular cases. The judgment shows us what use to make of the understanding. Understanding is necessary in order that we may understand what we learn or say, and that we may not repeat anything without understanding it. How many people hear and read things which they do not understand, though they believe them! Of that kind are both images and real things.

It is through reason that we get an insight into principles. But we must remember that we are speaking here of a reason which still needs guidance. Hence the child should not be encouraged to be always reasoning, nor should we indulge in reasoning in the presence of children, about things which surpass their conception.

We are not dealing here with speculative reason, but only with reflection upon actual occurrences, according to their causes and effects. It is in its arrangement and working a practical reason.

The best way to understand is to do

75. The best way of cultivating the mental faculties is to do ourselves all that we wish to accomplish; for instance, by carrying out into practice the grammatical rule which we have learnt. We understand a map best when we are able to draw it out for ourselves. The best way to understand is to do. That which we learn most thoroughly, and remember the best, is what we have in a way taught ourselves. There are but few men, however, who are capable of doing this. They are called self-taught (αὐτοδίδακτοι).

In the culture of reason the Socratic method is the best

76. In the culture of reason we must proceed according to the Socratic method. Socrates, who called himself the midwife of his hearers' knowledge, gives examples in his dialogues, which Plato has in a manner preserved for us, of the way in which, even in the case of grown-up people, ideas may be drawn forth from their own individual reason. In many respects children need not exercise their reason. They must not be allowed to argue about everything. It is not necessary for them to know the principles of everything connected with their education; but when the question of duty arises, they should be made to understand those principles. But on the whole we should try to draw out their own ideas, founded on reason, rather than to introduce such ideas into their minds. The Socratic method should form, then, the rule for the catechetical method. True it is somewhat slow, and it is difficult to manage so that in drawing ideas out of one child the others shall also learn something. The mechanical method of catechising is also useful in some sciences; for instance, in the explanation of revealed religion. In universal religion, on the other hand, we must employ the Socratic method. As to what has to be learnt historically, the mechanical method of catechising is much to be commended.

CHAPTER V: MORAL CULTURE

By moral culture the child is taught to think, so that he may act in accordance with 'maxims' — a difficult task since what is right or wrong is easily confounded with what gains reward, and what does not.

77. Moral culture must be based upon 'maxims,' not upon discipline; the one prevents evil habits, the other trains the mind to think. We must see, then, that the child should accustom himself to act in accordance with 'maxims,' and not from certain ever-changing springs of action. Through discipline we form certain habits, moreover, the force of which becomes lessened in the course of years. The child should learn to act according to 'maxims,' the reasonableness of which he is able to see for himself. One can easily see that there is some difficulty in carrying out this principle with young children, and that moral culture demands a great deal of insight on the part of parents and teachers.

Supposing a child tells a lie, for instance, he ought not to be punished, but treated with contempt, and told that he will not be believed in the future, and the like. If you punish a child for being naughty, and reward him for being good, he will do right merely for the sake of the reward; and when he goes out into the world and finds that goodness is not always rewarded, nor wickedness always punished, he will grow into a man who only thinks about how he may get on in the world, and does right or wrong according as he finds either of advantage to himself.

In the culture of 'maxims' children should be taught early to distinguish between right and wrong The school 'maxims' of childhood are followed by 'maxims' of mankind

78. 'Maxims' ought to originate in the human being as such. In moral training we should seek early to infuse into children ideas as to what is right and wrong. If we wish to establish morality, we must abolish punishment. Morality is something so sacred and sublime that we must not degrade it by placing it in the same rank as discipline. The first endeavour in moral education is the formation of character. Character consists in readiness to act in accordance with 'maxims.' At first they are school 'maxims,' and later 'maxims' of mankind. At first the child obeys rules. 'Maxims' are also rules, but subjective rules. They proceed from the understanding of man. No infringement of school discipline must be allowed to go unpunished, although the punishment must always fit the offence.

Method and strict adherence to rules are of great importance in the formation of character

79. If we wish to form the characters of children, it is of the greatest importance to point out to them a certain plan, and certain rules, in everything; and these must be strictly adhered to. For instance, they must have set times for sleep, for work, and for pleasure; and these times must be neither shortened nor lengthened. With indifferent matters children might be allowed to choose for themselves, but having once made a rule they must always follow it. We must, however, form in children the character of a child, and not the character of a citizen.

Unmethodical men are not to be relied on; it is difficult to understand them, and to know how far we are to trust them. It is true we often blame people who always act by rule — for instance, the man who does everything by the clock, having a fixed hour for every one of his actions — but we blame them often unreasonably, for this exactness, though it looks like pedantry, goes far towards helping the formation of character.

Obedience is twofold: absolute and voluntary; both kinds being essential to the character of a child

80. Above all things, obedience is an essential feature in the character of a child, especially of a school boy or girl. This obedience is twofold, including absolute obedience to his master's commands, and obedience to what he feels to be a good and reasonable will. Obedience may be the result of compulsion; it is then absolute: or it may arise out of confidence; it is then obedience of the second kind. This voluntary obedience is very important, but the former is also very necessary, for it prepares the child

for the fulfilment of laws that he will have to obey later, as a citizen, even though he may not like them.

School laws must be general, and put into force without partiality

81. Children, then, must be subject to a certain law of necessity. This law, however, must be a general one — a rule which has to be kept constantly in view, especially in schools. The master must not show any predilection or preference for one child above others; for thus the law would cease to be general. As soon as a child sees that the other children are not all placed under the same rules as himself, he will at once become refractory.

The idea of duty, apart from inclination, must be imparted early in life

82. One often hears it said that we should put everything before children in such a way that they shall do it from inclination. In some cases, it is true, this is all very well, but there is much besides which we must place before them as duty. And this will be of great use to them throughout their life. For in the paying of rates and taxes, in the work of the office, and in many other cases, we must be led, not by inclination, but by duty. Even though a child should not be able to see the reason of a duty, it is nevertheless better that certain things should be prescribed to him in this way; for, after all, a child will always be able to see that he has certain duties as a child, while it will be more difficult for him to see that he has certain duties as a human being. Were he able to understand this also — which, however, will only be possible in the course of years — his obedience would be still more perfect.

Disobedience is always followed by punishment — either physical or moral

83. Every transgression of a command in a child is a want of obedience, and this brings punishment with it. Also, should a command be disobeyed through inattention, punishment is still necessary. This punishment is either physical or moral. It is moral when we do something derogatory to the child's longing to be honoured and loved (a longing which is an aid to moral training); for instance, when we humiliate the child by treating him coldly and distantly. This longing of children should, however, be cultivated as much as possible. Hence this kind of punishment is the best, since it is an aid to moral training — for instance, if a child tells a lie, a look of contempt is punishment enough, and punishment of a most appropriate kind.

Physical punishment consists either in refusing a child's requests or in the infliction of pain. The first is akin to moral punishment, and is of a negative kind. The second form must be used with caution, lest an indoles servilis should be the result. It is of no use to give children rewards; this makes them selfish, and gives rise to an indoles mercenaria.

Punishments may also be divided into natural and artificial punishments

84. Further, obedience is either that of the child or that of the youth. Disobedience is always followed by punishment. This is either a really natural punishment, which a man brings upon himself by his own behaviour — for instance, when a child gets ill from over-eating — and this kind of punishment is the best, since a man is subject to it throughout his life, and not merely during his childhood; or, on the other hand, the punishment is artificial. By taking into consideration the child's desire to be loved and respected, such punishments may be chosen as will have a lasting effect upon its character. Physical punishments must merely supplement the insufficiency of moral punishment. If moral punishment have no effect at all, and we have at last to resort to physical punishment, we shall find after all that no good character is formed in this way. At the beginning, however, physical restraint may serve to take the place of reflection.

Punishments should be inflicted with great caution, never in anger, and always with a view to their object — namely, the improvement of the child

85. Punishments inflicted with signs of anger are useless. Children then look upon the punishment simply as the result of anger, and upon themselves merely as the victims of that anger; and as a general rule punishment must be inflicted on children with great caution, that they may understand that its one aim is their improvement. It is foolish to cause children, when they are punished, to return thanks for the

punishment by kissing hands, and only turns the child into a slave. If physical punishment is often repeated, it makes a child stubborn; and if parents punish their children for obstinacy, they often become all the more obstinate. Besides, it is not always the worst men who are obstinate, and they will often yield easily to kind remonstrance.

By duty a child understands submission to rules. A child's obedience, therefore must be distinguished from the obedience of a youth, who understands by duty obedience to reason

86. The obedience of the growing youth must be distinguished from the obedience of the child. The former consists in submission to rules of duty. To do something for the sake of duty means obeying reason. It is in vain to speak to children of duty. They look upon it in the end as something which if not fulfilled will be followed by the rod. A child may be guided by mere instinct. As he grows up, however, the idea of duty must come in. Also the idea of shame should not be made use of with children, but only with those who have left childhood for youth. For it cannot exist with them till the idea of honour has first taken root.

The foundation and essence of character is truthfulness

87. The second principal feature in the formation of a child's character is truthfulness. This is the foundation and very essence of character. A man who tells lies has no character, and if he has any good in him it is merely the result of a certain kind of temperament. Some children have an inclination towards lying, and this frequently for no other reason than that they have a lively imagination. It is the father's business to see that they are broken of this habit, for mothers generally look upon it as a matter of little or no importance, even finding in it a flattering proof of the cleverness and ability of their children. This is the time to make use of the sense of shame, for the child in this case will understand it well. The blush of shame betrays us when we lie, but it is not always a proof of it, for we often blush at the shamelessness of others who accuse us of guilt. On no condition must we punish children to force the truth from them, unless their telling a lie immediately results in some mischief; then they may be punished for that mischief. The withdrawal of respect is the only fit punishment for lying.

Punishments may be divided into negative and positive punishments. The first may be applied to laziness or viciousness; for instance, lying, disobedience. Positive punishment may be applied to acts of spitefulness. But above all things we must take care never to bear children a grudge.

Children should be encouraged to form friendships, to be cheerful and light-hearted. School hours should be followed by hours of recreation

88. A third feature in the child's character is sociableness. He must form friendships with other children, and not be always by himself. Some teachers, it is true, are opposed to these friendships in schools, but this is a great mistake. Children ought to prepare themselves for the sweetest enjoyment of life.

If a teacher allows himself to prefer one child to another, it must be on account of its character, and not for the sake of any talents the child may possess; otherwise jealousy will arise, which is opposed to friendship.

Children ought to be open-hearted and cheerful in their looks as the sun. A joyful heart alone is able to find its happiness in the good. A religion which makes people gloomy is a false religion; for we should serve God with a joyful heart, and not of constraint.

Children should sometimes be released from the narrow constraint of school, otherwise their natural joyousness will soon be quenched. When the child is set free he soon recovers his natural elasticity. Those games in which children, enjoying perfect freedom, are ever trying to outdo one another, will serve this purpose best, and they will soon make their minds bright and cheerful again.

The most troublesome period of life is the period of youth

89. Many people imagine that the years of their youth are the pleasantest and best of their lives; but it is not really so. They are the most troublesome; for we are then under strict discipline, can seldom choose our own friends, and still more seldom can we have our freedom. As Horace says: Multa tulit, fecitque

puer, sudavit et alsit.

Children should be taught only what is suitable to their age. Precocity and vanity must be guarded against

90. Children should only be taught those things which are suited to their age. Many parents are pleased with the precocity of their offspring; but as a rule, nothing will come of such children. A child should be clever, but only as a child. He should not ape the manners of his elders. For a child to provide himself with moral sentences proper to manhood is to go quite beyond his province and to become merely an imitator. He ought to have merely the understanding of a child, and not seek to display it too early. A precocious child will never become a man of insight and clear understanding. It is just as much out of place for a child to follow all the fashions of the time, to curl his hair, wear ruffles, and even carry a snuff-box. He will thus acquire affected manners not becoming to a child. Polite society is a burden to him, and he entirely lacks a man's heart. For that very reason we must set ourselves early to fight against all signs of vanity in a child; or, rather, we must give him no occasion to become vain. This easily happens by people prattling before children, telling them how beautiful they are, and how well this or that dress becomes them, and promising them some finery or other as a reward. Finery is not suitable for children. They must accept their neat and simple clothes as necessaries merely.

At the same time the parents must not set great store by their own clothes, nor admire themselves; for here, as everywhere, example is all-powerful, and either strengthens or destroys good precepts.

CHAPTER VI: PRACTICAL EDUCATION

91. Practical education includes (1) skill, (2) discretion, and (3) morality.

Skill must be thorough

With regard to skill, we must see that it is thorough, and not superficial. We must not pretend to know things which we afterwards cannot accomplish. Skill must be characterised by thoroughness, and this thoroughness should gradually become a habit. Thoroughness is an essential element in the formation of a man's character, while skill is necessary for talent.

Discretion consists in using others for our own ends; this necessitates reserve and self-control

92. As regards discretion, it consists in the art of turning our skill to account; that is, of using our fellow-men for our own ends. For this several things are necessary. Properly speaking, it is the last quality attained by man, but it ranks second in importance.

In order that a child may acquire prudence, he must learn to disguise his feelings and to be reserved, while at the same time he learns to read the character of others. It is chiefly with regard to his own character that he must cultivate reserve. Decorum is the art of outward behaviour, and this is an art that we must possess. It is difficult to read the characters of others, but we must learn to do this without losing our own reserve. For this end a kind of dissembling is necessary; that is to say, we have to hide our faults and keep up that outward appearance. This is not necessarily deceit, and is sometimes allowable, although it does border closely on insincerity.

Dissimulation, however, is but a desperate expedient. To be prudent it is necessary that we should not lose our temper; on the other hand, we should not be too apathetic. A man should be brave without being violent — two qualities which are quite distinct. A brave man is one who is desirous of exercising his will. This desire necessitates control of the passions. Discretion is a matter of temperament.

Self-control is the first step towards the formation of a good character

93. Morality is a matter of character. Sustine et abstine, such is the preparation for a wise moderation. The first step towards the formation of a good character is to put our passions on one side. We must take care that our desires and inclinations do not become passions, by learning to go without those things that are denied to us. Sustine implies endure and accustom thyself to endure. Courage and a certain bent of mind towards it are necessary for renunciation. We ought to accustom ourselves to opposition, the refusal of our requests, and so on.

Pity as a motive should take the place of emotional sympathy

'Sympathy' is a matter of temperament. Children, however, ought to be prevented from contracting the habit of a sentimental maudlin sympathy. 'Sympathy' is really sensitiveness, and belongs only to characters of delicate feeling. It is distinct from compassion, and it is an evil, consisting as it does merely in lamenting over a thing. It is a good thing to give children some pocket-money of their own, that they may help the needy; and in this way we should see if they are really compassionate or not. But if they are only charitable with their parents' money, we have no such test.

It is better to know a few things thoroughly than many things superficially

The saying Festina lente expresses constant activity, by which we must hasten to learn a great deal — that is, festina. But we must also learn thoroughly, and this needs time; that is, lente. The question here arises whether it is better to know a great many things in a superficial way or a few things thoroughly. It is better to know but little, and that little thoroughly, than to know a great deal and that superficially; for one becomes aware of the shallowness of superficial knowledge later on. But the child does not know as yet in what condition he may be with regard to requiring this or that branch of knowledge: it is best, therefore, that he should know something thoroughly of all, otherwise he will but deceive and dazzle others by his

superficially acquired knowledge.

Character, the formation of, which is the ultimate aim of education consists of fixity of purpose, and the carrying out of that purpose

94. Our ultimate aim is the formation of character. Character consists in the firm purpose to accomplish something, and then also in the actual accomplishing of it. Vir propositi tenax, said Horace, and this is a good character. For instance, if a man makes a promise, he must keep it, however inconvenient it may be to himself; for a man who makes a resolution and fails to keep it will have no more confidence in himself. Suppose, for example, that a man resolves to rise early every morning that he may study, or do something or other, or take a walk — and excuses himself in spring because the mornings are still too cold, and rising early might injure his health, and in summer because it is well to allow himself to sleep, and sleep is pleasant — thus he puts off his resolution from day to day, until he ends in having no confidence in himself.

Those things which are contrary to morality must be excluded from such resolutions. The character of a wicked man is evil; but then, in this case, we do not call it 'character' any longer, but obstinacy; and yet there is still a certain satisfaction to find such a man holding fast to his resolutions and carrying them out, though it would be much better if he showed the same persistency in good things.

Those who delay to fulfil their resolutions will do but little in life. We cannot expect much good to come of so-called future conversion. The sudden conversion of a man who has led a vicious life cannot possibly be enduring, in that it would be nothing short of a miracle to expect a man who has lived in such a way suddenly to assume the well-conducted life of a man who has always had good and upright thoughts. For the same reason we can expect no good to come from pilgrimages, mortifications, and fastings; for it is difficult to see how such customs can, all at once, make a virtuous man out of a vicious one. How can it make a man more upright, or improve him in any way, to fast by day and to feast at night; to impose a penance upon his body, which can in no way help towards improving his mind?

In laying the foundation of the child's moral character, his duties should be placed before him by means of examples and rules. (1) His duty towards himself — to maintain the dignity of man in his own person; and (2) his duty towards others — to reverence and respect their rights

95. To form the foundation of moral character in children, we must observe the following: —

We must place before them the duties they have to perform, as far as possible, by examples and rules. The duties which a child has to fulfil are only the common duties towards himself and towards others. These duties must be the natural outcome of the kind of question involved. We have thus to consider more closely: —

(1) The child's duties towards himself. — These do not consist in putting on fine clothes, in having sumptuous dinners, and so on, although his food should be good and his clothing neat. They do not consist in seeking to satisfy his cravings and inclinations; for, on the contrary, he ought to be very temperate and abstemious. But they consist in his being conscious that man possesses a certain dignity, which ennobles him above all other creatures, and that it is his duty so to act as not to violate in his own person this dignity of mankind. We are acting contrary to the dignity of man, for instance, when we give way to drink, or commit unnatural sins, or practise all kinds of irregularities, and so on, all of which place man far below the animals. Further, to be cringing in one's behaviour to others; to be always paying compliments, in order by such undignified conduct to ingratiate ourselves, as we assume — all this is against the dignity of man.

We can easily find opportunities for making children conscious of the dignity of man, even in their own persons. For instance, in the case of uncleanliness, which is at least unbecoming to mankind. But it is really through lying that a child degrades himself below the dignity of man, since lying presupposes the power of thinking and of communicating one's thoughts to others. Lying makes a man the object of common contempt, and is a means of robbing him of the respect for and trust in himself that every man

should have.

(2) The child's duties towards others. — A child should learn early to reverence and respect the rights of others, and we must be careful to see that this reverence is realised in his actions. For instance, were a child to meet another poorer child and to push him rudely away, or to hit him, and so on, we must not say to the aggressor, 'Don't do that, you will hurt him; you should have pity, he is a poor child,' and so on. But we must treat him in the same haughty manner, because his conduct is against the rights of man. Children have as yet no idea, properly speaking, of generosity. We may, for instance, notice that when a child is told by his parents to share his slice of bread-and-butter with another, without being promised a second slice, the child either refuses to obey, or obeys unwillingly. It is, besides, useless to talk to a child of generosity, as it is not yet in his power to be generous.

The first duty of the child towards himself, which is often overlooked, is of great importance, especially during the period when childhood is left for youth

96. Many writers — Crugott, for instance — have either quite omitted, or explained falsely, that chapter of morality which teaches our duties towards ourselves. Our duties towards ourselves consist, as has been already said, in guarding, each in our own person, the dignity of mankind. A man will only reproach himself if he has the idea of mankind before his eyes. In this idea he finds an original, with which he compares himself. But when years increase, then is the critical period in which the idea of the dignity of man alone will suffice to keep the young man in bounds. But the youth must have some timely hints which will help him to know what he is to approve and what to mistrust.

In teaching children their duty towards others a catechism of right conduct would be of great use

97. Almost all our schools are lacking in something which would nevertheless greatly tend to the formation of uprightness in children — namely, a catechism of right conduct. This should contain, in a popular form, everyday questions of right and wrong. For instance, a man has a certain debt to pay to-day, but he sees another man in sore need, and, moved with pity, gives him the money which belongs of right to his creditor. Is this right or wrong?

It is wrong, for we must be free from obligation before we can be generous. When we give alms, we do a meritorious act; but in paying our debts, we do what we are bound to do.

Again, can a lie ever be justified by necessity? No, there is no single instance in which a lie can be justified. If this rule were not strictly adhered to, children especially would take the smallest excuse for a necessity, and would very often allow themselves to tell lies. If there were a book of this kind, an hour might very profitably be spent daily in studying it, so that children might learn and take to heart lessons on right conduct — that apple of God's eye upon earth.

With regard to the obligation of benevolence, we should arouse children to the duty of helping others, rather than to the sentiment of feeling for them

98. As to the obligation of benevolence, it is not an absolute obligation. We must arouse the sympathies of children, not so much to feel for the sorrows of others as to a sense of their duty to help them. Children ought not to be full of feeling, but they should be full of the idea of duty. Many people, indeed, become hardhearted, where once they were pitiful, because they have so often been deceived. It is in vain to point out to children the meritorious side of actions. Religious teachers often make the mistake of representing acts of benevolence as meritorious, without seeing that all we can do for God is just to do what we are bound to do; and in doing good to the poor, we are only doing our duty. For the inequality of man arises only from accidental circumstances — if I possess wealth, to what do I owe it but to the laying hold of circumstances favourable to me or to my predecessors? — while our consideration of the whole remains ever the same.

Children should not be encouraged to compare themselves with others, but with an ideal standard of what is right and fitting

99. We only excite envy in a child by telling him to compare his own worth with the worth of others.

He ought rather to compare himself with a concept of his reason. For humility is really nothing else than the comparing of our own worth with the standard of moral perfection. Thus, for instance, the Christian religion makes people humble, not by preaching humility, but by teaching them to compare themselves with the highest pattern of perfection. It is very absurd to see humility in depreciating ourselves. 'See how such and such a child behaves himself!' An exclamation of this kind produces only a very ignoble mode of thinking; for if a man estimates his own worth by the worth of others, he either tries to elevate himself above others or to detract from another's worth. But this last is envy. We then only seek to impute faults to others, in order that we may compare favourably with them. Thus the spirit of emulation, wrongly applied, only arouses envy. Emulation may occasionally be used to good purpose, as when we tell a child, in order to convince him of the possibility of performing a certain task, that others could easily do it. We must on no account allow one child to humiliate another. We must seek to avoid every form of pride which is founded upon superiority of fortune. At the same time we must seek to cultivate frankness in the child. This is an unassuming confidence in himself, the possession of which places him in a position to exhibit his talents in a becoming manner. This self-confidence is to be distinguished from insolence, which is really indifference to the judgment of others.

Classification of cravings and vices

100. All the cravings of men are either formal (relating to freedom and power), or material (set upon a certain object) — that is to say, either cravings of imagination or enjoyment — or, finally, cravings for the continuation of these two things as elements of happiness. Cravings of the first kind are the lust of honour (ambition), the lust of power, and the lust of possession. Those of the second kind are sexual indulgence (voluptuousness), enjoyment of good things (good living), or the enjoyment of social intercourse (love of amusement).

Cravings of the third kind, finally, are love of life, love of health, and love of ease (freedom from care as regards the future).

Vices are either those of malice, baseness, or narrow-mindedness.

To the first belong envy, ingratitude, and joy at the misfortune of others. To the second kind belong injustice, unfaithfulness (deceitfulness), dissoluteness — and this in the squandering of wealth as well as of health (intemperance) and of honour.

Vices of the third kind are those of unkindness, niggardliness, and idleness (effeminacy).

Classification of virtues

101. Virtues are either virtues of merit or merely of obligation or of innocence.

To the first belong magnanimity (shown in self-conquest in times of anger or when tempted to ease and the lust of possession), benevolence, and self-command.

To the second belong honesty, propriety, peaceableness; and to the third, finally, belong honourableness, modesty, and content.

Man is by nature neither good nor bad. He becomes both, however — his inclinations urging him one way, while his reason would drive him in another

102. But is man by nature morally good or bad? He is neither, for he is not by nature a moral being. He only becomes a moral being when his reason has developed ideas of duty and law. One may say, however, that he has a natural inclination to every vice, for he has inclinations and instincts which would urge him one way, while his reason would drive him in another. He can only become morally good by means of virtue — that is to say, by self-restraint — though he may be innocent as long as his vicious inclinations lie dormant.

Vices, for the most part, arise in this way, that civilisation does violence to Nature; and yet our destiny as human beings is to emerge from our natural state as animals. Perfect art becomes second nature.

All depends on leading children to understand and accept correct principles

103. Everything in education depends upon establishing correct principles, and leading children to

understand and accept them. They must learn to substitute abhorrence for what is revolting and absurd, for hatred; the fear of their own conscience, for the fear of man and divine punishment; self-respect and inward dignity, for the opinions of men; the inner value of actions, for words and mere impulses; understanding, for feeling; and joyousness and piety with good humour, for a morose, timid, and gloomy devotion.

But above all things we must keep children from esteeming the merita fortunæ too highly.

The method of teaching children religion

104. In looking at the education of children with regard to religion, the first question which arises is whether it is practicable to impart religious ideas to children early in life. On this point much has been written in educational works. Religious ideas always imply a theology; and how can young people be taught theology when they do not yet know themselves, much less the world? Is the youth who as yet knows nothing of duty in the condition to comprehend an immediate duty towards God? This much is certain — that, could it be brought about that children should never witness a single act of veneration to God, never even hear the name of God spoken, it might then be the right order of things to teach them first about ends and aims, and of what concerns mankind; to sharpen their judgment; to instruct them in the order and beauty of the works of Nature; then add a wider knowledge of the structure of the universe; and then only might be revealed to them for the first time the idea of a Supreme Being — a Law-giver. But since this mode of proceeding is impossible, according to the present condition of society, and we cannot prevent children from hearing the name of God and seeing tokens of man's devotion to Him; if we were to teach them something about God only when they are grown up, the result would be either indifference or false ideas — for instance, terror of God's power. Since, then, it is to be feared that such ideas might find a dwelling-place in the child's imagination, to avoid it we should seek early to impart religious ideas to the child. But this instruction must not be merely the work of memory and imitation; the way chosen must be always in accordance with Nature. Children will understand — without abstract ideas of duty, of obligations, of good and bad conduct — that there is a law of duty which is not the same as ease, utility, or other considerations of the kind, but something universal, which is not governed by the caprice of men. The teacher himself, however, must form this idea.

At first we must ascribe everything to Nature, and afterwards Nature herself to God; showing at first, for instance, how everything is disposed for the preservation of the species and their equilibrium, but at the same time with consideration in the long run for man, that he may attain happiness.

The idea of God might first be taught by analogy with that of a father under whose care we are placed, and in this way we may with advantage point out to the child the unity of men as represented by one family.

Religion is morality applied to the knowledge of God. In teaching children we must begin with the law which is in us. Morality must come first, and theology follow

105. What, then, is religion? Religion is the law in us, in so far as it derives emphasis from a Law-giver and a Judge above us. It is morality applied to the knowledge of God. If religion is not united to morality, it becomes merely an endeavour to win favour. Hymnsinging, prayers, and church-going should only give men fresh strength, fresh courage to advance; or they should be the utterance of a heart inspired with the idea of duty. They are but preparations for good works, and not the works themselves; and the only real way in which we may please God is by our becoming better men.

In teaching a child we must first begin with the law which is in him. A vicious man is contemptible to himself, and this contempt is inborn, and does not arise in the first instance because God has forbidden vice; for it does not necessarily follow that the law-giver is the author of the law. A prince, for instance, may forbid stealing in his country without being called the original prohibitor of theft. From this, man learns to understand that it is a good life alone which makes him worthy of happiness. The divine law must at the same time be recognised as Nature's law, for it is not arbitrary. Hence religion belongs to all

morality.

We must not, however, begin with theology. The religion which is founded merely on theology can never contain anything of morality. Hence we derive no other feelings from it but fear on the one hand, and hope of reward on the other, and this produces merely a superstitious cult. Morality, then, must come first and theology follow; and that is religion.

Conscience is the representative of God

106. The law that is within us we call conscience. Conscience, properly speaking, is the application of our actions to this law. The reproaches of conscience would be without effect, if we did not regard it as the representative of God, who, while He has raised up a tribunal over us, has also established a judgment-seat within us. If religion is not added to moral conscientiousness, it is of no effect. Religion without moral conscientiousness is a service of superstition. People will serve God by praising Him and reverencing His power and wisdom, without thinking how to fulfil the divine law; nay, even without knowing and searching out His power, wisdom, and so on. These hymnsingings are an opiate for the conscience of such people, and a pillow upon which it may quietly slumber.

Children should be taught reverence and obedience to the divine will

107. Children cannot comprehend all religious ideas, notwithstanding there are some which we ought to teach them; these, however, must be more negative than positive. It is of no use whatever to let children recite formulæ; it only produces a misconception of piety. The true way of honouring God consists in acting in accordance with His will, and this is what we must teach children to do. We must see to it that the name of God is not so often taken in vain, and this by ourselves as well as by children. If we use it in congratulating our friends — even with pious intent — this also is a misuse of the holy name. The idea of God ought to fill people with reverence every time they hear His name spoken. And it should be pronounced but seldom and never lightly. The child must learn to feel reverence towards God, as the Lord of life and of the whole world; further, as one who cares for men, and lastly as their Judge. We are told of Newton that he never pronounced the name of God without pausing for a while and meditating upon it.

By uniting the idea of God and duty the child will learn to be kind to animals. He should be taught also to discover good in evil

108. Through an explanation which unites the ideas of God and of duty the child learns the better to respect the divine care for creatures, and will thus be kept from an inclination towards destruction and cruelty, which we so often see in the torture of small animals. At the same time we should teach the child to discover good in evil. For instance, beasts of prey and insects are patterns of cleanliness and diligence; so, too, evil men are a warning to follow the law; and birds, by waylaying worms, protect the garden; and so on.

Religious ideas should be taught to children early, though they should be few in number and merely negative

109. We must, then, give children some idea of the Supreme Being, in order that when they see others praying, and so on, they may know to whom they are praying, and why. But these ideas must be few in number, and, as has been said, merely negative. We must begin to impart them from early youth, being careful at the same time that they do not esteem men according to their religious observances, for, in spite of the diversity of religions, religion is everywhere the same.

At the time when the instinct of sex develops in the youth, he should be spoken to clearly and definitely on the subject

110. Here, in conclusion, we shall add a few remarks which should especially be observed by the youth as he approaches the years of early manhood. At this time the youth begins to make certain distinctions which he did not make formerly. In the first place, the distinction of sex. Nature has spread a certain veil of secrecy over this subject, as if it were something unseemly for man, and merely an animal need in him. She has, however, sought to unite it, as far as possible, with every kind of morality. Even

savage nations behave with a kind of shame and reserve in this matter. Children now and then ask curious questions; for instance, 'Where do children come from?' &c. They are, however, easily satisfied either at receiving an unreasonable answer which means nothing, or by being told that these are childish questions.

These inclinations develop mechanically in the youth, and, as is the way with all instincts, even without the knowledge of a particular object. Thus it is impossible to keep the youth in ignorance and the innocence which belongs to ignorance. By silence the evil is but increased. We see this in the education of our forefathers. In the education of the present day it is rightly assumed that we must speak openly, clearly, and definitely with the youth. We must allow that it is a delicate point, for we cannot look upon it as a subject for open conversation; but if we enter with sympathy into his new impulses all will go well.

The thirteenth or fourteenth year is usually the time in which the feeling of sex develops itself in the youth. (When it happens earlier it is because children have been led astray and corrupted through bad examples.) Their judgment also is then already formed, and at about this time Nature has prepared them for our discussing this matter with them.

Evil impulses may be escaped from by constant occupation. The youth should learn to respect women

111. Nothing weakens the mind as well as the body so much as the kind of lust which is directed towards themselves, and it is entirely at variance with the nature of man. But this also must not be concealed from the youth. We must place it before him in all its horribleness, telling him that in this way he will become useless for the propagation of the race, that his bodily strength will be ruined by this vice more than by anything else, that he will bring on himself premature old age, and that his intellect will be very much weakened, and so on.

We may escape from these impulses by constant occupation, and by devoting no more time to bed and sleep than is necessary. Through this constant occupation we may banish all such thoughts from our mind, for even if the object only remains in our imagination it eats away our vital strength. If we direct our inclination towards the other sex, there are at any rate certain obstacles in the way; if, however, they are directed towards ourselves, we may satisfy them at any time. The physical effects are extremely hurtful, but the consequences with regard to morality are even worse. The bounds of Nature are here overstepped and the inclination rages ceaselessly, since no real satisfaction can take place. The teachers of grown-up youths have propounded the question whether it is allowable for a youth to enter into relations with the other sex? If we must choose one of the two things, this is certainly better than the other. In the former he acts against Nature; in the latter he does not. Nature has called upon him to be a man so soon as he becomes of age, and to propagate his kind; the exigences, however, which exist for man in a civilised community render it sometimes impossible for him to marry and educate his children at that period. Herein he would be transgressing the social order. It is the best way — indeed, it is the duty of the young man — to wait till he is in a condition to marry. He acts then not only as a good man, but as a good citizen.

The youth should learn early to entertain a proper respect for the other sex; to win their esteem by an activity free from vice; and thus to strive after the high prize of a happy marriage.

With regard to distinctions of rank, the youth should be made conscious of the equality of men, as well as of their civil inequality

112. A second distinction which the youth begins to make about the time of his entrance into society consists in the knowledge of the distinction of rank and the inequality of men. As a child he must not be allowed to notice this. He must not even be allowed to give orders to the servants. If the child sees his parents giving orders to the servants, they may at any rate say to him: 'We give them their bread, and therefore they obey us — you do not, and therefore they need not obey you.' In fact, children would of themselves know nothing of this distinction, if only their parents did not give them this false notion. The young man should be shown that the inequality of man is an institution that has arisen on account of one man striving to get an advantage over another. The consciousness of the equality of men, together with

their civil inequality, may be taught him little by little.

In what way the moral character may best be maintained throughout life

113. We must accustom the youth to esteem himself absolutely and not relatively to others. The high esteem of others for what does not constitute the true value of men at all is vanity. Further, we must teach him to be conscientious in everything, and not merely to appear so, but to strive to be so. We must also make him heedful that in no matter about which he has well weighed a resolution shall it remain an empty resolution. Rather than this it is better to conceive of no resolution at all, and let the matter remain in doubt. He must be taught contentedness as regards outward circumstances, and patience in work — Sustine et abstine — moderation in pleasure. If we are not always thinking of pleasure, but will be patient in our work, we shall become useful members of the community and be kept from ennui.

Again, we must encourage the youth —

(1) To be cheerful and good-humoured. Cheerfulness arises from the fact of having nothing to reproach oneself with.

(2) To be even-tempered. By means of self-discipline one can train oneself to become a cheerful companion in society.

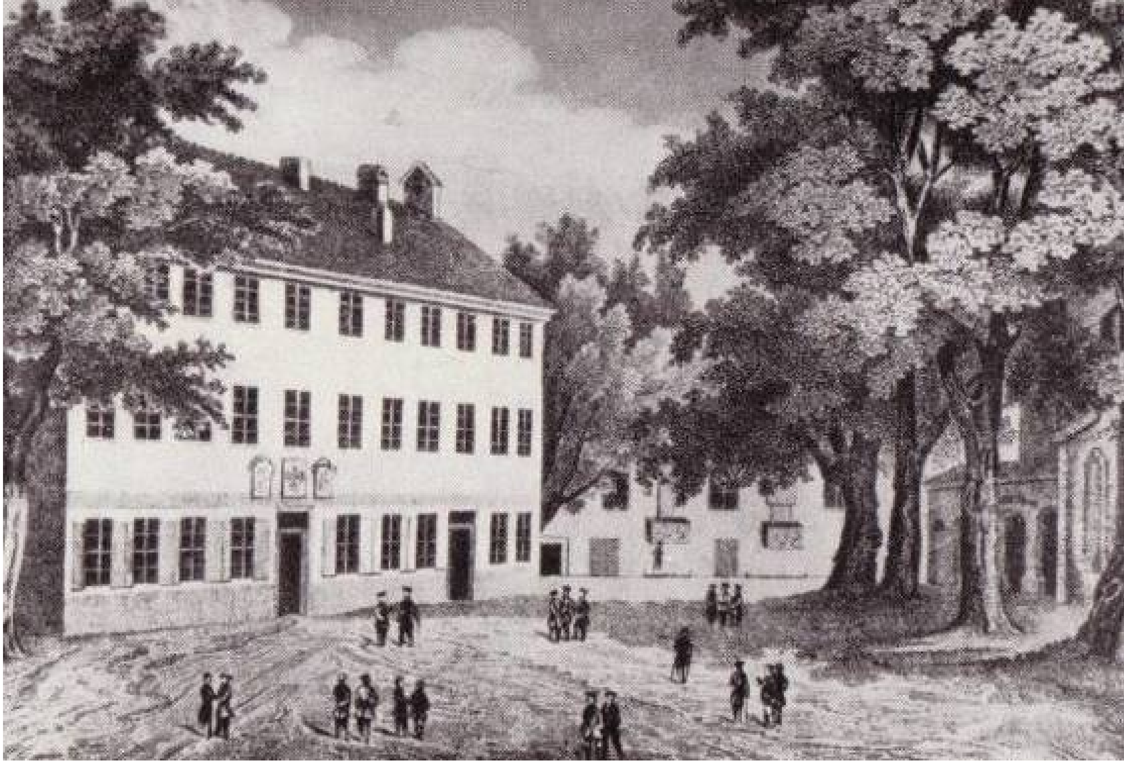
(3) To regard many things invariably as matters of duty. We must hold an action to be worthy, not because it falls in with our inclinations, but because in performing it we fulfil our duty.

(4) In love towards others, as well as to feelings of cosmopolitanism. There exists something in our minds which causes us to take an interest (a) in ourselves, (b) in those with whom we have been brought up, and (c) there should also be an interest in the progress of the world. Children should be made acquainted with this interest, so that it may give warmth to their hearts. They should learn to rejoice at the world’s progress, although it may not be to their own advantage or to that of their country.

(5) To set little store by the enjoyment of the good things of life. The childish fear of death will then disappear — we must point out to the youth that the anticipations of pleasure are not realised in its fulfilment.

Lastly, by pointing out the necessity of daily ‘settling accounts’ with himself, so that at the end of life he may be able to make an estimate with regard to its value.

The Criticism



In 1740, aged 16, Kant enrolled at the University of Königsberg, where he spent his whole career. He studied the philosophy of Gottfried Leibniz and Christian Wolff under Martin Knutzen (Associate Professor of Logic and Metaphysics from 1734 until his death in 1756), a rationalist who was also familiar with developments in British philosophy and science and introduced Kant to the new mathematical physics of Isaac Newton.

The university today

A COMMENTARY TO KANT'S 'CRITIQUE OF PURE REASON'
by Norman Kemp Smith

CONTENTS

PREFACE
NOTE
INTRODUCTION
PART I. THE TRANSCENDENTAL AESTHETIC
THE TRANSCENDENTAL AESTHETIC
PART II. THE TRANSCENDENTAL LOGIC
CHAPTER I
CHAPTER II
CHAPTER I
CHAPTER II
CHAPTER III
DIVISION II. THE TRANSCENDENTAL DIALECTIC
TRANSCENDENTAL DIALECTIC
CHAPTER I
CHAPTER II
CHAPTER III
CONCLUDING COMMENT ON THE DIALECTIC
APPENDICES
CHAPTER I
CHAPTER II
CHAPTER III
CHAPTER IV

PREFACE

The *Critique of Pure Reason* is more obscure and difficult than even a metaphysical treatise has any right to be. The difficulties are not merely due to defects of exposition; they multiply rather than diminish upon detailed study; and, as I shall endeavour to show in this *Commentary*, are traceable to two main causes, the composite nature of the text, written at various dates throughout the period 1772-1780, and the conflicting tendencies of Kant's own thinking.

The *Commentary* is both expository and critical; and in exposition no less than in criticism I have sought to subordinate the treatment of textual questions and of minor issues to the systematic discussion of the central problems. Full use is made of the various selections from Kant's private papers that have appeared, at intervals, since the publication of his *Lectures on Metaphysics* in 1821. Their significance has not hitherto been generally recognised in English books upon Kant. They seem to me to be of capital importance for the right understanding of the *Critique*.

Some apology is perhaps required for publishing a work of this character at the present moment. It was completed, and arrangements made for its publication, shortly before the outbreak of war. The printers have, I understand, found in it a useful stop-gap to occupy them in the intervals of more pressing work; and now that the type must be released, I trust that in spite of, or even because of, the overwhelming preoccupations of the war, there may be some few readers to whom the volume may be not unwelcome. That even amidst the distractions of actual campaigning metaphysical speculation can serve as a refuge and a solace is shown by the {viii}memorable example of General Smuts. He has himself told us that on his raid into Cape Colony in the South African War he carried with him for evening reading the *Critique of Pure Reason*. Is it surprising that our British generals, pitted against so unconventional an opponent, should have been worsted in the battle of wits?

The *Critique of Pure Reason* is a philosophical classic that marks a turning-point in the history of philosophy, and no interpretation, even though now attempted after the lapse of a hundred years, can hope to be adequate or final. Some things are clearer to us than they were to Kant's contemporaries; in other essential ways our point of view has receded from his, and the historical record, that should determine our judgments, is far from complete. But there is a further difficulty of an even more serious character. The *Critique* deals with issues that are still controversial, and their interpretation is possible only from a definite standpoint. The limitations of this standpoint and of the philosophical *milieu* in which it has been acquired unavoidably intervene to distort or obscure our apprehension of the text. Arbitrary and merely personal judgments I have, however, endeavoured to avoid. My sole aim has been to reach, as far as may prove feasible, an unbiassed understanding of Kant's great work.

Among German commentators I owe most to Vaihinger, Adickes, B. Erdmann, Cohen, and Riehl, especially to the first named. The chief English writers upon Kant are Green, Caird, and Adamson. In so far as Green and Caird treat the Critical philosophy as a half-way stage to the Hegelian standpoint I find myself frequently in disagreement with them; but my indebtedness to their writings is much greater than my occasional criticisms of their views may seem to imply. With Robert Adamson I enjoyed the privilege of personal discussions at a time when his earlier view of Kant's teaching was undergoing revision in a more radical manner than is apparent even in his posthumously published University lectures. To the stimulus of his suggestions the writing of this *Commentary* is largely due.

My first study of the *Critique* was under the genial and inspiring guidance of Sir Henry Jones. With characteristic kindliness he has read through my manuscript and has{ix} disclosed to me many defects of exposition and argument. The same service has been rendered me by Professor G. Dawes Hicks, whose criticisms have been very valuable, particularly since they come from a student of Kant who on many

fundamental points takes an opposite view from my own.

I have also to thank my colleague, Professor Oswald Veblen, for much helpful discussion of Kant's doctrines of space and time, and of mathematical reasoning.

Mr. H. H. Joachim has read the entire proofs, and I have made frequent modifications to meet his very searching criticisms. I have also gratefully adopted his revisions of my translations from the *Critique*. Similar acknowledgments are due to my colleague, Professor A. A. Bowman, and to my friend Dr. C. W. Hendel.

I have in preparation a translation of the *Critique of Pure Reason*, and am responsible for the translations of all passages given in the present work. In quoting from Kant's other writings, I have made use of the renderings of Abbott, Bernard, and Mahaffy; but have occasionally allowed myself the liberty of introducing alterations.

Should readers who are already well acquainted with the *Critique* desire to use my *Commentary* for its systematic discussions of Kant's teaching, rather than as an accompaniment to their study of the text, I may refer them to those sections which receive italicised headings in the table of contents.

NORMAN KEMP SMITH.

London, *January 1918*.{xi}

NOTE

In all references to the *Kritik der Reinen Vernunft* I have given the original pagings of both the first and second editions. References to Kant's other works are, whenever possible, to the volumes thus far issued in the new Berlin edition. As the *Reflexionen Kants zur Kritik der reinen Vernunft* had not been published in this edition at the time when the *Commentary* was completed, the numbering given is that of B. Erdmann's edition of 1884.

ABBREVIATIONS

Berlin edition of Kant's works
W

Pagings in the first edition of the *Kritik der reinen Vernunft*
A

Pagings in the second edition
B

Adickes' edition of the *Kritik der reinen Vernunft* (1889)
K

INTRODUCTION

I. TEXTUAL

KANT'S METHOD OF COMPOSING THE 'CRITIQUE OF PURE REASON'

SELDOM, in the history of literature, has a work been more conscientiously and deliberately thought out, or more hastily thrown together, than the *Critique of Pure Reason*. The following is the account which Kant in a letter to Moses Mendelssohn (August 16, 1783) has given of its composition:

"[Though the *Critique* is] the outcome of reflection which had occupied me for a period of at least twelve years, I brought it to completion in the greatest haste within some four to five months, giving the closest attention to the content, but with little thought of the exposition or of rendering it easy of comprehension by the reader — a decision which I have never regretted, since otherwise, had I any longer delayed, and sought to give it a more popular form, the work would probably never have been completed at all. This defect can, however, be gradually removed, now that the work exists in a rough form."

These statements must be allowed the greater weight as Kant, in another letter (to Garve, August 7, 1783), has given them in almost the same words:

"I freely admit that I have not expected that my book should meet with an immediate favourable reception. The exposition of the materials which for more than twelve successive years I had been carefully maturing, was not composed in a sufficiently suitable manner for general comprehension. For the perfecting of its exposition several years would have been required, whereas I brought it to completion in some four to five months, in the fear that, on longer delay, so prolonged a labour might finally become burdensome, and that my increasing years (I am already in my sixtieth year) would perhaps incapacitate me, while I am still the sole possessor of my complete system."

{xx}

The twelve years here referred to are 1769-1780; the phrase "at least twelve years" indicates Kant's appreciation of the continuity of his mental development. Hume's first influence upon Kant is probably to be dated prior to 1760. The choice, however, of the year 1769 is not arbitrary; it is the year of Kant's adoption of the semi-Critical position recorded in the *Inaugural Dissertation* (1770). The "four to five months" may be dated in the latter half of 1780. The printing of the *Critique* was probably commenced in December or January 1780-1781.

But the *Critique* is not merely defective in clearness or popularity of exposition. That is a common failing of metaphysical treatises, especially when they are in the German language, and might pass without special remark. What is much more serious, is that Kant flatly contradicts himself in almost every chapter; and that there is hardly a technical term which is not employed by him in a variety of different and conflicting senses. As a writer, he is the least exact of all the great thinkers.

So obvious are these inconsistencies that every commentator has felt constrained to offer some explanation of their occurrence. Thus Caird has asserted that Kant opens his exposition from the non-Critical standpoint of ordinary consciousness, and that he discloses the final position, towards which he has all along been working, only through repeated modifications of his preliminary statements. Such a view, however, cannot account either for the specific manner of occurrence or for the actual character of the contradictions of which the *Critique* affords so many examples. These are by no means limited to the opening sections of its main divisions; and careful examination of the text shows that they have no such

merely expository origin. The publication of Kant's *Reflexionen* and *Lose Blätter*, and the devoted labours of Benno Erdmann, Vaihinger, Adickes, Reicke and others, have, indeed, placed the issue upon an entirely new plane. It can now be proved that the *Critique* is not a unitary work, and that in the five months in which, as Kant tells us, it was "brought to completion" (*zu Stande gebracht*), it was not actually written, but was pieced together by the combining of manuscripts written at various dates throughout the period 1772-1780.

Kant's correspondence in these years contains the repeated assertion that he expected to be able to complete the work within some three or six months. This implies that it was already, at least as early as 1777, in great part committed{xxi} to writing. In 1780 Kant must therefore have had a large body of manuscript at his disposal. The recently published *Lose Blätter* are, indeed, part of it. And as we shall have constant occasion to observe, the *Critique* affords ample evidence of having been more or less mechanically constructed through the piecing together of older manuscript, supplemented, no doubt, by the insertion of connecting links, and modified by occasional alterations to suit the new context. Kant, it would almost seem, objected to nothing so much as the sacrifice of an argument once consecrated by committal to paper. If it could be inserted, no matter at what cost of repetition, or even confusion, he insisted upon its insertion. Thus the *Subjective* and *Objective Deductions* of the first edition can, as we shall find, be broken up into at least four distinct layers, which, like geological strata, remain to the bewilderment of the reader who naturally expects a unified system, but to the enlightenment of the student, once the clues that serve to identify and to date them have been detected. To cite another example: in the *Second Analogy*, as given in the first edition, the main thesis is demonstrated in no less than five distinct proofs, some of which are repetitions; and when Kant restated the argument in the second edition, he allowed the five proofs to remain, but superimposed still another upon them. Kant does, indeed, in the second edition omit some few passages from various parts of the *Critique*; but this is in the main owing to his desire to protect himself against serious misunderstanding to which, as he found, he had very unguardedly laid himself open. The alterations of the second edition are chiefly of the nature of additions.

Adickes' theory that Kant in the "four to five months" composed a brief outline of his entire argument, and that it was upon the framework of this outline that the *Critique* was elaborated out of the older manuscript, may possibly be correct. It has certainly enabled Adickes to cast much light upon many textual problems. But his own supplementary hypothesis in regard to the section on the *Antinomies*, namely, that it formed an older and separate treatise, may very profitably be further extended. Surely it is unlikely that with the expectation, continued over many years, of completion within a few months, Kant did not possess, at least for the *Aesthetic*, *Dialectic*, and *Methodology*, a general outline, that dated further back than 1780. And doubtless this outline was itself altered, patched, and recast, in proportion as insight into the problems of the *Analytic*, the problems, that is to say,{xxii} which caused publication to be so long deferred, deepened and took final form.

The composite character of the *Critique* is largely concealed by the highly elaborate, and extremely artificial, arrangement of its parts. To the general plan, based upon professedly logical principles, Kant has himself given the title, architectonic; and he carries it out with a thoroughness to which all other considerations, and even at times those of sound reasoning, are made to give way. Indeed, he clings to it with the unreasoning affection which not infrequently attaches to a favourite hobby. He lovingly elaborates even its minor detail, and is rewarded by a framework so extremely complicated that the most heterogeneous contents can be tidily arranged, side by side, in its many compartments. By its uniformity and rigour it gives the appearance of systematic order even when such order is wholly absent.

But we have still to consider the chief reason for the contradictory character of the contents of the *Critique*. It is inseparably bound up with what may perhaps be regarded as Kant's supreme merit as a philosophical thinker, especially as shown in the first *Critique*, — namely, his open-minded recognition of the complexity of his problems, and of the many difficulties which lie in the way of any solution which

he is himself able to propound. Kant's method of working seems to have consisted in alternating between the various possible solutions, developing each in turn, in the hope that some midway position, which would share in the merits of all, might finally disclose itself. When, as frequently happened, such a midway solution could not be found, he developed his thought along the parallel lines of the alternative views.

"You know that I do not approach reasonable objections with the intention merely of refuting them, but that in thinking them over I always weave them into my judgments, and afford them the opportunity of overturning all my most cherished beliefs. I entertain the hope that by thus viewing my judgments impartially from the standpoint of others some third view that will improve upon my previous insight may be obtainable.... Long experience has taught me that insight into a subject which I am seeking to master is not to be forced, or even hastened, by sheer effort, but demands a fairly prolonged period during which I return again and again to the same concepts, viewing them in all their aspects and in their widest possible connections, while in the intervals the sceptical spirit awakens, and makes trial whether my conclusions can withstand a {xxiii}searching criticism." "In mental labour of so delicate a character nothing is more harmful than preoccupation with extraneous matters. The mind, though not constantly on the stretch, must still, alike in its idle and in its favourable moments, lie uninterruptedly open to any chance suggestion which may present itself. Relaxations and diversions must maintain its powers in freedom and mobility, so that it may be enabled to view the object afresh from every side, and so to enlarge its point of view from a microscopic to a universal outlook that it adopts in turn every conceivable standpoint, verifying the observations of each by means of all the others." "I am not of the opinion of the well-meaning writer who has recommended us never to allow doubts in regard to a matter upon which we have once made up our minds. In pure philosophy that is not feasible. Indeed the understanding has in itself a natural objection to any such procedure. We must consider propositions in all their various applications; even when they may not seem to require a special proof, we must make trial of their opposites, and in this way fight for delay, until the truth becomes in all respects evident."

That these are no mere pious expressions of good intention, but represent Kant's actual method of working, is amply proved by the contents of the *Critique*. We find Kant constantly alternating between opposed standpoints, to no one of which he quite definitely commits himself, and constantly restating his principles in the effort to remove the objections to which, as he recognises, they continue to lie open. The *Critique*, as already stated, is not the exposition of a single unified system, but is the record of Kant's manifold attempts to formulate and to solve his many-sided problems. Even those portions of the *Critique* which embody his latest views show that Kant is still unwilling to sacrifice insight to consistency. When he is guilty of special pleading — for he cannot be altogether absolved even from that charge — it is in the interests of his logical architectonic, for which, as I have said, he cherishes a quite unreasoning affection, and not of his central principles. So far from concealing difficulties, or unduly dwelling upon the favouring considerations, Kant himself emphasises the outstanding objections to which his conclusions remain subject. If his teaching is on certain points very definite, it is in other hardly less important respects largely tentative.

The value of Kant's *Critique* as an introduction to modern philosophy is greatly enhanced by this method of procedure. The student who has steeped himself in the atmosphere of the *Critique*, however dissatisfied he may perhaps be with many of its doctrines, has become familiar with the main requirements{xxiv} which a really adequate metaphysics must fulfil, or at least will have acquired a due sense of the complexity of the problems with which it deals.

Recognition of the composite nature of the text will safeguard us in two ways. In the first place, citation of single passages is quite inconclusive. Not only must all the relevant passages be collated; they must be interpreted in the light of an historical understanding of the various stages in Kant's development. We must also be prepared to find that on certain main questions Kant hesitates between opposed positions, and that

he nowhere definitively commits himself to any quite final expression of view.

Secondly, we cannot proceed on the assumption that Kant's maturest teaching comes where, had the *Critique* been a unitary work, composed upon a definite and previously thought out plan, we should naturally expect to find it, namely, in its concluding portions. The teaching of much of the *Dialectic*, especially in its account of the nature of the phenomenal world and of its relation to the knowing mind, is only semi-Critical. This is also true of Kant's *Introduction* to the *Critique*. Introductions are usually written last; and probably Kant's *Introduction* was written after the completion of the *Aesthetic*, of the *Dialectic*, and of the *Analytic* in its earlier forms. But it bears all the signs of having been composed prior to the working out of several of his most characteristic doctrines in the central parts of the *Analytic*.

Thus both Kant's introductory statements of the aims and purposes of the *Critique*, and his application of his results in the solution of metaphysical problems, fail to represent in any adequate fashion the new and revolutionary principles to which he very gradually but successfully worked his way. The key to the *Critique* is given in the central portions of the *Analytic*, especially in the *Deduction of the Categories*. The other parts of the *Critique* reveal the Critical doctrines only as gradually emerging from the entangling influence of pre-Critical assumptions. Their teaching has to be radically remodelled before they can be made to harmonise with what, in view both of their intrinsic character and of the corresponding alterations in the second edition, must be regarded as Kant's maturest utterances.

This was a task which Kant never himself attempted. For no sooner had he attained to comparative clearness in regard to his new Critical principles and briefly expounded them in the *Analytic* of the first edition, than he hastened to apply them in the spheres of morality, aesthetics, and teleology. When the *Critique* appeared in 1781 he was fifty-{xxv}seven years of age; and he seems to have feared that if he allowed these purely theoretical problems, which had already occupied his main attention for "at least twelve years," to detain him longer, he would be debarred from developing and placing on permanent record the new metaphysics of ethics which, as the references in the first *Critique* show, had already begun to shape itself in his mind. To have expended further energy upon the perfecting of his theoretical philosophy would have endangered its own best fruits. Even the opportunity in 1787 of a second edition of the *Critique* he used very sparingly, altering or adding only where occasional current criticism — his puzzled contemporaries having still for the most part maintained a discreet silence — had clearly shown that his modes of exposition were incomplete or misleading.

II. HISTORICAL

KANT'S RELATION TO HUME AND TO LEIBNIZ

Kant's manner of formulating his fundamental problem — How are synthetic *a priori* judgments possible? — may well seem to the modern reader to imply an unduly scholastic and extremely rationalistic method of approach. Kant's reasons for adopting it have, unfortunately, been largely obscured, owing to the mistaken interpretation which has usually been given to certain of his personal utterances. They have been supposed to prove that the immediate occasion of the above formula was Hume's discussion of the problem of causality in the *Enquiry into the Human Understanding*. Kant, it is argued, could not have been acquainted with Hume's earlier and more elaborate *Treatise on Human Nature*, of which there was then no translation; and his references to Hume must therefore concern only the later work.

Vaihinger has done valuable service in disputing this reading of Kant's autobiographical statements. Kant does not himself make direct mention of the *Enquiry*, and the passages in the *Critique* and in the *Prolegomena* in which Hume's teaching is under consideration seem rather to point to the wider argument

of the *Treatise*. This is a matter of no small importance; for if Vaihinger's view can be established, it will{xxvi} enable us to appreciate, in a manner otherwise impossible, how Kant should have come to regard the problem of *a priori synthesis* as being the most pressing question in the entire field of speculative philosophy.

The essential difference between the *Treatise* and the *Enquiry*, from the standpoint of their bearing upon Critical issues, lies in the wider scope and more radical character of the earlier work. The *Enquiry* discusses the problem of causality only in the form in which it emerges in *particular* causal judgments, *i.e.* as to our grounds for asserting that this or that effect is due to this or that cause. In the *Treatise*, Hume raises the broader question as to our right to postulate that events must always be causally determined. In other words, he there questions the validity of the *universal* causal principle, that whatever begins to exist must have a cause of existence; and he does so on the explicit ground that it demands as necessary the connecting of two concepts, that of an event and that of an antecedent cause, between which *no connection of any kind* can be detected by the mind. The principle, that is to say, is not self-evident; it is synthetic. The concept of an event and the concept of a cause are quite separate and distinct ideas. Events can be conceived without our requiring to think antecedent events upon which they are dependent. Nor is the principle capable of demonstration. For if it be objected that in questioning its validity we are committing ourselves to the impossible assertion that events arise out of nothing, such argument is only applicable if the principle be previously granted. If events do not require a cause, it is as little necessary to seek their source in a generation out of nothing as in anything positive. Similarly, when it is argued that as all the parts of time and space are uniform, there must be a cause determining an event to happen at one moment and in one place rather than at some other time or place, the principle is again assumed. There is no greater difficulty in supposing the time and place to be fixed without a cause than in supposing the existence to be so determined. The principle, Hume concludes, is non-rational in character. It is an instrument useful for the organisation of experience; and for that reason nature has determined us to its formation and acceptance. Properly viewed, it expresses a merely instinctive belief, and is explicable only in the naturalistic manner of our other propensities, as necessary to the fulfilling of some practical need. "Nature has determined us to judge as well as to breathe and feel."

From this naturalistic position Hume makes a no less vigorous attack upon the empirical philosophies which profess{xxvii} to establish general principles by inductive inference from the facts of experience. If the principles which lie at the basis of our experience are non-rational in character, the same must be true of our empirical judgments. They may correctly describe the uniformities that have hitherto occurred in the sequences of our sensations, and may express the natural expectations to which they spontaneously give rise; but they must never be regarded as capable of serving as a basis for inference. In eliminating *a priori* principles, and appealing exclusively to sense-experience, the empiricist removes all grounds of distinction between inductive inference and custom-bred expectation. And since from this standpoint the possibility of universal or abstract concepts — so Hume argues — must also be denied, deductive inference must likewise be eliminated from among the possible instruments at the disposal of the mind. So-called inference is never the source of our beliefs; it is our fundamental natural beliefs, as determined by the constitution of our nature in its reaction upon external influences, that generate those expectations which, however they may masquerade in logical costume, have as purely natural a source as our sensations and feelings. Such, briefly and dogmatically stated, is the sum and substance of Hume's teaching.

Now it was these considerations that, as it would seem, awakened Kant to the problem of *a priori synthesis*. He was, and to the very last remained, in entire agreement with Hume's contention that the principle of causality is neither self-evident nor capable of logical demonstration, and he at once realised that what is true of this principle must also hold of all the other principles fundamental to science and philosophy. Kant further agreed that inductive inference from the data of experience is only possible upon

the prior acceptance of rational principles independently established; and that we may not, therefore, look to experience for proof of their validity. Thus with the rejection of self-evidence as a feature of the *a priori*, and with the consequent admission of its synthetic character, Kant is compelled to acquiesce in the inevitableness of the dilemma which Hume propounds. Either Hume's sceptical conclusions must be accepted, or we must be able to point to some criterion which is not subject to the defects of the rationalist and empirical methods of proof, and which is adequate to determine the validity or invalidity of general principles. Is there any such alternative? Such is Kant's problem as{xxviii} expressed in the formula: How are synthetic *a priori* judgments possible?

It is a very remarkable historical fact that notwithstanding the clearness and cogency of Hume's argument, and the appearance of such competent thinkers as Thomas Reid in Scotland, Lambert and Crusius in Germany, no less than thirty years should have elapsed before Hume found a single reader capable of appreciating the teaching of the *Treatise* at its true value. Even Kant himself was not able from his reading of the *Enquiry* in 1756-1762 to realise the importance and bearing of the main problem. Though in the *Enquiry* the wider issue regarding the general principle of causality is not raised, the bearing of Hume's discussion, when interpreted in the light of Kant's own teaching, is sufficiently clear; and accordingly we cannot be absolutely certain that it was not a re-reading of the *Enquiry* or a recalling of its argument that suggested to Kant the central problem of his Critical philosophy. The probability, however, is rather that this awakening took place only indirectly through his becoming acquainted with the wider argument of the *Treatise* as revealed in James Beattie's extremely crude and unsympathetic criticism of Hume's philosophy. Beattie had great natural ability, and considerable literary power. His prose writings have a lucidity, a crispness, and a felicity of illustration which go far to explain their widespread popularity in the latter half of the eighteenth century. Their literary quality is, however, more than counterbalanced by the absence of any genuine appreciation{xxix} of the deeper, speculative implications and consequences of the problems discussed. And this being so, he is naturally at his worst in criticising Hume. In insisting, as he does, upon the absurd practical results that would follow from the adoption of Hume's sceptical conclusions, he is merely exploiting popular prejudice in the philosophical arena. That, however, may be forgiven him, if, as would seem to be the case, the quotations which he gives verbatim from Hume's *Treatise* really first revealed to Kant the scope and innermost meaning of Hume's analysis of the causal problem.

The evidence in support of this contention is entirely circumstantial. The German translation of Beattie's *Essay on the Nature and Immutability of Truth* was published at Easter 1772, *i.e.* in the year in which Kant, in the process of his own independent development, came, as is shown by his famous letter to Herz, to realise the mysterious, problematic character of *a priori* knowledge *of the independently real*. He was then, however, still entirely unconscious of the deeper problem which at once emerges upon recognition that *a priori* principles, quite apart from all question of their objective validity, are synthetic in form. We know that Kant was acquainted with Beattie's work; for he twice refers to Beattie's criticism of Hume. What more probable than that he read the translation in the year of its publication, or at least at some time not very long subsequent to the date of the letter to Herz? The passages which Beattie quotes from the *Treatise* are exactly those that were necessary to reveal the full scope of Hume's revolutionary teaching in respect to the general principle of causality. There seems, indeed, little doubt that this must have been the channel through which Hume's influence chiefly acted. Thus at last, by a circuitous path, through the quotations of an adversary, Hume awakened philosophy from its dogmatic slumber, and won for his argument that appreciation which despite its cogency it had for thirty years so vainly demanded.{xxx}

Let us now turn our attention to the rationalist philosophy in which Kant was educated. Hume's contention that experience cannot by itself justify any inductive inference, forms the natural bridge over which we can best pass to the contrasting standpoint of Leibniz. Hume and Leibniz find common ground in

denouncing empiricism. Both agree in regarding it as the mongrel offspring of conflicting principles. If rationalism cannot hold its own, the alternative is not the finding of firm foothold in concrete experience, but only such consolation as a sceptical philosophy may afford. The overthrow of rationalism means the destruction of metaphysics in every form. Even mathematics and the natural sciences will have to be viewed as fulfilling a practical end, not as satisfying a theoretical need. But though Leibniz's criticism of empiricism is, in its main contention, identical with that of Hume, it is profoundly different both in its orientation and in the conclusions to which it leads. While Hume maintains that induction must be regarded as a non-rational process of merely instinctive anticipation, Leibniz argues to the self-legislative character of pure thought. Sense-experience reveals reality only in proportion as it embodies principles derived from the inherent character of thought itself. Experience conforms to *a priori* principles, and so can afford an adequate basis for scientific induction.

There is a passage in Hume's *Enquiry* which may be employed to illustrate the boldly speculative character of Leibniz's interpretation of the nature and function of human thought. "Nothing ... [seems] more unbounded than the thought of man, which not only escapes all human power and authority, but is not even restrained within the limits of nature and reality.... While the body is confined to one planet, along which it creeps with pain and difficulty, the thought can in an instant transport us into the most distant regions of the universe.... What never was seen, or heard of, may yet be conceived; nor is anything beyond the power of thought, except what implies an absolute contradiction." This passage in which Hume means to depict a false belief, already sufficiently condemned by the absurdity of its claims, expresses for Leibniz the wonderful but literal truth. Thought is the revealer of an eternal unchanging reality, and its validity{xxxi} is in no way dependent upon its verification through sense. When Voltaire in his *Ignorant Philosopher* remarks that "it would be very singular that all nature, all the planets, should obey eternal laws, and that there should be a little animal, five feet high, who, in contempt of these laws, could act as he pleased, solely according to his caprice," he is forgetting that this same animal of five feet can contain the stellar universe in thought within himself, and has therefore a dignity which is not expressible in any such terms as his size may seem, for vulgar estimation, to imply. Man, though dependent upon the body and confined to one planet, has the sun and stars as the playthings of his mind. Though finite in his mortal conditions, he is divinely infinite in his powers.

Leibniz thus boldly challenges the sceptical view of the function of reason. Instead of limiting thought to the translating of sense-data into conceptual forms, he claims for it a creative power which enables it out of its own resources to discover for itself, not only the actual constitution of the material world, but also the immensely wider realm of possible entities. The real, he maintains, is only one of the many kingdoms which thought discovers for itself in the universe of truth. It is the most comprehensive and the most perfect, but still only one out of innumerable others which unfold themselves to the mind in pure thought. Truth is not the abstracting of the universal aspects in things, not a copy of reality, dependent upon it for meaning and significance. Truth is wider than reality, is logically prior to it, and instead of being dependent upon the actual, legislates for it. Leibniz thus starts from the possible, as discovered by pure thought, to determine in an *a priori* manner the nature of the real.

This Leibnizian view of thought may seem, at first sight, to be merely the re-emergence of the romantic, rationalistic ideal of Descartes and Malebranche. So to regard it would, however, be a serious injustice. It was held with full consciousness of its grounds and implications, and reality was metaphysically reinterpreted so as to afford it a genuine basis. There was nothing merely mystical and nothing undefined in its main tenets. Leibniz differs from Malebranche in being himself a profound mathematician, the co-discoverer with Newton of the differential calculus. He also differs from Descartes in possessing an absorbing interest in the purely logical aspects of the problem of method; and was therefore equipped in a supreme degree for determining{xxxii} in genuinely scientific fashion the philosophical significance and value of the mathematical disciplines.

Hume and Leibniz are thus the two protagonists that dwarf all others. They realised as neither Malebranche, Locke, nor Berkeley, neither Reid, Lambert, Crusius, nor Mendelssohn ever did, the really crucial issues which must ultimately decide between the competing possibilities. Each maintained, in the manner prescribed by his general philosophy, one of what then appeared to be the only two possible views of the function of thought. The alternatives were these: (*a*) Thought is merely a practical instrument for the convenient interpretation of our human experience; it has no objective or metaphysical validity of any kind; (*b*) Thought legislates universally; it reveals the wider universe of the eternally possible; and prior to all experience can determine the fundamental conditions to which that experience must conform. Or to interpret this opposition in logical terms: (*a*) The fundamental principles of experience are synthetic judgments in which no relation is discoverable between subject and predicate, and which for that reason can be justified neither *a priori* nor by experience; (*b*) all principles are analytic, and can therefore be justified by pure thought.

The problem of Kant's *Critique*, broadly stated, consists in the examination and critical estimate of these two opposed views. There is no problem, scientific, moral, or religious, which is not vitally affected by the decision which of these alternatives we are to adopt, or what reconciliation of their conflicting claims we hope to achieve. Since Kant's day, largely owing to the establishment of the evolution theory, this problem has become only the more pressing. The naturalistic, instrumental view of thought seems to be immensely reinforced by biological authority. Thought would seem to be reduced to the level of sense-affection, and to be an instrument developed through natural processes for the practical purposes of adaptation. Yet the counter-view has been no less powerfully strengthened by the victorious march of the mathematical sciences. They have advanced beyond the limits of Euclidean space, defining possibilities such as no experience reveals to us. The Leibnizian view has also been reinforced by the successes of physical science in determining what would seem to be the actual, objective character of the independently real. Kant was a rationalist by education, temperament, and conviction. Consequently his problem was to reconcile Leibniz's view of the function of thought with Hume's proof of the synthetic character of the causal{xxxiii} principle. He strives to determine how much of Leibniz's belief in the legislative power of pure reason can be retained after full justice has been done to Hume's damaging criticisms. The fundamental principles upon which all experience and all knowledge ultimately rest are *synthetic* in nature: how is it possible that they should also be *a priori*? Such is the problem that was Kant's troublous inheritance from his philosophical progenitors, Hume and Leibniz.

III. GENERAL

In indicating some of the main features of Kant's general teaching, I shall limit myself to those points which seem most helpful in preliminary orientation, or which are necessary for guarding against the misunderstandings likely to result from the very radical changes in terminology and in outlook that have occurred in the hundred and thirty years since the publication of the *Critique*. Statements which thus attempt to present in outline, and in modern terms, the more general features of Kant's philosophical teaching will doubtless seem to many of my readers dogmatic in form and highly questionable in content. They must stand or fall by the results obtained through detailed examination of Kant's *ipsissima verba*. Such justification as I can give for them will be found in the body of the *Commentary*.

I. THE NATURE OF THE *A PRIORI*

The fundamental presupposition upon which Kant's argument rests — a presupposition never itself investigated but always assumed — is that universality and necessity cannot be reached by any process that is empirical in character. By way of this initial assumption Kant arrives at the conclusion that the *a*

priori, the distinguishing characteristics of which are universality and necessity, is not given in sense but is imposed by the mind; or in other less ambiguous terms, is not part of the matter of experience but constitutes its form. The matter of experience is here taken as equivalent to sensation; while sensation, in turn, is regarded as being the non-relational.

The explanation of Kant's failure either to investigate or to prove this assumption has already been indicated. Leibniz{xxxiv} proceeds upon the assumption of its truth no less confidently than Hume, and as Kant's main task consisted in reconciling what he regarded as being the elements of truth in their opposed philosophies, he very naturally felt secure in rearing his system upon the one fundamental presupposition on which they were able to agree. It lay outside the field of controversy, and possessed for Kant, as it had possessed for Hume and for Leibniz, that authoritative and axiomatic character which an unchallenged preconception tends always to acquire.

The general thesis, that the universal and necessary elements in experience constitute its form, Kant specifies in the following determinate manner. The form is fixed for all experience, that is to say, it is one and the same in each and every experience, however simple or however complex. It is to be detected in consciousness of duration no less than in consciousness of objects or in consciousness of self. For, as Kant argues, consciousness of duration involves the capacity to distinguish between subjective and objective succession, and likewise involves recognition with its necessary component self-consciousness. Or to state the same point of view in another way, human experience is a temporal process and yet is always a consciousness of meaning. As temporal, its states are ordered successively, that is, externally to one another; but the consciousness which they constitute is at each and every moment the awareness of some single unitary meaning by reference to which the contents of the successive experiences are organised. The problem of knowledge may therefore be described as being the analysis of the consciousness of duration, of objectivity, and of self-consciousness, or alternatively as the analysis of our awareness of meaning. Kant arrives at the conclusion that the conditions of all four are one and the same.

Kant thus teaches that experience in all its embodiments and in each of its momentary states can be analysed into an endlessly variable material and a fixed set of relational elements. And as no one of the relational factors can be absent without at once nullifying all the others, they together constitute what must be regarded as the determining form and{xxxv} structure of every mental process that is cognitive in character. Awareness, that is to say, is identical with the act of judgment, and therefore involves everything that a judgment, in its distinction from any mere association of ideas, demands for its possibility.

Kant's position, when thus stated, differs from that of Leibniz only in its clearer grasp of the issues and difficulties involved, and consequently in the more subtle, pertinacious, and thoroughgoing character of the argument by which it is established. Its revolutionary character first appears when Kant further argues, in extension of the teaching of Hume, that the formal, relational elements are of a *synthetic* nature. The significance and scope of this conclusion can hardly be exaggerated. No other Kantian tenet is of more fundamental importance. With it the main consequences of Kant's Critical teaching are indissolubly bound up. *As the principles which lie at the basis of our knowledge are synthetic, they have no intrinsic necessity, and cannot possess the absolute authority ascribed to them by the rationalists.* They are prescribed to human reason, but cannot be shown to be inherently rational in any usual sense of that highly ambiguous term. They can be established only as brute conditions, verifiable in fact though not demonstrable in pure theory (if there be any such thing), of our actual experience. They are conditions of *sense*-experience, and that means of our knowledge of appearances, never legitimately applicable in the deciphering of ultimate reality. They are valid within the realm of experience, useless for the construction of a metaphysical theory of things in themselves. This conclusion is reinforced when we recognise that human experience, even in its fundamental features (*e.g.* the temporal and the spatial), might conceivably be altogether different from what it actually is, and that its presuppositions are always, therefore, of the

same contingent character. Even the universality and necessity which Kant claims to have established for his *a priori* principles are of this nature. Their necessity is always for us extrinsic; they can be postulated only if, and so long as, we are assuming the occurrence of human sense-experience.

Thus Kant is a rationalist of a new and unique type. He believes in, and emphasises the importance of, the *a priori*. With it alone, he contends, is the *Critique* competent to deal. But it is an *a priori* which cannot be shown to be more than {xxxvi}relative. It does, indeed, enable us to conceive the known as relative, and to entertain in thought the possibility of an Absolute; but this it can do without itself possessing independent validity. For though the proof of the *a priori* is not empirical in the sense of being inductive, neither is it logical in the sense of being deduced from necessities of thought. Its "transcendental" proof can be executed only so long as experience is granted as actual; and so long as the fundamental characteristics of this experience are kept in view.

Lastly, the *a priori* factors are purely relational. They have no inherent content from which clues bearing on the supersensible can be obtained. Their sole function is to serve in the interpretation of contents otherwise supplied.

The *a priori*, then, is merely relational, without inherent content; it is synthetic, and therefore incapable of independent or metaphysical proof; it is relative to an experience which is only capable of yielding appearances. The *a priori* is as merely factual as the experience which it conditions.

Even in the field of morality Kant held fast to this conviction. Morality, no less than knowledge, presupposes *a priori* principles. These, however, are never self-evident, and cannot be established by any mere appeal to intuition. They have authority only to the extent to which they can be shown to be the indispensable presuppositions of a moral consciousness that is undeniably actual.

That the *a priori* is of this character must be clearly understood. Otherwise the reader will be pursued by a feeling of the unreality, of the merely historical or antiquarian significance, of the entire discussion. He may, if he pleases, substitute the term formal or relational for *a priori*. And if he bears in mind that by the relational Kant is here intending those elements in knowledge which render possible the relations constitutive of *meaning*, he will recognise that the Critical discussion is by no means antiquated, but still remains one of the most important issues in the entire field of philosophical enquiry.

2. KANT'S CONTRIBUTION TO THE SCIENCE OF LOGIC

The above conclusions have an important bearing upon logical doctrine. Just as modern geometry originates in a sceptical treatment of the axiom of parallels, so modern, idealist logic rests upon Kant's demonstration of the revolutionary {xxxvii}consequences of Hume's sceptical teaching. If principles are never self-evident, and yet are not arrived at by induction from experience, by what alternative method can they be established? In answer to this question, Kant outlines the position which is now usually entitled the *Coherence* theory of truth. That theory, though frequently ascribed to Hegel, has its real sources in the *Critique of Pure Reason*. It expresses that modification in the Leibnizian rationalism which is demanded by Hume's discovery of the synthetic character of the causal axiom. Neither the deductive methods of the Cartesian systems nor the inductive methods of the English philosophies can any longer be regarded as correctly describing the actual processes of scientific proof.

General principles are either presuppositions or postulates. If *a priori*, they are presupposed in all conscious awareness; as above indicated, they have a *de facto* validity within the experience which they thus make possible. If more special in nature, they are the postulates to which we find ourselves committed in the process of solving specific problems; and they are therefore discovered by the method of trial and failure. They are valid in proportion as they enable us to harmonise appearances, and to adjudicate to each a kind of reality consistent with that assigned to every other.

Proof of fact is similar in general character. The term fact is eulogistic, not merely descriptive; it marks

the possession of cognitive significance in regard to some body of knowledge, actual or possible. It can be applied to particular appearances only in so far as we can determine their conditions, and can show that as thus conditioned the mode of their existence is relevant to the enquiry that is being pursued. The convergence of parallel lines is fact from the standpoint of psychological investigation; from the point of view of their physical existence it is merely appearance. Ultimately, of course, everything is real, including what we entitle appearance; but in the articulation of human experience such distinctions are indispensable, and the criteria that define them are prescribed by the context in which they are being employed.

Thus facts cannot be established apart from principles, nor principles apart from facts. The proof of a principle is its adequacy to the interpretation of all those appearances that can be shown to be in any respect relevant to it, while the test of an asserted fact, *i.e.* of our description of a given appearance, is its conformity to the principles that make insight possible.

Though the method employed in the *Critique* is entitled{xxxviii} by Kant the "transcendental method," it is really identical in general character with the hypothetical method of the natural sciences. It proceeds by enquiring what conditions must be postulated in order that the admittedly given may be explained and accounted for. Starting from the given, it also submits its conclusions to confirmation by the given. Considered as a method, there is nothing metaphysical or high-flying about it save the name. None the less, Kant is in some degree justified in adopting the special title. In view of the unique character of the problem to be dealt with, the method calls for very careful statement, and has to be defended against the charge of inapplicability in the philosophical field.

The fundamental thesis of the Coherence theory finds explicit formulation in Kant's doctrine of the judgment: the doctrine, that awareness is identical with the act of judging, and that judgment is always complex, involving both factual and interpretative elements. Synthetic, relational factors are present in *all* knowledge, even in knowledge that may seem, on superficial study, to be purely analytic or to consist merely of sense-impressions. Not contents alone, but contents interpreted in terms of some specific setting, are the sole possible objects of human thought. Even when, by forced abstraction, particulars and universals are held mentally apart, they are still being apprehended through judgments, and therefore through mental processes that involve both. They stand in relations of mutual implication within a *de facto* system; and together they constitute it.

This is the reason why in modern logic, as in Kant's *Critique*, the theory of the judgment receives so much more attention than the theory of reasoning. For once the above view of the judgment has been established, all the main points in the doctrine of reasoning follow of themselves as so many corollaries. Knowledge starts neither from sense-data nor from general principles, but from the complex situation in which the human race finds itself at the dawn of self-consciousness. That situation is organised in terms of our mental equipment; and this already existing, rudimentary system is what has made practicable further advance; to create a system *ab initio* is altogether impossible. The starting-point does not, however, by itself alone determine our conclusions. Owing to the creative activities of the mind, regulative principles are active in all consciousness; and under their guidance the experienced order, largely practical in satisfaction of the instinctive desires, is transformed into a comprehended{xxxix} order, controlled in view of Ideal ends. Logic is the science of the processes whereby this transformation is brought about. An essentially metaphysical discipline, it cannot be isolated from the general body of philosophical teaching; it is not formal, but transcendental; in defining the factors and processes that constitute knowledge, its chief preoccupation is with ultimate issues.

In calling his new logic "transcendental" Kant, it is true, also intends to signify that it is supplementary to, not a substitute for, the older logic, which he professes to accept. Moreover his intuitional theory of mathematical science, his doctrine of the "pure concept," his attributive view of the judgment — all of them survivals from his pre-Critical period — frequently set him at cross-purposes with himself. His

preoccupation, too, with the problem of the *a priori* leads him to underestimate the part played in knowledge by the merely empirical. But despite all inconsistencies, and notwithstanding his perverse preference for outlandish modes of expression, he succeeds in enforcing with sufficient clearness the really fundamental tenets of the Coherence view.

3. THE NATURE OF CONSCIOUSNESS

I shall now approach Kant's central position from another direction, namely, as an answer to the problem of the nature of consciousness. We are justified, I think, in saying that Kant was the first in modern times to raise the problem of the nature of awareness, and of the conditions of its possibility. Though Descartes is constantly speaking of consciousness, he defines it in merely negative terms, through its opposition to matter; and when he propounds the question how material bodies can be known by the immaterial mind, his mode of dealing with it shows that his real interest lies not in the nature of consciousness but in the character of the existences which it reveals. His answer, formulated in terms of the doctrine of representative perception, and based on the supposed teaching of physics and physiology, is that material bodies through their action on the sense-organs and brain generate images or duplicates of themselves. These images, existing not in outer space but only in consciousness, are, he asserts, mental in nature; and being mental they are, he would seem to conclude, immediately and necessarily apprehended by the mind. Thus Descartes gives us, not an analysis{xl} of the knowing process, but only a subjectivist interpretation of the nature of the *objects* upon which it is directed.

Quite apart, then, from the question as to whether Descartes' doctrine of representative perception rests on a correct interpretation of the teaching of the natural sciences — Kant was ultimately led to reject the doctrine — it is obvious that the main epistemological problem, *i.e.* the problem how awareness is possible, and in what it consists, has so far not so much as even been raised. Descartes and his successors virtually assume that consciousness is an ultimate, unanalysable form of awareness, and that all that can reasonably be demanded of the philosopher is that he explain what objects are actually presented to it, and under what conditions their presentation can occur. On Descartes' view they are conditioned by antecedent physical and physiological processes; according to Berkeley they are due to the creative activity of a Divine Being; according to Hume nothing whatsoever can be determined as to their originating causes. But all three fail to recognise that even granting the objects to be of the character asserted, namely, mental, the further problem still remains for consideration, how they come to be consciously apprehended, and in what such awareness consists.

Certain interpretations of the nature of the knowing process are, of course, to be found in the writings of Descartes and his successors. But they are so much a matter of unexamined presupposition that they never receive exact formulation, and alternate with one another in quite a haphazard fashion. We may consider three typical views.

1. There is, Descartes frequently seems to imply — the same assumption is evident throughout Locke's *Essay* — a self that stands behind all mental states, observing and apprehending them. Consciousness is the power which this self has of contemplating both itself and its ideas. Obviously this is a mere ignoring of the issue. If we assume an observer, we *ipso facto* postulate a process of observation, but we have not explained or even defined it.

2. There is also in Descartes a second, very different, view of consciousness, namely, as a diaphanous medium analogous to light. Just as light is popularly conceived as revealing the objects upon which it falls, so consciousness is regarded as revealing to us our inner states. This view of consciousness, for reasons which I shall indicate shortly, is entirely inadequate to the facts for which we have to account. It is no more tenable than the corresponding view of light.

3. In Hume we find this latter theory propounded in what may at first sight seem a more satisfactory

form, but is even{xli} less satisfactory. Sensations, images, feelings, he argues, are *states* of consciousness, one might almost say *pieces* of consciousness, *i.e.* they are conceived as carrying their own consciousness with them. Red, for instance, is spoken of as a sensation, and is consequently viewed both as being a sense-content, *i.e.* something sensed or apprehended, and also at the same time as the sensing or awareness of it. This view is unable to withstand criticism. There is really no more ground for asserting that red colour carries with it consciousness of itself than for saying that a table does. The illegitimacy of the assertion is concealed from us by the fact that tables appear to exist when there is no consciousness present, whereas redness cannot be proved to exist independently of consciousness — it may or may not do so. Many present-day thinkers, continuing the tradition of the English associationists, hold to this pre-Kantian view. Sensations, feelings, etc., are, it is implied, pieces of consciousness, forms of awareness; through their varying combinations they constitute the complex experiences of the animal and human mind.

Kant's teaching is developed in direct opposition to all such views. If we discard his antiquated terminology, and state his position in current terms, we find that it amounts to the assertion that *consciousness is in all cases awareness of meaning*. There is no awareness, however rudimentary or primitive, that does not involve the apprehension of meaning. Meaning and awareness are correlative terms; each must be studied in its relation to the other. And inasmuch as meaning is a highly complex object of apprehension, awareness cannot be regarded as ultimate or as unanalysable. It can be shown to rest upon a complexity of generative conditions and to involve a variety of distinct factors.

There are thus, from the Kantian standpoint, two all-sufficient reasons why the diaphanous view of consciousness, *i.e.* any view which treats consciousness merely as a medium whereby the existent gets itself reported, must be regarded as untenable. In the first place, as already remarked, it is based on the false assumption that consciousness is an ultimate, and that we are therefore dispensed from all further investigation of its nature. Kant claims to have distinguished successfully the many components which go to constitute it; and he also professes to have shown that until such analysis has been made, there can be no sufficient basis for a philosophical treatment either of the problems of sense-perception or of the logical problems of judgment and inference. The diaphanous view, with its mirror-like mode of representation, might allow of the side-by-sideness of{xlii} associated contents; it can never account for the processes whereby the associated contents come to be apprehended.

Secondly, the diaphanous view ignores the fundamental distinction between meaning and existence. Existences rest, so to speak, on their own bottom; they are self-centred even at the very moment of their reaction to external influences. Meaning, on the other hand, always involves the interpretation of what is given in the light of wider considerations that lend it significance. In the awareness of meaning the given, the actually presented, is in some way transcended, and this transcendence is what has chiefly to be reckoned with in any attempt to explain the conscious process. Kant is giving expression to this thesis when he contends that all awareness, no matter how rudimentary or apparently simple, is an act of judgment, and therefore involves the relational categories. *Not passive contemplation but active judgment, not mere conception but inferential interpretation, is the fundamental form, and the only form, in which our consciousness exists.* This, of course, commits Kant to the assertion that there is no mode of cognition that can be described as immediate or unreflective. There is an immediate *element* in all knowledge, but our consciousness of it is always conditioned and accompanied by interpretative processes, and in their absence there can be no awareness of any kind.

By way of this primary distinction between existence and meaning Kant advances to all those other distinctions which characterise our human experience, between appearance and reality, between the real and the Ideal, between that which is judged and the criteria which control and direct the judging process. Just because all awareness is awareness of meaning, our human experience becomes intelligible as a purposive activity that directs itself according to Ideal standards.

The contrast between the Kantian and the Cartesian views of consciousness can be defined in reference to another important issue. The diaphanous view commits its adherents to a very definite interpretation of the nature of relations. Since they regard consciousness as passive and receptive, they have to maintain that relations can be known only in so far as they are apprehended in a manner analogous to the contents themselves. I do not, of course, wish to imply that this view of relational knowledge is in all cases and in all respects illegitimate. Kant, as we shall find, has carried the opposite view to an impossible extreme, assuming without further argument that what has been shown to be true of certain types of relation (for instance, of the causal and{xliii} substance-attribute relations) must be true of all relations, even of those that constitute space and time. It cannot be denied that, as William James and others have very rightly insisted, such relations as the space-relations are *in some degree or manner* presentational. This does not, however, justify James in concluding, as he at times seems inclined to do, that all relations are directly experienced. Such procedure lays him open to the same charge of illegitimate reasoning. But even if we could grant James's thesis in its widest form, the all-important Critical question would still remain: in what does awareness, whether of presented contents or of presented relations, consist, and how is it possible? In answering this question Kant is led to the conclusion that consciousness must be regarded as an activity, and as supplying certain of the conditions of its own possibility. Its contribution is of a uniform and constant nature; it consists, as already noted, of certain relational factors whose presence can be detected in each and every act of awareness.

There is one other respect in which Kant's view of consciousness differs from that of his Cartesian predecessors. Consciousness, he maintains, does not reveal itself, but only its objects. In other words, there is no awareness of awareness. So far as our mental states and processes can be known at all, they are known in the same objective manner in which we apprehend existences in space. Now if that be so, a very important consequence follows. If there is no awareness of awareness, but only of meanings all of which are objective, there can be no consciousness of the generative, synthetic processes that constitute consciousness *on its subjective side*. For consciousness, being an *act* of awareness in which *meaning* is apprehended, has a twofold nature, and must be very differently described according to the aspect which at any one time we may have in view. When we regard it on its *objective* side as awareness of *meaning*, we are chiefly concerned with the various factors that are necessary to meaning and that enter into its constitution. That is to say, our analysis is essentially logical. When, on the other hand, we consider consciousness as an *act* of awareness, our problem is ontological or as it may be entitled (though the term is in this reference somewhat misleading, since the enquiry as defined by Kant is essentially metaphysical) psychological in character. Between these two aspects {xliv}there is this very important difference. The logical factors constitutive of meaning can be exhaustively known; they are elements in the meanings which consciousness reveals; whereas the synthetic processes are postulated solely in view of these constituent factors, and in order to account for them. The processes, that is to say, are known only through that which they condition, and on Kant's teaching we are entirely ruled out from attempting to comprehend even their possibility. They must be thought as occurring, but they cannot be known, *i.e.* their nature cannot be definitely specified. The postulating of them marks a gap in our knowledge, and extends our insight only in the degree that it discloses our ignorance. As consciousness rests upon, and is made possible by, these processes, it can never be explained in terms of the objective world to which our sense-experience, and therefore, as Kant argues, our specific knowledge, is exclusively limited. The mind can unfold its contents in the sunshine of consciousness, only because its roots strike deep into a soil that the light does not penetrate. These processes, thus postulated, Kant regards as the source of the *a priori* elements, and as the agency through which the synthetic connections necessary to all consciousness are brought about.

According to Kant's Critical teaching, therefore, consciousness, though analysable, is not such as can ever be rendered completely comprehensible. When all is said, it remains for us a merely *de facto* form

of existence, and has to be taken just for what it presents itself as being. It is actually such as to make possible the logical processes of judgment and inference. It is actually such as to render possible a satisfactory proof of the scientific validity, within the field of sense-experience, of the principle of causality, and of such other principles as are required in the development of the positive sciences. It is also such as to render comprehensible the controlling influence of Ideal standards. But when we come to the question, how is consciousness of this type and form possible, that is, to the question of its metaphysical significance and of the generative conditions upon which it rests, we find, Kant maintains, that we have no data sufficient to justify any decisive answer.{xlv}

The ontological, creative, or dynamical aspect of consciousness, I may further insist, must be constantly borne in mind if the Critical standpoint is to be properly viewed. The logical analysis is, indeed, for the purposes of the central portions of the *Critique* much the more important, and alone allows of detailed, exhaustive development; but the other is no less essential for an appreciation of Kant's attitude towards the more strictly metaphysical problems of the *Dialectic*.

Hegel and his disciples have been the chief culprits in subordinating, or rather in entirely eliminating, this aspect of Kant's teaching. Many of the inconsistencies of which they accuse Kant exist only if Kant's teaching be first reduced to a part of itself. To eliminate the ontological implications of his theory of consciousness is, by anticipation, to render many of his main conclusions entirely untenable, and in particular to destroy the force of his fundamental distinction between appearance and reality. If consciousness knows itself in its ultimate nature — and such is Hegel's contention — one half of reality is taken out of the obscurity in which, on Kant's reading of the situation, it is condemned to lie hidden. Man is more knowable than nature, and is the key to nature; such is Hegel's position, crudely stated. Contrast therewith the teaching of Kant. We can know nature more completely (though still very incompletely) than we can ever hope to comprehend the conditions that make possible and actual man's spiritual life. The moral consciousness is an autonomously acting source of independent values, and though a standing miracle, must be taken for all that on independent and separate enquiry it is found to be. Hegel, in his endeavour to establish an intellectual monism, does violence to some of the highest interests which he professes to be safeguarding. Kant, while outlining in Idea a Kingdom of Ends, remains satisfied with a pluralistic distinction between the intellectual and the moral categories. The antithesis of the two philosophies is in some degree the ancient opposition between Aristotle and Plato, restated in modern terms.

4. PHENOMENALISM, KANT'S SUBSTITUTE FOR SUBJECTIVISM

The revolutionary character of the above conclusions is shown by the difficulty which Kant himself found in breaking away from many of the presuppositions that underlie the views which he was renouncing; and this is nowhere more evident than in his constant alternation throughout the{xlvi} *Critique* between a *subjectivism* that is thoroughly Cartesian — we might almost, allowing for his rationalism, say Berkeleian — in character, and a radically different position which may be entitled *phenomenalism*. The latter is alone genuinely Critical, and presents Kant's teaching in its maturest form. For though first formulated only in those portions of the *Analytic* that are late in date of writing, and in those passages of the second edition which supplement them, it would seem to be the only logical outcome of Kant's other main doctrines.

I have especially in mind Kant's fundamental distinction between appearance and reality; it has an all-important bearing upon the Cartesian opposition between the mental and the material, and especially upon the question as to what view ought to be taken of our so-called *subjective* experiences. The objective is for the Cartesians the independently real; the subjective is asserted to have an altogether different kind of existence in what is named the field of consciousness. Kant's phenomenalist restatement of this distinction

is too complex and subtle to be made intelligible in the brief space available in this *Introduction* — it is expounded in the body of the *Commentary* — but its general character I may indicate in a few sentences. All subjectivist modes of stating the problem of knowledge, such as we find in Hume and in Leibniz no less than in Descartes, Locke, and Berkeley, are, Kant finally concluded, illegitimate and question-begging. Our so-called subjective states, whether they be sensations, feelings, or desires, are *objective* in the sense that they are *objects* for consciousness. Our mental states do not run parallel with the system of natural existences; nor are they additional to it. They do not constitute our consciousness of nature; they are themselves part of the natural order which consciousness reveals. They compose the empirical self which is an objective existence, integrally connected with the material environment in terms of which alone it can be understood. The subjective is not opposite in nature to the objective, but a sub-species within it. While, however, the psychical is thus to be regarded as a class of known appearances, and as forming together with the physical a single{xlvii} system of nature, this entire order is, in Kant's view, conditioned by an underlying realm of noumenal existence; and when the question of the possibility of the *knowing*, that is, of the *experiencing* of such a comprehensive natural system, is raised, it is to this noumenal sphere that we are referred. Everything experienced, even a sensation or feeling, is an event, but the experiencing of it is an act of awareness, and calls for an explanation of an altogether different kind.

Thus the problem of knowledge, stated in adequate Critical terms, is not how we can advance from the merely subjective to knowledge of the independently real, but how, if everything known forms part of a comprehensive natural system, consciousness and the complex factors which contribute to its possibility are to be interpreted. On this latter question, as already indicated, Kant, though debarring both subjectivism and materialism, otherwise adopts a non-committal attitude. So long as we continue within the purely theoretical domain, there are a number of alternatives between which there are no sufficient data for deciding. To debar subjectivism is not to maintain the illusory or phenomenal character of the individual self; and to rule out materialism is not to assert that the unconscious may not generate and account for the conscious. In other words, they are ruled out not for any ulterior reasons derived from their supposed metaphysical consequences, but solely because they are based on palpable misinterpretations of the cognitive situation that generates those very problems to which they profess to be an answer.

5. THE DISTINCTION BETWEEN HUMAN AND ANIMAL INTELLIGENCE

The inwardness of Kant's Critical standpoint may perhaps be made clearer by a brief consideration of his view of animal intelligence. We are accustomed nowadays to test a psychology of human consciousness by its capacity to render conceivable an evolution from lower forms. How does Kant's teaching emerge from such a test?

It may at once be admitted that Kant has made no special study of animal behaviour, and was by no means competent to speak with authority in regard to its conditions. Indeed it is evident that anything which he may have to say upon this{xlviii} question is entirely of the nature of a deduction from results obtained in the human sphere. But when this has been admitted, and we are therefore prepared to find the problems approached from the point of view of the difference rather than of the kinship between man and the animals, we can recognise that, so far as the independent study of human consciousness is concerned, there is a certain compensating advantage in Kant's pre-Darwinian standpoint. For it leaves him free from that desire which exercises so constant, and frequently so deleterious an influence, upon many workers in the field of psychology, namely, to maintain at all costs, in anticipation of conclusions not yet by any means established, the fundamental identity of animal and human intelligence. This besetting desire all too easily tends to the minimising of differences that may perhaps with fuller insight be found to involve no

breach of continuity, but which in the present state of our knowledge cannot profitably be interpreted save in terms of their differentiating peculiarities.

The current controversy between mechanism and vitalism enforces the point which I desire to make. Biological problems, as many biologists are now urging, can be most profitably discussed in comparative independence of ultimate issues, entirely in view of their own domestic circumstances. For only when the actual constitution of organic compounds has been more completely determined than has hitherto been possible can the broader questions be adequately dealt with. In other words, the differences must be known before the exact nature and degree of the continuity can be defined. They cannot be anticipated by any mere deduction from general principles.

The value of Kant's analysis of human consciousness is thus closely bound up with his frank recognition of its inherent complexity. Not simplification, but specification, down to the bedrock of an irreducible minimum of correlated factors, is the governing motive of his Critical enquiries. His results have therefore the great advantage of being inspired by no considerations save such as are prescribed by the actual subject-matter under investigation. As already noted, Kant maintains that human consciousness is always an awareness of meaning, and that consequently it can find expression only in judgments which involve together with their other factors the element of recognition or self-consciousness.

This decides for Kant the character of the distinction to be drawn between animal and human intelligence. As animals, in his view, cannot be regarded as possessing a capacity of self-consciousness, they must also be denied all awareness of{xlix} meaning. However complicated the associative organisation of their ideas may be, it never rises to the higher level of logical judgment. For the same reason, though their ideas may be schematic in outline, and in their bearing on behaviour may therefore have the same efficiency as general concepts, they cannot become universal in the logical sense. "Animals have apprehensions, but not apperceptions, and cannot, therefore, make their representations universal." In support of this position Kant might have pointed to the significant fact that animals are so teachable up to a certain point, and so unteachable beyond it. They can be carried as far as associative suggestion will allow, but not a step further. To this day it remains true — at least I venture the assertion — that no animal has ever been conclusively shown to be capable of apprehending a sign as a sign. Animals may seem to do so owing to the influence of associated ideas, but are, as it would appear, debarred from crossing the boundary line which so sharply distinguishes associative suggestion from reflective knowledge.

But Kant is committed to a further assertion. If animals are devoid of all awareness of meaning, they must also be denied anything analogous to what we must signify by the term consciousness. Their experience must fall apart into events, that may, perhaps, be described as mental, but cannot be taken as equivalent to an act of awareness. "*Apprehensio bruta* without consciousness," such is Kant's view of the animal mind. Its mental states, like all other natural existences, are events in time, explicable in the same naturalistic fashion as the bodily processes by which they are conditioned; they can not be equated with that human consciousness which enables us to reflect upon them, and to determine the conditions of their temporal happening.

The distinction which Kant desires to draw is ultimately that between events and consciousness of events. Even if events are psychical in character, consisting of sensations and feelings, there will still remain as fundamental the distinction between what is simply a member of the causal series of natural events and the consciousness through which the series is apprehended. Kant's most explicit statements occur in a letter to Herz. He is referring to data of the senses which cannot be self-consciously apprehended:

"I should not be able to know that I have them, and they would therefore be for me, as a cognitive being, absolutely nothing.{l} They might still (if I conceive myself as an animal) exist in me (a being unconscious of my own existence) as representations ..., connected according to an empirical law of association, exercising influence upon feeling and desire, and so always disporting themselves with

regularity, without my thereby acquiring the least cognition of anything, not even of these my own states."

As to whether Kant is justified in maintaining that the distinction between animal and human consciousness coincides with the distinction between associative and logical or reflective thinking, I am not concerned to maintain. This digression has been introduced solely for the purpose of defining more precisely the central tenets of Kant's Critical teaching.

6. THE NATURE AND CONDITIONS OF SELF-CONSCIOUSNESS

We have still to consider what is perhaps the most serious of all the misunderstandings to which Kant has laid himself open, and which is in large part responsible for the widespread belief that his Critical principles, when consistently developed, must finally eventuate in some such metaphysics as that of Fichte and Hegel. I refer to the view that Kant in postulating synthetic processes as conditioning consciousness is postulating a noumenal self as exercising these activities, and is therefore propounding a *metaphysical explanation* of the synthetic, *a priori* factors in human experience.

Kant's language is frequently ambiguous. The Leibnizian spiritualism, to which in his pre-Critical period he had unquestioningly held, continued to influence his terminology, and so to prevent his Critical principles from obtaining consistent expression. This much can be said in support of the above interpretation of Kant's position. But in all other respects such a reading of his philosophy is little better than a parody of his actual teaching. For Kant is very well aware that the problem of knowledge is not to be solved in any such easy and high-handed fashion. In the *Critique* he teaches quite explicitly that to profess to explain the presence of{li} *a priori* factors in human experience by means of a self assumed for that very purpose would be a flagrant violation, not only of Critical principles, but even of the elementary maxims of scientific reasoning. In the first place, explanation by reference to the activities of such a self would be explanation by faculties, by the unknown; it is a cause that will explain anything and everything equally well or badly. Self-consciousness has, indeed, to be admitted as a fact; and from its occurrence Kant draws important conclusions in regard to the conditions which make experience possible. But, in so doing, Kant never intends to maintain that we are justified in postulating as part of those conditions, or as condition of those conditions, a noumenal self. The conditions which make experience possible, whatever they may be, are also the conditions which make self-consciousness possible. Since the self is known only as appearance, it cannot be asserted to be the conditioning ground of appearance.

This first objection is not explicitly stated by Kant, but it is implied in a second argument which finds expression both in the *Deduction of the Categories* and in the chapter on the *Paralogisms*. The only self that we know to exist is the *conscious* self. Now, as Kant claims to have proved, the self can be thus conscious, even of itself, only in so far as it is conscious of objects. Consequently we have no right to assume that the self can precede such consciousness as its generating cause. That would be to regard the self as existing prior to its own conditions, working in darkness to create itself as a source of light.

But there is also a third reason why Kant's Critical solution of the problem of knowledge must not be stated in spiritualist terms. Self-consciousness, as he shows, is itself *relational* in character. It is a fundamental factor in human experience,{lii} not because the self can be shown to be the agency to which relations are due, but solely because, itself a case of recognition, it is at the same time a necessary condition of recognition, and recognition is indispensably presupposed in all consciousness of meaning. Awareness of meaning is the fundamental mystery, and retains its profoundly mysterious character even when self-consciousness has been thus detected as an essential constituent. For self-consciousness does not explain the possibility of meaning; it is itself, as I have just remarked, only one case of recognition, and so is itself only an instance, though indeed the supreme and most important instance, of what we must intend by the term meaning. All awareness, not excepting that of the knowing self, rests upon noumenal

conditions whose specific nature it does not itself reveal. Only on moral grounds, never through any purely theoretical analysis of cognitive experience, can it be proved that the self is an abiding personality, and that in conscious, personal form it belongs to the order of noumenal reality.

7. KANT'S THREEFOLD DISTINCTION BETWEEN SENSIBILITY, UNDERSTANDING, AND REASON

Even so summary a statement of Critical teaching as I am attempting in this *Introduction* would be very incomplete without some reference to Kant's threefold distinction between the forms of sensibility, the categories of the understanding, and the Ideas of Reason.

On investigating space and time Kant discovers that they cannot be classed either with the data of the bodily senses or with the concepts of the understanding. They are sensuous (*i.e.* are not abstract but concrete, not ways of thinking but modes of existence), yet at the same time are *a priori*. They thus stand apart by themselves. Each is unique in its kind, is single, and is an infinite existence. To describe them is to combine predicates seemingly contradictory. In Kant's own phrase, they are monstrosities (*Undinge*), none the less incomprehensible that they are undeniably actual. To them, primarily, are due those problems which have been a standing challenge to philosophy since the time of Zeno the Eleatic, and which Kant has entitled "antinomies of Reason."

In contrast of sensibility Kant sets the intellectual faculties, understanding and Reason. In the understanding originate certain pure concepts, or as he more usually names them,{liii} categories. The chief of these are the categories of "relation" — substance, causality and reciprocity. They combine with the forms of sensibility and the manifold of sense to yield the consciousness of an empirical order, interpretable in accordance with universal laws.

To the faculty of Reason Kant ascribes what he entitles Ideas. The Ideas differ from space, time, and the categories in being not "constitutive" but "regulative." They demand an *unconditionedness* of existence and a *completeness* of explanation which can never be found in actual experience. Their function is threefold. In the first place, they render the mind dissatisfied with the haphazard collocations of ordinary experience, and define the goal for its scientific endeavours. Secondly, they determine for us the criteria that distinguish between truth and falsity. And thirdly, in so doing, they likewise make possible the distinction between appearance and reality, revealing to us an irreconcilable conflict between the ultimate aims of science and the human conditions, especially the spatial and temporal conditions under which these aims are realised. The Ideas of Reason are the second main factor in the "antinomies."

The problem of the *Critique*, the analysis of our awareness of meaning, is a single problem, and each of the above elements involves all the others. Kant, however, for reasons into which I need not here enter, has assigned part of the problem to what he entitles the *Transcendental Aesthetic*, and another part to the *Transcendental Dialectic*. Only what remains is dealt with in what is really the most important of the three divisions, the *Transcendental Analytic*. But as the problem is one and indivisible, the discussions in all three sections are condemned to incompleteness save in so far as Kant, by happy inconsistency, transgresses the limits imposed by his method of treatment. The *Aesthetic* really does no more than prepare the ground for the more adequate analysis of space and time given in the *Analytic* and *Dialectic*, while the problem of the *Analytic* is itself incompletely stated until the more comprehensive argument of the *Dialectic* is taken into account. Thus the statement in the *Aesthetic* that space and time are *given* to the mind by the sensuous faculty of{liv} receptivity is modified in the *Analytic* through recognition of the part which the syntheses and concepts of the understanding must play in the construction of these forms; and in the *Dialectic* their apprehension is further found to involve an Idea of Reason. Similarly, in the concluding chapter of the *Analytic*, in discussing the grounds for distinguishing between appearance and reality, Kant omits all reference to certain important considerations which first emerge into view in the

course of the *Dialectic*. Yet, though no question is more vital to Critical teaching, the reader is left under the impression that the treatment given in the *Analytic* is complete and final.

Partly as a consequence of this, partly owing to Kant's inconsistent retention of earlier modes of thinking, there are traceable throughout the *Critique* two opposed views of the nature of the distinction between appearance and reality. On the one view, this distinction is mediated by the relational categories of the understanding, especially by that of causality; on the other view, it is grounded in the Ideas of Reason. The former sets appearance in opposition to reality; the latter regards the distinction in a more tenable fashion, as being between realities less and more comprehensively conceived.

A similar defect is caused by Kant's isolation of immanent from transcendent metaphysics. The former is dealt with only in the *Analytic*, the latter only in the *Dialectic*. The former, Kant asserts, is made possible by the forms of sensibility and the categories of the understanding; the latter he traces to an illegitimate employment of the Ideas of Reason. Such a mode of statement itself reveals the impossibility of any sharp distinction between the immanent and the transcendent. If science is conditioned by Ideals which arouse the mind to further acquisitions, and at the same time reveal the limitations to which our knowledge is for ever condemned to remain subject; if, in other words, everything known, in being correctly known, must be apprehended as appearance (*i.e.* as a subordinate existence within a more comprehensive reality), the distinction between the immanent and the transcendent falls within and not beyond the domain of our total experience. The meaning which our consciousness discloses in each of its judgments is an essentially metaphysical one. It involves the thought, though not the knowledge, of something more than what the experienced can ever itself be found to be. The metaphysical is immanent in our knowledge; the transcendent is merely a name{lv} for this immanent factor when it is falsely viewed as capable of isolation and of independent treatment. By Kant's own showing, the task of the *Dialectic* is not merely to refute the pretensions of transcendent metaphysics, but to develop the above general thesis, in confirmation of the positive conclusions established in the *Analytic*. The *Critique* will then supply the remedy for certain evils to which the human mind has hitherto been subject.

"*The Critique of Pure Reason* is a preservative against a malady which has its source in our rational nature. This malady is the opposite of the love of home (the home-sickness) which binds us to our fatherland. It is a longing to pass out beyond our immediate confines and to relate ourselves to other worlds."

8. THE PLACE OF THE *CRITIQUE OF PURE REASON* IN KANT'S PHILOSOPHICAL SYSTEM

The positive character of Kant's conclusions cannot be properly appreciated save in the wider perspectives that open to view in the *Critique of Practical Reason* and in the *Critique of Judgment*. Though in the *Critique of Pure Reason* a distinction is drawn between theoretical and moral belief, it is introduced in a somewhat casual manner, and there is no clear indication of the far-reaching consequences that follow in its train. Unfortunately also, even in his later writings, Kant is very unfair to himself in his methods of formulating the distinction. His real intention is to show that scientific knowledge is not coextensive with human insight; but he employs a misleading terminology, contrasting knowledge with faith, scientific demonstration with practical belief.

As already indicated, the term knowledge has, in the Critical philosophy, a much narrower connotation than in current speech. It is limited to *sense*-experience, and to such inferences therefrom as can be obtained by the only methods that Kant is willing to recognise, namely, the mathematico-physical. Aesthetic, moral and religious experience, and even organic phenomena, are excluded from the field of possible knowledge.

In holding to this position, Kant is, of course, the child of his time. The absolute sufficiency of the Newtonian physics is a presupposition of all his utterances on this theme. Newton, he believes, has

determined in a quite final manner the principles, methods and limits of scientific investigation. For though Kant himself imposes upon science a further{lvi} limitation, namely, to appearances, he conceives himself, in so doing, not as weakening Newton's natural philosophy, but as securing it against all possible objections. And to balance the narrow connotation thus assigned to the term knowledge, he has to give a correspondingly wide meaning to the terms faith, moral belief, subjective principles of interpretation. If this be not kept constantly in mind, the reader is certain to misconstrue the character and tendencies of Kant's actual teaching.

But though the advances made by the sciences since Kant's time have rendered this mode of delimiting the field of knowledge altogether untenable, his method of defining the sources of *philosophical insight* has proved very fruitful, and has many adherents at the present day. What Kant does — stated in broad outline — is to distinguish between the problems of *existence* and the problems of *value*, assigning the former to science and the latter to philosophy. Theoretical philosophy, represented in his system by the *Critique of Pure Reason*, takes as its province the logical values, that is, the distinction of truth and falsity, and defining their criteria determines the nature and limits of our theoretical insight. Kant finds that these criteria enable us to distinguish between truth and falsity only on the empirical plane. Beyond making possible a distinction between appearance and reality, they have no applicability in the metaphysical sphere.

The *Critique of Practical Reason* deals with values of a very different character. The faculty of Reason, which, as already noted, renders our consciousness a purposive agency controlled by Ideal standards, is also, Kant maintains, the source of the moral sanctions. But whereas in the theoretical field it subdues our minds to the discipline of experience, and restrains our intellectual ambitions within the limits of the empirical order, it here summons us to sacrifice every natural impulse and every secular advantage to the furtherance of an end that has absolute value. In imposing duties, it raises our life from the "pragmatic" level of a calculating expediency to the higher plane of a categorical imperative.

The categorical imperative at once humbles and exalts; it discloses our limitations, but does so through the greatness of the vocation to which it calls us.

"This principle of morality, just on account of the universality of the legislation which makes it the formal supreme determining principle of our will, without regard to any subjective differences, is{lvii} declared by the Reason to be a law for all rational beings.... It is, therefore, not limited to men only, but applies to all finite beings that possess Reason and Will; nay, it even includes the Infinite Being as the Supreme Intelligence."

Consequently, in employing moral ends in the interpretation of the Universe, we are not picturing the Divine under human limitations, but are discounting these limitations in the light of the one form of value that is known to us as absolute.

"*Duty!* ... What origin is worthy of thee and where is to be found the root of thy noble descent ... a root to be derived from which is the indispensable condition of the only worth that men can give themselves."

In his earlier years Kant had accepted the current, Leibnizian view that human excellence consists in intellectual enlightenment, and that it is therefore reserved for an *élite*, privileged with the leisure and endowed with the special abilities required for its enjoyment. From this arid intellectualism he was delivered through the influence of Rousseau.

"I am by disposition an enquirer. I feel the consuming thirst for knowledge, the eager unrest to advance ever further, and the delights of discovery. There was a time when I believed that this is what confers real dignity upon human life, and I despised the common people who know nothing. Rousseau has set me right. This imagined advantage vanishes. I learn to honour men, and should regard myself as of much less use than the common labourer, if I did not believe that my philosophy will restore to all men the common rights of humanity."

These common rights Kant formulates in a purely individualist manner. For here also, in his lack of

historic sense and in his distrust alike of priests and of statesmen, he is the child of his time. In the education and discipline of the soul he looks to nothing so artificial and humanly limited — Kant so regards them — as religious tradition and social{lviii} institutions. Human rights, he believes, do not vary with time and place; and for their enjoyment man requires no initiation and no equipment beyond what is supplied by Nature herself. It is from this standpoint that Kant adduces, as the twofold and sufficient inspiration to the rigours and sublimities of the spiritual life, the starry heavens above us and the moral law within. They are ever-present influences on the life of man. The naked eye reveals the former; of the latter all men are immediately aware. In their universal appeal they are of the very substance of human existence. Philosophy may avail to counteract certain of the hindrances which prevent them from exercising their native influence; it cannot be a substitute for the inspiration which they alone can yield.

Thus the categorical imperative, in endowing the human soul with an intrinsic value, singles it out from all other natural existences, and strengthens it to face, with equanimity, the cold immensities of the cosmic system. For though the heavens arouse in us a painful feeling of our insignificance as animal existences, they intensify our consciousness of a sublime destiny, as bearers of a rival, and indeed a superior, dignity.

In one fundamental respect Kant broke with the teaching of Rousseau, namely, in questioning his doctrine of the natural goodness and indefinite perfectibility of human nature. Nothing, Kant maintains, is good without qualification except the good will; and even that, perhaps, is never completely attained in any single instance. The exercise of duty demands a perpetual vigilance, under the ever-present consciousness of continuing demerit.

"I am willing to admit out of love of humanity that most of our actions are indeed correct, but if we examine them more closely we everywhere come upon the dear self which is always prominent...." "Nothing but moral fanaticism and exaggerated self-conceit is infused into the mind by exhortation to actions as noble, sublime and magnanimous. Thereby men are led into the delusion that it is not duty, that is, respect for the law, whose yoke ... they must bear, whether they like it or not, that constitutes the determining principle of their actions, and which always humbles them while{lix} they *obey* it. They then fancy that those actions are expected from them, not from duty, but as pure merit.... In this way they engender a vain high-flying fantastic way of thinking, flattering themselves with a spontaneous goodness of heart that needs neither spur nor bridle, nor any command...."

In asserting the goodness and self-sufficiency of our natural impulses Rousseau is the spokesman of a philosophy which has dominated social and political theory since his day, and which is still prevalent. This philosophy, in Kant's view, is disastrous in its consequences. As a reading of human nature and of our moral vocation, it is hardly less false than the Epicurean teaching, which finds in the pursuit of pleasure the motive of all our actions. A naturalistic ethics, in either form, is incapacitated, by the very nature of its controlling assumptions, from appreciating the distinguishing features of the moral consciousness. Neither the successes nor the failures of man's spiritual endeavour can be rightly understood from any such standpoint. The human race, in its endurance and tenacity, in its dauntless courage and in its soaring spirit, reveals the presence of a *prevenient* influence, *non-natural* in character; and only if human nature be taken as including this higher, directive power, can it assume to itself the eulogy which Rousseau so mistakenly passes upon the natural and undisciplined tendencies of the human heart. For as history demonstrates, while *men* are weak, *humanity* is marvellous.

"There is one thing in our soul which, when we take a right view of it, we cannot cease to regard with the highest astonishment, and in regard to which admiration is right and indeed elevating, and that is our original moral capacity in general.... Even the incomprehensibility of this capacity, a capacity which proclaims a Divine origin, must rouse man's spirit to enthusiasm and strengthen it for any sacrifices which respect for his duty may impose on him."

We are not here concerned with the detail of Kant's ethical teaching, or with the manner in which he establishes the freedom of the will, and justifies belief in the existence of God and the immortality of the

soul. In many respects his argument lies open to criticism. There is an unhappy{lx} contrast between the largeness of his fundamental thesis and the formal, doctrinaire manner in which it is developed. Indeed, in the *Critique of Practical Reason* the individualist, deistic, rationalistic modes of thinking of his time are much more in evidence than in any other of his chief writings; and incidentally he also displays a curious insensibility — again characteristic of his period — to all that is specific in the religious attitude. But when due allowances have been made, we can still maintain that in resting his constructive views upon the supreme value of the moral personality Kant has influenced subsequent philosophy in hardly less degree than by his teaching in the *Critique of Pure Reason*.

The two *Critiques*, in method of exposition and argument, in general outcome, and indeed in the total impression they leave upon the mind, are extraordinarily different. In the *Critique of Pure Reason* Kant is meticulously scrupulous in testing the validity of each link in his argument. Constantly he retraces his steps; and in many of his chief problems he halts between competing solutions. Kant's sceptical spirit is awake, and it refuses to cease from its questionings. In the *Critique of Practical Reason*, on the other hand, there is an austere simplicity of argument, which advances, without looking to right or left, from a few simple principles direct to their ultimate consequences. The impressiveness of the first *Critique* consists in its appreciation of the *complexity* of the problems, and in the care with which their various, conflicting aspects are separately dealt with. The second *Critique* derives its force from the fundamental conviction upon which it is based.

Such, then, stated in the most general terms, is the manner in which Kant conceives the *Critique of Pure Reason* as contributing to the establishment of a humanistic philosophy. It clears the ground for the practical Reason, and secures it in the autonomous control of its own domain. While preserving to the intellect and to science certain definitely prescribed rights, Kant places in the forefront of his system the moral values; and he does so under the conviction that in living up to the opportunities, in whatever rank of life, of our common heritage, we obtain a truer and deeper insight into ultimate issues than can be acquired through the abstruse subtleties of metaphysical speculation.

I may again draw attention to the consequences which follow from Kant's habitual method of isolating his problems. Truth is a value of universal jurisdiction, and from its criteria{lxi} the judgments of moral and other values can claim no exemption. Existences and values do not constitute independent orders. They interpenetrate, and neither can be adequately dealt with apart from the considerations appropriate to the other. In failing to co-ordinate his problems, Kant has over-emphasised the negative aspects of his logical enquiries and has formulated his ethical doctrines in a needlessly dogmatic form.

These defects are, however, in some degree remedied in the last of his chief works, the *Critique of Judgment*. In certain respects it is the most interesting of all Kant's writings. The qualities of both the earlier *Critiques* here appear in happy combination, while in addition his concrete interests are more in evidence, to the great enrichment of his abstract argument. Many of the doctrines of the *Critique of Pure Reason*, especially those that bear on the problems of teleology, are restated in a less negative manner, and in their connection with the kindred problems of natural beauty and the fine arts. For though the final decision in all metaphysical questions is still reserved to moral considerations, Kant now takes a more catholic view of the field of philosophy. He allows, though with characteristic reservations, that the *empirical* evidence obtainable through examination of the broader features of our total experience is of genuinely philosophical value, and that it can safely be employed to amplify and confirm the independent convictions of the moral consciousness. The embargo which in the *Critique of Pure Reason*, in matters metaphysical, is placed upon all tentative and probable reasoning is thus tacitly removed; and the term knowledge again acquires the wider meaning very properly ascribed to it in ordinary speech.

A COMMENTARY TO KANT'S "CRITIQUE OF PURE REASON"

TITLE: KRITIK DER REINEN VERNUNFT

THE term critique or criticism, as employed by Kant, is of English origin. It appears in seventeenth and eighteenth century English, chiefly in adjectival form, as a literary and artistic term — for instance, in the works of Pope, who was Kant's favourite English poet. Kant was the first to employ it in German, extending it from the field of aesthetics to that of general philosophy. A reference in Kant's *Logic* to Home's *Elements of Criticism* would seem to indicate that it was Home's use of the term which suggested to him its wider employment. "Critique of pure reason," in its primary meaning, signifies the passing of critical judgments upon pure reason. In this sense Kant speaks of his time as "the age of criticism (*Zeitalter der Kritik*)." Frequently, however, he takes the term more specifically as meaning a critical investigation leading to positive as well as to negative results. Occasionally, especially in the *Dialectic*, it also signifies a discipline applied to pure reason, limiting it within due bounds. The first appearance of the word in Kant's writings is in 1765 in the *Nachricht* of his lectures for the winter term 1765-1766. Kant seldom employs the corresponding adjective, critical (*kritisch*). His usual substitute for it is the term transcendental.

Pure (*rein*) has here a very definite meaning. It is the absolutely *a priori*. Negatively it signifies that which is independent of experience. Positively it signifies that which originates from reason itself, and which is characterised by universality and necessity. By "pure reason" Kant therefore means reason in so far as it supplies out of itself, independently of experience, *a priori* elements that as such are characterised by universality and necessity.

Reason (*Vernunft*) is used in the *Critique* in three different meanings. In the above title it is employed in its widest sense, as the source of all *a priori* elements. It includes what is *a priori* in sensibility as well as in understanding (*Verstand*). In its narrowest sense it is distinct even from understanding, and signifies that faculty which renders the mind dissatisfied with its ordinary and scientific knowledge, and which leads it to demand a completeness and unconditionedness which can never be found in the empirical sphere. Understanding conditions science; reason generates metaphysic. Understanding has categories; reason has its Ideas. Thirdly, Kant frequently employs understanding and reason as synonymous terms, dividing the mind only into the two faculties, sensibility and spontaneity. Thus in A 1-2, understanding and reason are used promiscuously, and in place of *reine Vernunft* we find *reiner Verstand*. As already stated, the term reason, as employed in Kant's title, ought properly to be taken in its widest sense. Sensibility falls within reason in virtue of the *a priori* forms which it contains. Kant does not himself, however, always interpret the title in this strict sense. The triple use of the term is an excellent example of the looseness and carelessness with which he employs even the most important and fundamental of his technical terms. Only the context can reveal the particular meaning to be assigned in each case.

The phrase "*of* pure reason" (*der reinen Vernunft*) has, as Vaihinger points out, a threefold ambiguity. (1) Sometimes it is a genitive objective. The critical enquiry is directed upon pure reason as its object. This corresponds to the view of the *Critique* as merely a treatise on method. (2) Sometimes it is a genitive subjective. The critical enquiry is undertaken by and executed through pure reason. This expresses the view of the *Critique* as itself a system of pure rational knowledge. (3) At other times it has a reflexive meaning. Pure reason is subject and object at once. It is both subject-matter and method or instrument. Through the *Critique* it attains to self-knowledge. The *Critique* is the critical examination of pure reason by itself. The first view would seem to be the original and primary meaning of the title. The second view very early took its place alongside it, and appears in many passages. The third view must be taken as representing Kant's final interpretation of the title; it is on the whole the most adequate to the actual content and scope of the *Critique*. For the *Critique* is not merely a treatise on method; it is also a system of pure rational knowledge. It professes to establish, in an exhaustive and final manner, the *a*

priori principles which determine the possibility, conditions, and limits of pure rational knowledge.

MOTTO

DE nobis ipsis silemus: De re autem, quae agitur, petimus: ut homines eam non opinionem, sed opus esse cogitent; ac pro certo habeant, non sectae nos alicuius, aut placiti, sed utilitatis et amplitudinis humanae fundamenta moliri. Deinde ut suis commodis aequi ... in commune consulant ... et ipsi in partem veniant. Praeterea ut bene sperent, neque instaurationem nostram ut quiddam infinitum et ultra mortale fingant, et animo concipiant; quum revera sit infiniti erroris finis et terminus legitimus.

This motto, which was added in the second edition, is taken from the preface to Bacon's *Instauratio Magna*, of which the *Novum Organum* is the second part. As the first part of the *Instauratio* is represented only by the later, separately published, *De Augmentis Scientiarum*, this preface originally appeared, and is still usually given, as introductory to the *Novum Organum*.

The complete passage (in which I have indicated Kant's omissions) is rendered as follows in the translation of Ellis and Spedding:

"Of myself I say nothing; but in behalf of the business which is in hand I entreat men to believe that it is not an opinion to be held, but a work to be done; and to be well assured that I am labouring to lay the foundation, not of any sect or doctrine, but of human utility and power. Next, I ask them to deal fairly by their own interests [and laying aside all emulations and prejudices in favour of this or that opinion], to join in consultation for the common good; and [being now freed and guarded by the securities and helps which I offer from the errors and impediments of the way] to come forward themselves and take part [in that which remains to be done]. Moreover, to be of good hope, nor to imagine that this Instauration of mine is a thing infinite and beyond the power of man, when it is in fact the true end and termination of infinite error."

The opening sentence of Bacon's preface might also have served as a fitting motto to the *Critique*:

"It seems to me that men do not rightly understand either their store or their strength, but overrate the one and underrate the other."

Or again the following:

"I have not sought nor do I seek either to enforce or to ensnare men's judgments, but I lead them to things themselves and the concordances of things, that they may see for themselves what they have, what they can dispute, what they can add and contribute to the common stock.... And by these means I suppose that I have established for ever a true and lawful marriage between the empirical and the rational faculty, the unkind and ill-starred divorce and separation of which has thrown into confusion all the affairs of the human family."

DEDICATION

TO

FREIHERR VON ZEDLITZ

Karl Abraham, Freiherr von Zedlitz had been entrusted, as Minister (1771-1788) to Frederick the Great, with the oversight and direction of the Prussian system of education. He held Kant in the highest

esteem. In February 1778 we find him writing to thank Kant for the pleasure he had found in perusing notes of his lectures on physical geography, and requesting the favour of a complete copy. A week later he invited Kant to accept a professorship of philosophy in Halle, which was then much the most important university centre in Germany. Upon Kant's refusal he repeated the offer, with added inducements, including the title of Hofrat. Again, in August of the same year, he writes that he is attending, upon Mendelssohn's recommendation (and doubtless also in the hope of receiving from this indirect source further light upon Kant's own teaching in a favourite field), the lectures on anthropology of Kant's disciple and friend, Marcus Herz. The letter concludes with a passage which may perhaps have suggested to Kant the appropriateness of dedicating his *Critique* to so wise and discerning a patron of true philosophy.

"Should your inventive power extend so far, suggest to me the means of holding back the students in the universities from the bread and butter studies, and of making them understand that their modicum of law, even their theology and medicine, will be immensely more easily acquired and safely applied, if they are in possession of more philosophical knowledge. They can be judges, advocates, preachers and physicians only for a few hours each day; but in these and all the remainder of the day they are men, and have need of other sciences. In short, you must instruct me how this is to be brought home to students. Printed injunctions, laws, regulations — these are even worse than bread and butter study itself."

A Minister of Education who thus ranks philosophy above professional studies, and both as more important than all academic machinery, holds his office by divine right.

PREFACE TO THE FIRST EDITION

Detailed discussion of the *Prefaces* is not advisable. The problems which they raise can best be treated in the order in which they come up in the *Critique* itself. I shall dwell only on the minor incidental difficulties of the text, and on those features in Kant's exposition which are peculiar to the *Prefaces*, or which seem helpful in the way of preliminary orientation. I shall first briefly restate the argument of the *Preface* to the first edition, and then add the necessary comment.

Human reason is ineradicably metaphysical. It is haunted by questions which, though springing from its very nature, none the less transcend its powers. Such a principle, for instance, as that of causality, in carrying us to more and more remote conditions, forces us to realise that by such regress our questions can never be answered. However far we recede in time, and however far we proceed in space, we are still no nearer to a final answer to our initial problems, and are therefore compelled to take refuge in postulates of a different kind, such, for instance, as that there must be a first unconditioned cause from which the empirical series of causes and effects starts, or that space is capable of existing as a completed whole. But these assumptions plunge reason in darkness and involve it in contradictions. They are the sources of all the troubles of the warring schools. Error lies somewhere concealed in them — the more thoroughly concealed that they surpass the limits of possible experience. Until such error has been detected and laid bare, metaphysical speculation must remain the idlest of all tasks.

In the latter part of the eighteenth century metaphysics had fallen, as Kant here states, into disrepute. The wonderful success with which the mathematical and natural sciences were being developed served only to emphasise by contrast the ineffectiveness of the metaphysical disciplines. Indifference to philosophy was the inevitable outcome, and was due, not to levity, but to the matured judgment of the age, which refused to be any longer put off with such pretended knowledge. But since the philosophical sciences aim at that knowledge which, if attainable, we should be least willing to dispense with, the failure of philosophy is really a summons to reason to take up anew the most difficult of all its tasks. It must once and for all determine either the possibility or the impossibility of metaphysics. It must establish

"...a tribunal which will assure to reason its lawful claims, and which will also be able to dismiss all

groundless pretensions, not by despotic decrees, but in accordance with its own eternal and unalterable laws. This tribunal is no other than the *Critique of Pure Reason*." "Our age is, in especial degree, the age of criticism (*Kritik*), and to such criticism everything must submit. Religion, through its sanctity, and law-giving, through its majesty, may seek to exempt themselves from it. But they then awaken just suspicion, and cannot claim the sincere respect which reason accords only to that which has been able to sustain the test of free and open examination."

As has already been emphasised in the preceding historical sketch, Kant had learnt to trust the use of reason, and was a rationalist by education, temperament, and conviction. He here classifies philosophies as dogmatic and sceptical; and under the latter rubric he includes all empirical systems. 'Empiricism' and 'scepticism' he interprets as practically synonymous terms. The defect of the dogmatists is that they have not critically examined their methods of procedure, and in the absence of an adequate distinction between appearance and reality have interpreted the latter in terms of the former. The defect of the empiricists and sceptics is that they have misrepresented the nature of the faculty of reason, ignoring its claims and misreading its functions, and accordingly have gone even further astray than their dogmatic opponents. All knowledge worthy of the name is *a priori* knowledge. It possesses universality and necessity, and as such must rest on pure reason. Wherever there is science, there is an element of pure reason. Whether or not pure reason can also extend to the unconditioned is the question which decides the possibility of constructive metaphysics. This is what Kant means when he declares that the *Critique* is a criticism of the power of reason, in respect of all knowledge after which it may strive independently of experience. Pure reason is the subject-matter of the enquiry; it is also the instrument through which the enquiry is made. Nothing empirical or merely hypothetical has any place in it, either as subject-matter or as method of argument.

From this position Kant draws several important consequences. First, since pure reason means that faculty whereby we gain knowledge independently of all experience, it can be isolated and its whole nature exhaustively determined. Indeed pure reason (Kant seeks to prove) is so perfect a unity that if "its principle" should be found insufficient to the solution of a single one of all the questions which are presented to it by its own nature, we should be justified in forthwith rejecting it as also incompetent to answer with complete certainty any one of the other questions. In metaphysics it must be either all or nothing, either final and complete certainty or else absolute failure.

"While I am saying this I can fancy that I detect in the face of the reader an expression of indignation mingled with contempt at pretensions seemingly so arrogant and vainglorious; and yet they are incomparably more moderate than the claims of all those writers who on the lines of the usual programme profess to prove the simple nature of the soul or the necessity of a first beginning of the world."

In so doing they pretend to define realities which lie beyond the limits of possible experience; the *Critique* seeks only to deal with that faculty of reason which manifests itself to us within our own minds. Formal logic shows how completely and systematically the simple acts of reason can be enumerated. Aristotle created this science of logic complete at a stroke. Kant professes to have established an equally final metaphysics; and as logic is not a science proper, but rather a propaedeutic to all science, metaphysics, thus interpreted, is the only one of all the sciences which can immediately attain to such completeness.

"For it is nothing but the inventory of all our possessions through pure reason, systematically arranged. In this field nothing can escape us. What reason produces entirely out of itself cannot lie concealed, but is brought to light by reason itself immediately the common principle has been discovered."

Secondly, the *Critique* also claims certainty. With the removal of everything empirical, and the reduction of its subject-matter to pure reason, all mere opinion or hypothesis is likewise eliminated. Probabilities or hypotheses can have no place in a *Critique of Pure Reason*. Everything must be derived according to *a priori* principles from pure conceptions in which there is no intermixture of experience or

any special intuition.

This *Preface* to the first edition, considered as introductory to the *Critique*, is misleading for two reasons. First, because in it Kant is preoccupied almost exclusively with the problems of metaphysics in the strict ontological sense, that is to say, with the problems of the *Dialectic*. The problems of the *Analytic*, which is the very heart of the *Critique*, are almost entirely ignored. They are, it is true, referred to in A x-xi, but the citation is quite externally intercalated; it receives no support or extension from the other parts of the *Preface*. This results in a second defect, namely, that Kant fails to indicate the more empirical features of his new Critical standpoint. Since ultimate reality is supersensuous, metaphysics, as above conceived, can have no instrument save pure reason. The subjects of its enquiry, God, freedom, and immortality, if they are to be known at all, can be determined only through *a priori* speculation. This fact, fundamental and all-important for Kant, was completely ignored in the popular eclectic philosophies of the time. They professed to derive metaphysical conclusions from empirical evidence. They substituted, as Kant has pointed out, "a physiology of the human understanding" for the Critical investigation of the claims of reason, and anthropology for ethics. They were blind to the dogmatism of which they are thereby guilty. They assumed those very points which most call for proof, namely, that reason is adequate to the solution of metaphysical problems, and that all existence is so fundamentally of one type that we can argue from the sensuous to the supersensuous, from appearance to reality. When they fell into difficulties, they pleaded the insufficiency of human reason, and yet were all the while unquestioningly relying upon it in the drawing of the most tremendous inferences. Such, for instance, are the assumptions which underlie Moses Mendelssohn's contention that since animals as well as men agree in the apprehension of space, it must be believed to be absolutely real. These assumptions also determine Priestley's assertion that though every event has its cause, there is one causeless happening, namely, the creative act to which the existence of the world is due. On such terms, metaphysics is too patently easy to be even plausible. "Indifference, doubt, and, in final issue, severe criticism, are truer signs of a profound habit of thought." The matter of experience affords no data for metaphysical inference. In the *a priori* forms of experience, and there alone, can metaphysics hope to find a basis, if any basis is really discoverable.

This is Kant's reason for so emphatically insisting that the problem of the *Critique* is to determine "how much we can hope to achieve by reason, when all the material and assistance of experience is taken away." But in keeping only this one point in view Kant greatly misrepresents the problems and scope of the *Critique*. Throughout the *Preface* he speaks the language of the *Aufklärung*. Even in the very act of limiting the scope of reason, he overstresses its powers, and omits reference to its empirical conditions. It is well to contrast this teaching with such a passage as the following:

"The position of all genuine idealists from the Eleatics to Berkeley is contained in this formula: 'All cognition through the senses and experience is nothing but mere illusion, and only in the ideas of pure understanding and Reason is there truth.' The fundamental principle ruling all my idealism, on the contrary, is this: 'All cognition of things solely from pure understanding or pure Reason is nothing but mere illusion, and only in experience is there truth.'"

But that passage is equally inadequate as a complete expression of Kant's Critical philosophy. The truth lies midway between it and the teaching of the *Preface* to the first edition. Pure reason is as defective an instrument of knowledge as is factual experience. Though the primary aim of metaphysics is to determine our relation to the absolutely real, and though that can only be done by first determining the nature and possible scope of *a priori* principles, such principles are found on investigation to possess only empirical validity. The central question of the *Critique* thus becomes the problem of the validity of their empirical employment. The interrelation of these two problems, that of the *a priori* and that of experience, and Kant's attitude towards them, cannot be considered till later. The defects of the *Preface* to the first

edition are in part corrected by the extremely valuable *Preface* substituted in the second edition. But some further points in this first *Preface* must be considered.

Prescribed by the very nature of reason itself. — Metaphysics exists as a "natural disposition," and its questions are not therefore merely artificial.

"As natural disposition (*Naturanlage*) ... metaphysics is real. For human reason, without being moved merely by the idle desire for extent and variety of knowledge, proceeds impetuously, driven on by an inward need, to questions such as cannot be answered by any empirical employment of reason, or by principles thence derived. Thus in all men, as soon as their reason has become ripe for speculation, there has always existed and will always continue to exist some kind of metaphysics."

Hence results what Kant entitles *transcendental illusion*.

"The cause of this transcendental illusion is that there are fundamental rules and maxims for the employment of Reason, subjectively regarded as a faculty of human knowledge, and that these rules and maxims have all the appearance of being objective principles. We take the subjective necessity of a connection of our concepts, *i.e*. a connection necessitated for the advantage of the understanding, for an objective necessity in the determination of things in themselves. This is an illusion which can no more be prevented than we can prevent the sea from appearing higher at the horizon than at the shore, since we see it through higher light rays; or to cite a still better example, than the astronomer can prevent the moon from appearing larger at its rising, although he is not deceived by this illusion.... There exists, then, a natural and unavoidable dialectic of pure Reason, not one in which a bungler might entangle himself through lack of knowledge, or one which some sophist has artificially invented to confuse thinking people, but one which is inseparable from human Reason, and which, even after its deceiving power has been exposed, will not cease to play tricks with it and continually to entrap it into momentary aberrations that will ever and again call for correction."

Dogmatism. — According to Kant there are three possible standpoints in philosophy — the dogmatic, the sceptical, and the critical. All preceding thinkers come under the first two heads. A dogmatist is one who assumes that human reason can comprehend ultimate reality, and who proceeds upon this assumption. He does not, before proceeding to construct a metaphysics, enquire whether it is possible. Dogmatism expresses itself (to borrow Vaihinger's convenient mode of definition) through three factors — *rationalism*, *realism*, and *transcendence*. Descartes and Leibniz are typical dogmatists. As rationalists they hold that it is possible to determine from pure *a priori* principles the ultimate nature of God, of the soul, and of the material universe. They are realists in that they assert that by human thought the complete nature of objective reality can be determined. They also adopt the attitude of transcendence. Through pure thought they go out beyond the sensible and determine the supersensuous. Scepticism (Kant, as above stated, regards it as being in effect equivalent to empiricism) may similarly be defined through the three terms, *empiricism*, *subjectivism*, *immanence*. A sceptic can never be a rationalist. He must reduce knowledge to sense-experience. For this reason also his knowledge is infected by subjective conditions; through sensation we cannot hope to determine the nature of the objectively real. This attitude is also that of immanence; knowledge is limited to the sphere of sense-experience. Criticism has similarly its three constitutive factors, *rationalism, subjectivism, immanence*. It agrees with dogmatism in maintaining that only through *a priori* principles can true knowledge be obtained. Such knowledge is, however, subjective in its origin, and for that reason it is also only of immanent application; knowledge is possible only in the sphere of sense-experience. Dogmatism claims that knowledge arises independently of experience and extends beyond it. Empiricism holds that knowledge arises out of sense-experience and is valid only within it. Criticism teaches that knowledge arises independently of particular experience but is valid only for experience.

The following passages in the *Methodology* give Kant's view of the historical and relative values of the two false methods:

"The sceptic is the taskmaster who constrains the dogmatic reasoner to develop a sound critique of the understanding and reason. When the latter has been made to advance thus far, he need fear no further challenge, since he has learned to distinguish his real possessions from that which lies entirely beyond them, and to which he can therefore lay no claim.... Thus the sceptical procedure cannot of itself yield any satisfying answer to the questions of reason, but none the less it prepares the way by awakening its circumspection, and by indicating the radical measures which are adequate to secure it in its legitimate possessions." "The first step in matters of pure reason, marking its infancy, is *dogmatic*. The second step is *sceptical*, and indicates that experience has rendered our judgment wiser and more circumspect. But a third step, such as can be taken only by fully matured judgment, is now necessary.... This is not the censorship but the critique of reason, whereby not its present bounds but its determinate [and necessary] limits, not its ignorance on this or that point, but in regard to all possible questions of a certain kind, are demonstrated from principles, and not merely arrived at by way of conjecture. Scepticism is thus a resting-place for human reason, where it can reflect upon its dogmatic wanderings and make survey of the region in which it finds itself, so that for the future it may be able to choose its path with more certainty. But it is no dwelling-place for permanent settlement. That can be obtained only through perfect certainty in our knowledge, alike of the objects themselves and of the limits within which all our knowledge of objects is enclosed."

Locke. — Cf. A 86 = B 119; A 270 = B 327; B 127.

On the unfavourable contrast between mathematics and metaphysics. — Cf. *Ueber die Deutlichkeit der Grundsätze* (1764), *erste Betrachtung*, and below, p, 563 ff.

The age of criticism. — Kant considered himself as contributing to the further advance of the eighteenth century Enlightenment. In view, however, of the contrast between eighteenth and nineteenth century thought, and of the real affiliations and ultimate consequences of Kant's teaching, it seems truer to regard the Critical philosophy as at once completing and transcending the *Aufklärung*. Kant breaks with many of its most fundamental assumptions.

The Critique of Pure Reason. — Kant here defines the *Critique* as directed upon pure reason. Further, it is a criticism of knowledge which is "independent of all experience," or, as Kant adds "free from all experience." Such phrases, in this context, really mean *transcendent*. The *Critique* is here taken as being a Critical investigation of transcendent metaphysics, of its sources, scope, and limits.

Opinion or hypothesis not permissible. — Cf. below, ff.

I know no enquiries, etc. — The important questions raised by this paragraph are discussed below, ff.

Jean Terrasson (1670-1750). — The quotation is from his work posthumously published (1754), and translated from the French by Frau Gottsched under the title *Philosophie nach ihrem allgemeinen Einflusse auf alle Gegenstände des Geistes und der Sitten* (1762). Terrasson is also referred to by Kant in his *Anthropologie*, §§ 44 and 77. Terrasson would seem to be the author of the *Traité de l'infini créé* which has been falsely ascribed to Malebranche. I have translated this latter treatise in the *Philosophical Review* (July 1905).

Such a system of pure speculative reason. — The relation in which this system would stand to the *Critique* is discussed below, p-2. Speculative does not with Kant mean transcendent, but merely theoretical as opposed to practical. Cf. B 25, A 15 = B 29, A 845 = B 873.

Under the title: Metaphysics of Nature. — No such work, at least under this title, was ever completed by Kant. In the Kantian terminology "nature" signifies "all that is." Cf. below, .

PREFACE TO THE SECOND EDITION

I SHALL again give a brief explanatory paraphrase, before proceeding to detailed comment. The main points of the preface of the first edition are repeated. "Metaphysics soars above all teaching of

experience, and rests on concepts only. In it reason has to be her own pupil." But Kant immediately proceeds to a further point. That logic should have attained the secure method of science is due to its limitation to the mere *a priori* form of knowledge. For metaphysics this is far more difficult, since it "*has to deal not with itself alone, but also with objects*."

The words which I have italicised form a very necessary correction of the first edition preface, according to which the *Critique* would seem to "treat only of reason and its pure thinking." A further difference follows. The second edition preface, in thus emphasising the objective aspect of the problem, is led to characterise in a more complete manner the method to be followed in the Critical enquiry. How can the *Critique*, if it is concerned, as both editions agree in insisting, only with the *a priori* which originates in human reason, solve the specifically metaphysical problem, viz. that of determining the independently real? How can an idea in us refer to, and constitute knowledge of, an object? The larger part of the preface to the second edition is devoted to the Critical solution of this problem. The argument of the *Dialectic* is no longer emphasised at the expense of the *Analytic*.

Kant points out that as a matter of historical fact each of the two rational sciences, mathematics and physics, first entered upon the assured path of knowledge by a sudden revolution, and by the adoption of a method which in its general characteristics is common to both. This method consists, not in being led by nature as in leading-strings, but in interrogating nature in accordance with what reason produces on its own plan. The method of the geometrician does not consist in the study of figures presented to the senses. That would be an empirical (in Kant's view, sceptical) method. Geometrical propositions could not then be regarded as possessing universality and necessity. Nor does the geometrician employ a dogmatic method, that of studying the mere conception of a figure. By that means no new knowledge could ever be attained. The actual method consists in interpreting the sensible figures through conceptions that have been rigorously defined, and in accordance with which the figures have been constructively generated. The first discovery of this method, by Thales or some other Greek, was "far more important than the discovery of the passage round the celebrated Cape of Good Hope."

Some two thousand years elapsed before Galileo formulated a corresponding method for physical science. He relied neither on mere observation nor on his own conceptions. He determined the principles according to which alone concordant phenomena can be admitted as laws of nature, and then by experiment compelled nature to answer the questions which these principles suggest. Here again the method is neither merely empirical nor purely dogmatic. It possesses the advantages of both.

Metaphysics is ripe for a similar advance. It must be promoted to the rank of positive science by the transforming power of an analogous method. The fundamental and distinguishing characteristic of mathematical and physical procedure is the legislative power to which reason lays claim. Such procedure, if generalised and extended, will supply the required method of the new philosophy. Reason must be regarded as self-legislative in all the domains of our possible knowledge. *Objects must be viewed as conforming to human thought, not human thought to the independently real*. This is the "hypothesis" to which Kant has given the somewhat misleading title, "Copernican." The *method of procedure* which it prescribes is, he declares, analogous to that which was followed by Copernicus, and will be found to be as revolutionary in its consequences. In terms of this hypothesis a complete and absolutely certain metaphysics, valid now and for all time, can be created at a stroke. The earliest and oldest enterprise of the human mind will achieve a new beginning. Metaphysics, the mother of all the sciences, will renew her youth, and will equal in assurance, as she surpasses in dignity, the offspring of her womb.

From this new standpoint Kant develops phenomenalism on rationalist lines. He professes to prove that though our knowledge is only of appearances, it is conditioned by *a priori* principles. His "Copernican hypothesis," so far from destroying positive science, is, he claims, merely a philosophical extension of the method which it has long been practising. Since all science worthy of the name involves *a priori*

elements, it can be accounted for only in terms of the new hypothesis. Only if objects are regarded as conforming to our forms of intuition, and to our modes of conception, can they be anticipated by *a priori* reasoning. Science can be *a priori* just because, properly understood, it is not a rival of metaphysics, and does not attempt to define the absolutely real.

But such a statement at once suggests what may at first seem a most fatal objection. Though the new standpoint may account for the *a priori* in experience and science, it can be of no avail in metaphysics. If the *a priori* concepts have a mental origin, they can have no validity for the independently real. If we can know only what we ourselves originate, things in themselves must be unknown, and metaphysics must be impossible. But in this very consequence the new hypothesis first reveals its full advantages. It leads to an interpretation of metaphysics which is as new and as revolutionary as that which it gives to natural science. Transcendent metaphysics is indeed impossible, but in harmony with man's practical and moral vocation, its place is more efficiently taken by an immanent metaphysics on the one hand, and by a metaphysics of ethics on the other. Together these constitute the new and final philosophy which Kant claims to have established by his Critical method. Its chief task is to continue "that noblest enterprise of antiquity," the distinguishing of appearances from things in themselves. The unconditioned is that which alone will satisfy speculative reason; its determination is the ultimate presupposition of metaphysical enquiry. But so long as the empirical world is regarded as true reality, totality or unconditionedness cannot possibly be conceived — is, indeed, inherently self-contradictory. On the new hypothesis there is no such difficulty. By the proof that things in themselves are unknowable, a sphere is left open within which the unconditioned can be sought. For though this sphere is closed to speculative reason, the unconditioned can be determined from data yielded by reason in its practical activity. The hypothesis which at first seems to destroy metaphysics proves on examination to be its necessary presupposition. The "Copernican hypothesis" which conditions science will also account for metaphysics properly conceived.

Upon this important point Kant dwells at some length. Even the negative results of the *Critique* are, he emphasises, truly positive in their ultimate consequences. The dogmatic extension of speculative reason really leads to the narrowing of its employment, for the principles of which it then makes use involve the subjecting of things in themselves to the limiting conditions of sensibility. All attempts to construe the unconditioned in terms that will satisfy reason are by such procedure ruled out from the very start. To demonstrate this is the fundamental purpose and chief aim of the *Critique*. Space and time are merely forms of sensuous intuition; the concepts of understanding can yield knowledge only in their connection with them. Though the concepts in their purity possess a quite general meaning, this is not sufficient to constitute knowledge. The conception of causality, for instance, necessarily involves the notion of time-sequence; apart from time it is the bare, empty, and entirely unspecified conception of a sufficient ground. Similarly, the category of substance signifies the permanent in time and space; as a form of pure reason it has a quite indefinite meaning signifying merely that which is always a subject and never a predicate. In the absence of further specification, it remains entirely problematic in its reference. The fact, however, that the categories of the understanding possess, in independence of sensibility, even this quite general significance is all-important. Originating in pure reason they have a wider scope than the forms of sense, and enable us to conceive, though not to gain knowledge of, things in themselves. Our dual nature, as being at once sensuous and supersensuous, opens out to us the apprehension of both.

Kant illustrates his position by reference to the problem of the freedom of the will. As thought is wider than sense, and reveals to us the existence of a noumenal realm, we are enabled to reconcile belief in the freedom of the will with the mechanism of nature. We can recognise that within the phenomenal sphere everything without exception is causally determined, and yet at the same time maintain that the whole order of nature is grounded in noumenal conditions. We can assert of one and the same being that its will is subject to the necessity of nature and that it is free — mechanically determined in its visible actions, free in its real supersensible existence. We have, indeed, no knowledge of the soul, and therefore cannot

assert on theoretical grounds that it possesses any such freedom. The very possibility of freedom transcends our powers of comprehension. The proof that it can at least be conceived without contradiction is, however, all-important. For otherwise no arguments from the nature of the moral consciousness could be of the least avail; before a palpable contradiction every argument is bound to give way. Now, for the first time, the doctrine of morals and the doctrine of nature can be independently developed, without conflict, each in accordance with its own laws. The same is true in regard to the existence of God and the immortality of the soul. By means of the Critical distinction between the empirical and the supersensible worlds, *these conceptions are now for the first time rendered possible of belief*. "I had to remove *knowledge*, in order to make room for *belief*." "This loss affects only the *monopoly of the schools*, in no respect the *interests of humanity*."

Lastly, Kant emphasises the fact that the method of the *Critique* must be akin to that of dogmatism. It must be rational *a priori*. To adopt any other method of procedure is "to shake off the fetters of *science* altogether, and thus to change work into play, certainty into opinion, philosophy into philodoxy." And Kant repeats the claims of the preface of the first edition as to the completeness and finality of his system. "This system will, as I hope, maintain through the future this same unchangeableness."

Logic. — For Kant's view of the logic of Aristotle as complete and perfect, cf. below, p-5. Kant compares metaphysics to mathematics and physics on the one hand, and to formal logic on the other. The former show the possibility of attaining to the secure path of science by a sudden and single revolution; the latter demonstrates the possibility of creating a science complete and entire at a stroke. Thanks to the new Critical method, metaphysics may be enabled, Kant claims, to parallel both achievements at once.

Theoretical and practical reason. — Such comment as is necessary upon this distinction is given below. Cf. ff.

Hitherto it has been supposed that all knowledge must conform to the objects. — This statement is historically correct. That assumption did actually underlie one and all of the pre-Kantian philosophies. At the same time, it is true that Kant's phenomenalist standpoint is partially anticipated by Hume, by Malebranche and by Leibniz, especially by the first named. Hume argues that to condemn knowledge on the ground that it can never copy or truly reveal any external reality is to misunderstand its true function. Our sense perceptions and our general principles are so determined by nature as to render feasible only a practical organisation of life. When we attempt to derive from them a consistent body of knowledge, failure is the inevitable result. Malebranche, while retaining the absolutist view of conceptual knowledge, propounds a similar theory of sense-perception. Our perceptions are, as he shows, permeated through and through, from end to end, with illusion. Such illusions justify themselves by their practical usefulness, but they likewise prove that theoretical insight is not the purpose of our sense-experience. Kant's Copernican hypothesis consists in great part of an extension of this view to our conceptual, scientific knowledge. But he differs both from Malebranche and from Hume in that he develops his phenomenalism on rationalist lines. He professes to show that though our knowledge is only of the phenomenal, it is conditioned by *a priori* principles. The resulting view of the distinction between appearance and reality has kinship with that of Leibniz. The phenomena of science, though only appearances, are none the less *bene fundata*. Our scientific knowledge, though not equivalent to metaphysical apprehension of the ultimately real, can be progressively developed by scientific methods.

The two "parts" of metaphysics. — Kant is here drawing the important distinction, which is one result of his new standpoint, between *immanent* and *transcendent* metaphysics. It is unfortunate that he does not do so in a more explicit manner, with full recognition of its novelty and of its far-reaching significance. Many ambiguities in his exposition here and elsewhere would then have been obviated.

The unconditioned which Reason postulates in all things by themselves, by necessity and by right. — Points are here raised the discussion of which must be deferred. Cf. below, p-31, 433-4, 558-61.

The Critique is a treatise on method, not a system of the science itself. — Cf. A xv.; B xxxvi.; and

especially A 11 = B 24, below p-2.

The Copernican hypothesis. — Kant’s comparison of his new hypothesis to that of Copernicus has generally been misunderstood. The reader very naturally conceives the Copernican revolution in terms of its main ultimate consequence, the reduction of the earth from its proud position of central pre-eminence. But that does not bear the least analogy to the intended consequences of the Critical philosophy. The direct opposite is indeed true. Kant’s hypothesis is inspired by the avowed purpose of neutralising the naturalistic implications of the Copernican astronomy. His aim is nothing less than the firm establishment of what may perhaps be described as a Ptolemaic, anthropocentric metaphysics. Such naturalistic philosophy as that of Hume may perhaps be described as Copernican, but the Critical philosophy, as humanistic, has genuine kinship with the Greek standpoint.

Even some of Kant’s best commentators have interpreted the analogy in the above manner. It is so interpreted by T. H. Green and by J. Hutchison Stirling. Caird in his *Critical Philosophy of Kant* makes not the least mention of the analogy, probably for the reason that while reading it in the same fashion as Green, he recognised the inappropriateness of the comparison as thus taken. The analogy is stated in typically ambiguous fashion by Lange and by Höffding. S. Alexander, while very forcibly insisting upon the Ptolemaic character of the Kantian philosophy, also endorses this interpretation in the following terms:

“It is very ironical that Kant himself signalised the revolution which he believed himself to be effecting as a Copernican revolution. But there is nothing Copernican in it except that he believed it to be a revolution. If every change is Copernican which reverses the order of the terms with which it deals, which declares A to depend on B when B had before been declared to depend on A, then Kant — who believed that he had reversed the order of dependence of mind and things — was right in saying that he effected a Copernican revolution. But he was not right in any other sense. For his revolution, so far as it was one, was accurately anti-Copernican.”

As the second edition preface is not covered by the published volumes of Vaihinger’s *Commentary*, the point has not been taken up by him.

Now Kant’s own statements are entirely unambiguous and do not justify any such interpretation as that of Green and Alexander. As it seems to me, they have missed the real point of the analogy. The misunderstanding would never have been possible save for our neglect of the scientific classics. Kant must have had first-hand acquaintance with Copernicus’ *De Revolutionibus*, and the comparison which he draws assumes similar knowledge on the part of his readers. Copernicus by his proof of the “hypothesis” (his own term) of the earth’s motion sought only to achieve a more harmonious ordering of the Ptolemaic universe. And as thus merely a simplification of the traditional cosmology, his treatise could fittingly be dedicated to the reigning Pope. The sun upon which our terrestrial life depends was still regarded as uniquely distinct from the fixed stars; and our earth was still located in the central region of a universe that was conceived in the traditional manner as being single and spherical. Giordano Bruno was the first, a generation later, to realise the revolutionary consequences to which the new teaching, consistently developed, must inevitably lead. It was he who first taught what we have now come to regard as an integral part of Copernicus’ revolution, the doctrine of innumerable planetary systems side by side with one another in infinite space.

Copernicus’ argument starts from the Aristotelian principle of relative motion. To quote Copernicus’ exact words:

“All apprehended change of place is due to movement either of the observed object or of the observer, or to differences in movements that are occurring simultaneously in both. For if the observed object and the observer are moving in the same direction with equal velocity, no motion can be detected. Now it is from the earth that we visually apprehend the revolution of the heavens. If, then, any movement is ascribed to the earth, that motion will generate the appearance of itself in all things which are external to it, though

as occurring in the opposite direction, as if everything were passing across the earth. This will be especially true of the daily revolution. For it seems to seize upon the whole world, and indeed upon everything that is around the earth, though not upon the earth itself.... As the heavens, which contain and cover everything, are the common locus of things, it is not at all evident why it should be to the containing rather than to the contained, to the located rather than to the locating, that a motion is to be ascribed."

The apparently objective movements of the fixed stars and of the sun are mere appearances, due to the projection of our own motion into the heavens.

"The first and highest of all the spheres is that of the fixed stars, self-containing and all-containing, and consequently immobile, in short the locus of the universe, by relation to which the motion and position of all the other heavenly bodies have to be reckoned."

Now it is this doctrine, and this doctrine alone, to which Kant is referring in the passages before us, namely, Copernicus' hypothesis of a subjective explanation of apparently objective motions. And further, in thus comparing his Critical procedure to that of Copernicus, he is concerned more with the positive than with the negative consequences of their common hypothesis. For it is chiefly from the point of view of the *constructive* parts of the *Aesthetic*, *Analytic*, and *Dialectic* that the comparison is formulated. By means of the Critical hypothesis Kant professes on the one hand to account for our scientific knowledge, and on the other to safeguard our legitimate metaphysical aspirations. The spectator projects his own motion into the heavens; human reason legislates for the domain of natural science. The sphere of the fixed stars is proved to be motionless; things in themselves are freed from the limitations of space and time. "Copernicus dared, in a manner contradictory of the senses but yet true, to seek the observed movements, not in the heavenly bodies, but in the spectator."

In view of Kant's explicit elimination of all *hypotheses* from the *Critique* the employment of that term would seem to be illegitimate. He accordingly here states that though in the *Preface* his Critical theory is formulated as an hypothesis only, in the *Critique* itself its truth is demonstrated *a priori*.

Distinction between knowing and thinking. — Since according to Critical teaching the limits of sense-experience are the limits of knowledge, the term knowledge has for Kant a very limited denotation, and leaves open a proportionately wide field for what he entitles thought. Though things in themselves are unknowable, their existence may still be recognised in thought.

INTRODUCTION

I SHALL first give a restatement, partly historical and partly explanatory, of Kant's main argument as contained in the enlarged *Introduction* of the second edition.

There were two stages in the process by which Kant came to full realisation of the Critical problem. There is first the problem as formulated in his letter of 1772 to Herz: how the *a priori* can yield knowledge of the independently real. This, as he there states it, is an essentially metaphysical problem. It is the problem of the possibility of transcendent metaphysics. He became aware of it when reflecting upon the function which he had ascribed to intellect in the *Dissertation*. Then, secondly, this problem was immeasurably deepened, and at the same time the proper line for its treatment was discovered, through the renewed influence which Hume at some date subsequent to February 1772 exercised upon Kant's thought. Hume awakened Kant to what may be called the *immanent* problem involved in the very conception of *a priori* knowledge as such. The primary problem to be solved is not how we advance by means of *a priori* ideas to the independently real, but how we are able to advance beyond a subject term to a predicate which it does not appear to contain. The problem is indeed capable of solution, just because it takes this *logical* form. Here as elsewhere, ontological questions are viewed by Kant as soluble only to the extent

to which they can be restated in logical terms. Now also the enquiry becomes twofold: how and in what degree are *a priori* synthetic judgments possible, first in their employment within the empirical sphere (the problem of immanent metaphysics) and secondly in their application to things in themselves (the problem of transcendent metaphysics). The outcome of the Critical enquiry is to establish the legitimacy of immanent metaphysics and the impossibility of all transcendent speculation.

The argument of Kant's *Introduction* follows the above sequence. It starts by defining the problem of metaphysical knowledge *a priori*, and through it leads up to the logical problem of the *a priori* synthetic judgment. In respect of time all knowledge begins *with* experience. But it does not therefore follow that it all arises *from* experience. Our experience may be a compound of that which we receive through impressions, and of that which pure reason supplies from itself. The question as to whether or not any such *a priori* actually exists, is one that can be answered only after further enquiry. The two inseparable criteria of the *a priori* are necessity and universality. That neither can be imparted to a proposition by experience was Kant's confirmed and unquestioned belief. He inherited this view both from Leibniz and from Hume. It is one of the presuppositions of his argument. Experience can reveal only co-existence or sequence. It enables us only to assert that so far as we have hitherto observed, there is no exception to this or that rule. A generalisation, based on observation, can never possess a wider universality than the limited experience for which it stands. If, therefore, necessary and universal judgments can anywhere be found in our knowledge, the existence of an *a priori* that originates independently of experience is *ipso facto* demonstrated.

The contrast between empirical and *a priori* judgments, as formulated from the dogmatic standpoint, is the most significant and striking fact in the whole range of human knowledge. *A priori* judgments claim absolute necessity. They allow of no possible exception. They are valid not only for us, but also for all conceivable beings, however different the specific conditions of their existence, whether they live on the planet Mars or in some infinitely remote region of stellar space, and no matter how diversely their bodily senses may be organised. Through these judgments a creature five feet high, and correspondingly limited by temporal conditions, legislates for all existence and for all time. Empirical judgments, on the other hand, possess only a hypothetical certainty. We recognise that they may be overturned through some addition to our present experience, and that they may not hold for beings on other planets or for beings with senses differently constituted. Whereas the opposite of a rational judgment is not even conceivable, the opposite of an empirical judgment is always possible. The one depends upon the inherent and inalienable nature of our thinking; the other is bound up with the contingent material of sense. The one claims absolute or metaphysical truth: the other is a merely tentative *résumé* of a limited experience.

The possibility of such *a priori* judgments had hitherto been questioned only by those who sought to deny to them all possible objective validity. Kant, as a rationalist, has no doubt as to their actual existence. In the *Introduction* to the second edition he bluntly asserts their *de facto* existence, citing as instances the propositions of mathematics and the fundamental principles of physical science. Their possibility can be accounted for through the assumption of *a priori* forms and principles. But with equal emphasis he questions the validity of their *metaphysical* employment. For that is an entirely different matter. We then completely transcend the world of the senses and pass into a sphere where experience can neither guide nor correct us. In this sphere the *a priori* is illegitimately taken as being at once the source of our professed knowledge and also the sole criterion of its own claims.

This is the problem, semi-Critical, semi-dogmatic, which is formulated in the letter of 1772 to Herz. What right have we to regard ideas, which as *a priori* originate from within, as being valid of things in themselves? In so doing we are assuming a pre-established harmony between our human faculties and the ultimately real; and that is an assumption which by its very nature is incapable of demonstration. The proofs offered by Malebranche and by Leibniz are themselves speculative, and consequently presuppose the conclusion which they profess to establish. As above stated, Kant obtained his answer to this problem

by way of the logical enquiry into the nature and conditions of *a priori* judgment.

One of the chief causes, Kant declares, why hitherto metaphysical speculation has passed unchallenged among those who practise it, is the confusion of two very different kinds of judgment, the analytic and the synthetic. Much the greater portion of what reason finds to do consists in the analysis of our concepts of objects.

"As this procedure yields real knowledge *a priori*, which progresses in secure and useful fashion, reason is so far misled as surreptitiously to introduce, without itself being aware of so doing, assertions of an entirely different order, in which reason attaches to given concepts others completely foreign to them — and moreover attaches them *a priori*. And yet one does not know how reason comes to do this. This is a question which is never as much as thought of."

The concepts which are analytically treated may be either empirical or *a priori*. When they are empirical, the judgments which they involve can have no wider application than the experience to which they give expression; and in any case can only reveal what has all along been thought, though confusedly, in the term which serves as subject of the proposition. They can never reveal anything different in kind from the contents actually experienced. This limitation, to which the analysis of empirical concepts is subject, was admitted by both empiricists and rationalists. The latter sought, however, to escape its consequences by basing their metaphysics upon concepts which are purely *a priori*, and which by their *a priori* content may carry us beyond the experienced. But here also Kant asserts a *non possibile*. *A priori* concepts, he seeks to show, are in all cases purely logical functions without content, and accordingly are as little capable as are empirical concepts of carrying us over to the supersensible. This is an objection which holds quite independently of that already noted, namely, that their objective validity would involve a pre-established harmony.

What, then, is the nature and what are the generating conditions of synthetic judgments that are also *a priori*? In all judgments there is a relation between subject and predicate, and that can be of two kinds. Either the predicate B belongs to the subject A, or B lies outside the sphere of the concept A though somehow connected with it. In the former case the judgment is analytic; in the latter it is synthetic. The one simply unfolds what has all along been conceived in the subject concept; the other ascribes to the concept of the subject a predicate which cannot be found in it by any process of analysis. Thus the judgment 'all bodies are extended' is analytic. The concept of body already contains that of extension, and is impossible save through it. On the other hand, the judgment 'all bodies are heavy' is synthetic. For not body as such, but only bodies which are in interaction with other bodies, are found to develop this property. Bodies can very well be conceived as not influencing one another in any such manner.

There is no difficulty in accounting for analytic judgments. They can all be justified by the principle of contradiction. Being analytic, they can be established *a priori*. Nor, Kant here claims, is there any difficulty in regard to synthetic judgments that are empirical. Though the predicate is not contained in the subject concept, they belong to each other (though accidentally) as parts of a given empirical whole. Experience is the *x* which lies beyond the concept A, and on which rests the possibility of the synthesis of B with A. In regard, however, to synthetic judgments which are likewise *a priori*, the matter is very different. Hitherto, both by the sensationalists and by the rationalists, all synthetic judgments have been regarded as empirical, and all *a priori* judgments as analytic. The only difference between the opposed schools lies in the relative value which they ascribe to the two types of judgment. For Hume the only really fruitful judgments are the synthetic judgments *a posteriori*; analytic judgments are of quite secondary value; they can never extend our knowledge, but only clarify its existing content. For Leibniz, on the other hand, true knowledge consists only in the analysis of our *a priori* concepts, which he regards as possessing an intrinsic and fruitful content; synthetic judgments are always empirical, and as such are purely contingent.

Thus for pre-Kantian philosophy analytic is interchangeable with *a priori*, and synthetic with *a*

posteriori. Kant's Critical problem arose from the startling discovery that the *a priori* and the synthetic do not exclude one another. A judgment may be synthetic and yet also *a priori*. He appears to have made this discovery under the influence of Hume, through study of the general principle of causality — every event must have a cause. In that judgment there seems to be no connection of any kind discoverable between the subject (the conception of an event as something happening in time) and the predicate (the conception of another event preceding it as an originating cause); and yet we not merely ascribe the one to the other but assert that they are necessarily connected. We can conceive an event as sequent upon a preceding empty time; none the less, in physical enquiry, the causal principle is accepted as an established truth. Here, then, is a new and altogether unique type of judgment, of thoroughly paradoxical nature. So entirely is it without apparent basis, that Hume, who first deciphered its strange character, felt constrained to ascribe our belief in it to an unreasoning and merely instinctive, 'natural' habit or custom.

Kant found, however, that the paradoxical characteristics of the causal principle also belong to mathematical and physical judgments. This fact makes it impossible to accept Hume's sceptical conclusion. If even the assertion 7 + 5 = 12 is both synthetic and *a priori*, it is obviously impossible to question the validity of judgments that possess these characteristics. But they do not for that reason any the less urgently press for explanation. Such an enquiry might not, indeed, be necessary were we concerned only with scientific knowledge. For the natural sciences justify themselves by their practical successes and by their steady unbroken development. But metaphysical judgments are also of this type; and until the conditions which make *a priori* synthetic judgment possible have been discovered, the question as to the legitimacy of metaphysical speculation cannot be decided. Such judgments are plainly mysterious, and urgently call for further enquiry.

The problem to be solved concerns the ground of our ascription to the subject concept, as necessarily belonging to it, a predicate which seems to have no discoverable relation to it. What is the unknown *x* on which the understanding rests in asserting the connection? It cannot be repeated experience; for the judgments in question claim necessity. Nor can such judgments be proved by means of a logical test, such as the inconceivability of the opposite. The absence of all apparent connection between subject and predicate removes that possibility. These, however, are the only two methods of proof hitherto recognised in science and philosophy. The problem demands for its solution nothing less than the discovery and formulation of an entirely novel method of proof.

The three main classes of *a priori* synthetic judgments are, Kant proceeds, the mathematical, the physical, and the metaphysical. The synthetic character of mathematical judgments has hitherto escaped observation owing to their being proved (as is required of all apodictic certainty) according to the principle of contradiction. It is therefrom inferred that they rest on the authority of that principle, and are therefore analytic. That, however, is an illegitimate inference; for though the truth of a synthetic proposition can be thus demonstrated, that can only be if another synthetic principle is first presupposed. It can never be proved that its truth, as a separate judgment, is demanded by the principle of contradiction. That 7 + 5 must equal 12 does not follow analytically from the conception of the sum of seven and five. This conception contains nothing beyond the union of both numbers into one; it does not tell us what is the single number that combines both. That five should be added to seven is no doubt implied in the conception, but not that the sum should be twelve. To discover that, we must, Kant maintains, go beyond the concepts and appeal to intuition. This is more easily recognised when we take large numbers. We then clearly perceive that, turn and twist our concepts as we may, we can never, by means of mere analysis of them, and without the help of intuition, arrive at the sum that is wanted. The fundamental propositions of geometry, the so-called axioms, are similarly synthetic, *e.g.* that the straight line between two points is the shortest. The concept 'straight' only defines direction; it says nothing as to quantity.

As an instance of a synthetic *a priori* judgment in physical science Kant cites the principle: the quantity of matter remains constant throughout all changes. In the conception of matter we do not conceive its

permanency, but only its presence in the space which it fills. The opposite of the principle is thoroughly conceivable.

Metaphysics is *meant* to contain *a priori* knowledge. For it seeks to determine that of which we can have no experience, as *e.g.* that the world must have a first beginning. And if, as will be proved, our *a priori* concepts have no content, which through analysis might yield such judgments, these judgments also must be synthetic.

Here, then, we find the essential problem of pure reason. Expressed in a single formula, it runs: How are synthetic *a priori* judgments possible? To ask this question is to enquire, first, how pure mathematics is possible; secondly, how pure natural science is possible; and thirdly, how metaphysics is possible. That philosophy has hitherto remained in so vacillating a state of ignorance and contradiction is entirely due to the neglect of this problem of *a priori* synthesis. "Its solution is the question of life and death to metaphysics." Hume came nearest to realising the problem, but he discovered it in too narrow a form to appreciate its full significance and its revolutionary consequences.

"Greater firmness will be required if we are not to be deterred by inward difficulties and outward opposition from endeavouring, through application of a method entirely different from any hitherto employed, to further the growth and fruitfulness of a science indispensable to human reason — a science whose every branch may be cut away but whose root cannot be destroyed."

These statements are decidedly ambiguous, owing to Kant's failure to distinguish in any uniform and definite manner between immanent and transcendent metaphysics. The term metaphysics is used to cover both. Sometimes it signifies the one, sometimes the other; while in still other passages its meaning is neutral. But if we draw the distinction, Kant's answer is that a genuine and valid immanent metaphysics is for the first time rendered possible by his *Critique*; its positive content is expounded in the *Analytic*. Transcendent metaphysics, on the other hand, is criticised in the *Dialectic*; it is never possible. The existing speculative sciences transgress the limits of experience and yield only a pretence of knowledge. This determination of the limits of our possible *a priori* knowledge is the second great achievement of the *Critique*. Thus the *Critique* serves a twofold purpose. It establishes a new *a priori* system of metaphysics, and also determines on principles equally *a priori* the ultimate limits beyond which metaphysics can never advance. The two results, positive and negative, are inseparable and complementary. Neither should be emphasised to the neglect of the other.

Comment on the Argument of Kant's *Introduction*

This *Introduction*, though a document of great historical importance as being the first definite formulation of the generating problem of Kant's new philosophy, is extremely unsatisfactory as a statement of Critical teaching. The argument is developed in terms of distinctions which are borrowed from the traditional logic, and which are not in accordance with the transcendental principles that Kant is professing to establish. This is, indeed, a criticism which may be passed upon the *Critique* as a whole. Though Kant was conscious of opening a new era in the history of philosophy, and compares his task with that of Thales, Copernicus, Bacon and Galileo, it may still be said that he never fully appreciated the greatness of his own achievement. He invariably assumes that the revolutionary consequences of his teaching will not extend to the sphere of pure logic. They concern, as he believed, only our metaphysical theories regarding the nature of reality and the determining conditions of our human experience. As formal logic prescribes the axiomatic principles according to which all thinking must proceed, its validity is not affected by the other philosophical disciplines, and is superior to the considerations that determine their truth or falsity. Its distinctions may be securely relied upon in the pioneer labours of Critical investigation. This was, of course, a very natural assumption for Kant to make; and many present-day thinkers will maintain that it is entirely justified. Should that be our attitude, we may approve of Kant's general method of procedure, but shall be compelled to dissent from much in his argument and from many of his chief conclusions. If, on the other hand, we regard formal logic as in any degree adequate only as a

theory of the thought processes involved in the formation and application of the generic or class concept, we shall be prepared to find that the equating of this highly specialised logic with logic in general has resulted in the adoption of distinctions which may be fairly adequate for the purposes in view of which they have been formulated, but which must break down when tested over a wider field. So far from condemning Kant for departing in his later teaching from these hard and fast distinctions, we shall welcome every sign of his increasing independence.

Kant was not, of course, so blind to the real bearing of his principles as to fail to recognise that they have logical implications. He speaks of the new metaphysics which he has created as being a transcendental logic. It is very clear, however, that even while so doing he does not regard it as in any way alternative to the older logic, but as moving upon a different plane, and as yielding results which in no way conflict with anything that formal logic may teach. Indeed Kant ascribes to the traditional logic an almost sacrosanct validity. Both the general framework of the *Critique* and the arrangement of the minor subdivisions are derived from it. It is supposed to afford an adequate account of discursive thinking, and such supplement as it may receive is regarded as simply an extension of its carefully delimited field. There are two logics, that of discursive or analytic reasoning, and that of synthetic interpretation. The one is formal; the other is transcendental. The one was created by Aristotle, complete at a stroke; Kant professes to have formulated the other in an equally complete and final manner.

This latter claim, which is expressed in the most unqualified terms in the *Prefaces* to the first and second editions, is somewhat startling to a modern reader, and would seem to imply the adoption of an ultra-rationalistic attitude, closely akin to that of Wolff.

"In this work I have made completeness my chief aim, and I venture to assert that there is not a single metaphysical problem which has not been solved, or for the solution of which the key at least has not been supplied. Reason is, indeed, so perfect a unity that if its principle were insufficient for the solution of even a single one of all the questions to which it itself gives birth, we should be justified in forthwith rejecting it as incompetent to answer, with perfect certainty, any one of the other questions." "Metaphysics has this singular advantage, such as falls to the lot of no other science which deals with objects (for *logic* is concerned only with the form of thought in general), that should it, through this *Critique*, be set upon the secure path of science, it is capable of acquiring exhaustive knowledge of its entire field. It can finish its work and bequeath it to posterity as a capital that can never be added to. For metaphysics has to deal only with principles, and with the limits of their employment as determined by these principles themselves. Since it is a fundamental science, it is under obligation to achieve this completeness. We must be able to say of it: *nil actum reputans, si quid superesset agendum*."

These sanguine expectations — by no means supported by the after-history of Kant's system — are not really due to Kant's immodest over-estimate of the importance of his work. They would rather seem to be traceable, on the one hand to his continuing acceptance of rationalistic assumptions proper only to the philosophy which he is displacing, and on the other to his failure to appreciate the full extent of the revolutionary consequences which his teaching was destined to produce in the then existing philosophical disciplines. Kant, like all the greatest reformers, left his work in the making. Both his results and his methods call for modification and extension in the light of the insight which they have themselves rendered possible. Indeed, Kant was himself constantly occupied in criticising and correcting his own acquired views; and this is nowhere more evident than in the contrast between the teaching of this *Introduction* and that of the central portions of the *Analytic*. But even the later expressions of his maturer views reveal the persisting conflict. They betray the need for further reconstruction, even in the very act of disavowing it. Not an additional logic, but the demonstration of the imperative need for a complete revisal of the whole body of logical science, is the first, and in many respects the chief, outcome of his Critical enquiries.

The broader bearings of the situation may perhaps be indicated as follows. If our account of Kant's

awakening from his dogmatic slumber be correct, it consisted in his recognition that self-evidence will not suffice to guarantee any general principle. The fundamental principles of our experience are synthetic. That is to say, their opposite is in all cases conceivable. Combining this conclusion with his previous conviction that they can never be proved by induction from observed facts, he was faced with the task of establishing rationalism upon a new and altogether novel basis. If neither empirical facts nor intuitive self-evidence may be appealed to, in what manner can proof proceed? And how can we make even a beginning of demonstration, if our very principles have themselves to be established? Principles are never self-evident, and yet principles are indispensable. Such was Kant's unwavering conviction as regards the fundamental postulates alike of knowledge and of conduct.

This is only another way of stating that Kant is the real founder of the *Coherence* theory of truth. He never himself employs the term Coherence, and he constantly adopts positions which are more in harmony with a *Correspondence* view of the nature and conditions of knowledge. But all that is most vital in his teaching, and has proved really fruitful in its after-history, would seem to be in line with the positions which have since been more explicitly developed by such writers as Lotze, Sigwart, Green, Bradley, Bosanquet, Jones and Dewey, and which in their tenets all derive from Hegel's restatement of Kant's logical doctrines. From this point of view principles and facts mutually establish one another, the former proving themselves by their capacity to account for the relevant phenomena, and the latter distinguishing themselves from irrelevant accompaniments by their conformity to the principles which make insight possible. In other words, all proof conforms in general type to the hypothetical method of the natural sciences. Kant's so-called transcendental method, the method by which he establishes the validity of the categories, is itself, as we have already observed, of this character. Secondly, the distinction between the empirical and the *a priori* must not be taken (as Kant himself takes it in his earlier, and occasionally even in his later utterances) as marking a distinction between two kinds of knowledge. They are elements inseparably involved in all knowledge. And lastly, the contrast between analysis and synthesis becomes a difference not of kind but of degree. Nothing can exist or be conceived save as fitted into a system which gives it meaning and decides as to its truth. In the degree to which it can be studied in relative independence of the supporting system analysis will suffice; in the degree to which it refers us to this system it calls for synthetic interpretation. But ultimately the needs of adequate understanding must constrain us to the employment of both methods of enquiry. Nothing can be known save in terms of the wider whole to which it belongs.

There is, however, one important respect in which Kant diverges in very radical fashion from the position of Hegel. The final whole to which all things must be referred is represented to us only through an "Idea," for which no corresponding reality can ever be found. The system which decides what is to be regarded as *empirically* real is the mechanical system of natural science. We have no sufficient theoretical criterion of absolute reality.

These somewhat general considerations may be made more definite if we now endeavour to determine in what specific respects the distinctions employed in the *Introduction* fail to harmonise with the central doctrines of the *Analytic*.

In the first place, Kant states his problem in reference only to the attributive judgment. The other types of relational judgment are entirely ignored. For even when he cites judgments of other relational types, such as the propositions of arithmetic and geometry, or that which gives expression to the causal axiom, he interprets them on the lines of the traditional theory of the categorical proposition. As we shall find, it is with the relational categories, and consequently with the various types of relational judgment to which they give rise, that the *Critique* is alone directly concerned. Even the attributive judgment is found on examination to be of this nature. What it expresses is not the inclusion of an attribute within a given group of attributes, but the organisation of a complex manifold in terms of the dual category of substance and attribute.

Secondly, this exclusively attributive interpretation of the judgment leads Kant to draw, in his *Introduction*, a hard and fast distinction between the analytic and the synthetic proposition — a distinction which, when stated in such extreme fashion, obscures the real implications of the argument of the *Analytic*. For Kant here propounds as an exhaustive division the two alternatives: (*a*) inclusion of the predicate concept within the subject concept, and (*b*) the falling of the predicate concept entirely outside it. He adds, indeed, that in the latter case the two concepts may still be in some way connected with one another; but this is a concession of which he takes no account in his subsequent argument. He leaves unconsidered the third possibility, that every judgment is both analytic and synthetic. If concepts are not independent entities, as Kant, in agreement with Leibniz, still continues to maintain, but can function only as members of an articulated system, concepts will be distinguishable from one another, and yet will none the less involve one another. In so far as the distinguishable elements in a judgment are directly related, the judgment may *seem* purely analytic; in so far as they are related only in an indirect manner through a number of intermediaries, they may *seem* to be purely synthetic. But in every case there is an internal articulation which is describable as synthesis, and an underlying unity that in subordinating all differences realises more adequately than any mere identity the demand for connection between subject and predicate. In other words, all judgments will, on this view, be of the relational type. Even the attributive judgment, as above noted, is no mere assertion of identity. It is always expressed in terms of the dual category of substance and attribute, connecting by a *relation* contents that as contents may be extremely diverse.

This would seem to be the view to which Kant's Critical teaching, when consistently developed, is bound to lead. For in insisting that the synthetic character of a judgment need not render it invalid, and that all the fundamental principles and most of the derivative judgments of the positive sciences are of this nature, Kant is really maintaining that the justification of a judgment is always to be looked for beyond its own boundaries in some implied context of coherent experience. But though the value of his argument lies in clear-sighted recognition of the synthetic factor in all genuine knowledge, its cogency is greatly obscured by his continued acceptance of the possibility of judgments that are purely analytic. Thus there is little difficulty in detecting the synthetic character of the proposition: all bodies are heavy. Yet the reader has first been required to admit the analytic character of the proposition: all bodies are extended. The two propositions are really identical in logical character. Neither can be recognised as true save in terms of a comprehensive theory of physical existence. If matter must exist in a state of distribution in order that its parts may acquire through mutual attraction the property of weight, the size of a body, or even its possessing any extension whatsoever, may similarly depend upon specific conditions such as may conceivably not be universally realised. We find the same difficulty when we are called upon to decide whether the judgment 7 + 5 = 12 is analytic or purely synthetic. Kant speaks as if the concepts of 7, 5, and 12 were independent entities, each with its own quite separate connotation. But obviously they can only be formed in the light of the various connected concepts which go to constitute our system of numeration. The proposition has meaning only when interpreted in the light of this conceptual system. It is not, indeed, a self-evident identical proposition; but neither is the connection asserted so entirely synthetic that intuition will alone account for its possibility. That, however, brings us to the third main defect in Kant's argument.

When Kant states that in synthetic judgments we require, besides the concept of the subject, something else on which the understanding can rely in knowing that a predicate, not contained in the concept, nevertheless belongs to it, he entitles this something *x*. In the case of empirical judgments, this *x* is brute experience. Such judgments, Kant implies, are *merely* empirical. No element of necessity is involved, not even in an indirect manner; in reference to empirical judgments there is no problem of *a priori synthesis*. Now in formulating the issue in this way, Kant is obscuring the essential purpose of his whole enquiry. He may, without essential detriment to his central position, still continue to preserve a hard-and-fast distinction between analytic and synthetic judgments. In so doing he is only failing to perceive the ultimate

consequences of his final results. But in viewing empirical judgments as lacking in every element of necessity, he is destroying the very ground upon which he professes to base the *a priori* validity of general principles. All judgments involve relational factors of an *a priori* character. The appeal to experience is the appeal to an implied system of nature. Only when fitted into the context yielded by such a system can an empirical proposition have meaning, and only in the light of such a presupposed system can its truth be determined. It can be true at all, only if it can be regarded as necessarily holding, under the same conditions, for all minds constituted like our own. Assertion of a contingent relation — as in the proposition: this horse is white — is not equivalent to contingency of assertion. Colour is a variable quality of the genus horse, but in the individual horse is necessarily determined in some particular mode. If a horse is naturally white, it is necessarily white. Though, therefore, in the above proposition, necessity receives no explicit verbal expression, it is none the less implied.

In other words, the distinction between the empirical and the *a priori* is not, as Kant inconsistently assumes in this *Introduction*, a distinction between two kinds of synthesis or judgment, but between two elements inseparably involved in every judgment. Experience is transcendentally conditioned. Judgment is in all cases the expression of a relation which implies an organised system of supporting propositions; and for the articulation of this system *a priori* factors are indispensably necessary.

But the most flagrant example of Kant's failure to live up to his own Critical principles is to be found in his doctrine of pure intuition. It represents a position which he adopted in the pre-Critical period. It is prefigured in *Ueber die Deutlichkeit der Grundsätze* (1764), and in *Von dem ersten Grunde des Unterschiedes der Gegenden im Raume* (1768), and is definitely expounded in the *Dissertation* (1770). That Kant continued to hold this doctrine, and that he himself regarded it as an integral part of his system, does not, of course, suffice to render it genuinely Critical. As a matter of fact, it is really as completely inconsistent with his Critical standpoint as is the view of the empirical proposition which we have just been considering. An appeal to our fingers or to points is as little capable, in and by itself, of justifying any *a priori* judgment as are the sense-contents of grounding an empirical judgment. Even when Kant is allowed the benefit of his own more careful statements, and is taken as asserting that arithmetical propositions are based on a pure *a priori* intuition which can find only approximate expression in sensuous terms, his statements run counter to the main tendencies of his Critical teaching, as well as to the recognised methods of the mathematical sciences. Intuition may, as Poincaré and others have maintained, be an indispensable element in all mathematical concepts; it cannot afford *proof* of any general theorem. The conceptual system which directs our methods of decimal counting is what gives meaning to the judgment $7 + 5 = 12$; it is also what determines that judgment as true. The appeal to intuition in numerical judgments must be regarded only as a means of imaginatively realising in a concrete form the abstract relations of some such governing system, or else as a means of detecting relations not previously known. The last thing in the world which such a method can yield is universal demonstration. This is equally evident in regard to geometrical propositions. That a straight line is the shortest distance between two points, cannot be proved by any mere appeal to intuition. The judgment will hold if it can be assumed that space is Euclidean in character; and to justify that assumption it must be shown that Euclidean concepts are adequate to the interpretation of our intuitional data. Should space possess a curvature, the above proposition might cease to be universally valid. Space is not a simple, unanalysable datum. Though intuitionally apprehended, it demands for its precise determination the whole body of geometrical science.

The comparative simplicity of Kant's intuitional theory of mathematical science, supported as it is by the seemingly fundamental distinction between abstract concepts of reflective thinking and the construction of concepts in geometry and arithmetic, has made it intelligible even to those to whom the very complicated argument of the *Analytic* makes no appeal. It would also seem to be inseparably bound up with what from the popular point of view is the most striking of all Kant's theoretical doctrines,

namely, his view that space and time are given subjective forms, and that the assertion of their independent reality must result in those contradictions to which Kant has given the title antinomy. For these reasons his intuitional theory of mathematical science has received attention out of all proportion to its importance. Its pre-Critical character has been more or less overlooked, and instead of being interpreted in the light of Critical principles, it has been allowed to obscure the sounder teaching of the *Analytic*. In this matter Schopenhauer is a chief culprit. He not only takes the views of mathematical science expounded in the *Introduction* and *Aesthetic* as being in line with Kant's main teaching, but expounds them in an even more unqualified fashion than does Kant himself.

There are thus four main defects in the argument of this *Introduction*, regarded as representative of Critical teaching. (1) Its problems are formulated exclusively in terms of the attributive judgment; the other forms of relational judgment are ignored. (2) It maintains that judgments are either merely analytic or completely synthetic. (3) It proceeds in terms of a further division of judgments into those that are purely empirical and those that are *a priori*. (4) It seems to assert that the justification for mathematical judgments is intuitional. All these four positions are in some degree retained throughout the *Critique*, but not in the unqualified manner of this *Introduction*. In the *Analytic*, judgment in all its possible forms is shown to be a synthetic combination of a given manifold in terms of relational categories. This leads to a fourfold conclusion. In the first place, judgment must be regarded as essentially relational. Secondly, the *a priori* and the empirical must not be taken as two separate kinds of knowledge, but as two elements involved in all knowledge. Thirdly, analysis and synthesis must not be viewed as co-ordinate processes; synthesis is the more fundamental; it conditions all analysis. And lastly, it must be recognised that nothing is merely given; intuitional experience, whether sensuous or *a priori*, is conditioned by processes of conceptual interpretation. Though the consequences which follow from these conclusions, if fully developed, would carry us far beyond any point which Kant himself reached in the progressive maturing of his views, the next immediate steps would still be on the strict lines of the Critical principles, and would involve the sacrifice only of such pre-Critical doctrines as that of the intuitive character of mathematical proof. Such correction of Kant's earlier positions is the necessary complement of his own final discovery that sense-intuition is incapable of grounding even the so-called empirical judgment.

The *Introduction* to the first edition bears all the signs of having been written previous to the central portions of the *Analytic*. That it was not, however, written prior to the *Aesthetic* seems probable. The opening sections of the *Aesthetic* represent what is virtually an independent introduction which takes no account of the preceding argument, and which redefines terms and distinctions that have already been dwelt upon. The extensive additions which Kant made in recasting the *Introduction* for the second edition are in many respects a great improvement. In the first edition Kant had not, except when speaking of the possibility of constructing the concepts of mathematical science, referred to the synthetic character of mathematical judgments. This is now dwelt upon in adequate detail. Kant's reason for not making the revision more radical was doubtless his unwillingness to undertake the still more extensive alterations which this would have involved. Had he expanded the opening statement of the second edition *Introduction*, that even our empirical knowledge is a compound of the sensuous and the *a priori*, an entirely new *Introduction* would have become necessary. The additions made are therefore only such as will not markedly conflict with the main tenor of the argument of the first edition.

How Are Synthetic *a priori* Judgments Possible?

Treatment of detailed points will be simplified if we now consider in systematic fashion the many difficulties that present themselves in connection with Kant's mode of formulating his central problem: *How are synthetic* a priori *judgments possible?* This formula is less definite and precise than would at first sight appear. The central phrase 'synthetic *a priori*' is sufficiently exact (the meaning to be attached to the *a priori* has already been considered), but ambiguities of the most various kinds lurk in the

seemingly innocent and simple terms with which the formula begins and ends:

A. 'How' has two very different meanings:

(*a*) *How* possible = *in what manner* possible = wie.

(*b*) *How* possible = *in how far* possible, *i.e. whether* possible = *ob*.

In connection with these two meanings of the term 'how,' we shall have to consider the distinction between the synthetic method employed in the *Critique* and the analytic method employed in the *Prolegomena*.

B. 'Possible' has a still wider range of application. Vaihinger distinguishes within it no less than three pairs of alternative meanings:

(*a*) Psychological and logical possibility.

(*b*) Possibility of explanation and possibility of existence.

(*c*) Real and ideal possibility.

A. Kant personally believed that the possibility of valid *a priori* synthetic judgment is proved by the existing sciences of mathematics and physics. And that being so, there were for Kant two very different methods which could be employed in accounting for their possibility, the synthetic or progressive, and the analytic or regressive. The synthetic method would start from given, ordinary experience (in its simplest form, as consciousness of time), to discover its conditions, and from them to prove the validity of knowledge that is *a priori*. The analytic method would start "from the sought as if it were given," that is, from the existence of *a priori* synthetic judgments, and, assuming them as valid, would determine the conditions under which alone such validity can be possible. The precise formulation of these two methods, the determination of their interrelations, of their value and comparative scope, is a matter of great importance, and must therefore be considered at some length.

The synthetic method may easily be confounded with the analytic method. For in the process of its argument it makes use of analysis. By analysing ordinary experience in the form in which it is given, it determines (in the *Aesthetic* and in the *Analytic of Concepts*) the fundamental elements of which knowledge is composed, and the generating conditions from which it results. From these the validity of the *a priori* principles that underlie mathematics and physics can (in the *Analytic of Principles*) be directly deduced. The fundamental differentiating feature, therefore, of the so-called synthetic method is not its synthetic procedure, since in great part, in the solution of the most difficult portion of its task, it employs an analytic method, but only its attitude towards the one question of the validity of *a priori* synthetic knowledge. It does not postulate this validity as a premiss, but proves it as a consequence of conditions which are independently established. By a preliminary regress upon the conditions of our *de facto* consciousness it acquires data from which it is enabled to advance by a synthetic, progressive or deductive procedure to the establishment of the validity of synthetic *a priori* judgments. The analytic method, on the other hand, makes no attempt to prove the validity of *a priori* knowledge. It seeks only to discover the conditions under which such knowledge, if granted to exist, can possess validity, and in the light of which its paradoxical and apparently contradictory features can be viewed as complementary to one another. The conditions, thus revealed, will render the validity of knowledge conceivable, will account for it once it has been assumed; but they do not prove it. The validity is a premiss; the whole argument rests upon the assumption of its truth. The conditions are only postulated *as conditions*; and their reality becomes uncertain, if the validity, which presupposes them, is itself called in question. Immediately we attempt to reverse the procedure, and to prove validity from these conditions, our argument must necessarily adopt the synthetic form; and that, as has been indicated, involves the prior application of a very different and much more thorough process of analysis. The distinction between the two methods may therefore be stated as follows. In the synthetic method the grounds which are employed to explain *a priori* knowledge are such as also at the same time suffice to prove its validity. In the analytic

method they are grounds of explanation, but not of proof. They are themselves proved only in so far as the assumption of validity is previously granted.

The analytic procedure which is involved in the complete synthetic method ought, however, for the sake of clearness, to be classed as a separate, third, method. And as such I shall henceforth regard it. It establishes by an independent line of argument the existence of *a priori* factors, and also their objective validity as conditions necessary to the very possibility of experience. So viewed, it is the most important and the most fundamental of the three methods. The argument which it embodies constitutes the very heart of the *Critique*. It is, indeed, Kant's new transcendental method; and in the future, in order to avoid confusion with the analytic method of the *Prolegomena*, I shall refer to it always by this title. It is because the transcendental method is an integral part of the complete, synthetic method, but cannot be consistently made a part of the analytic method, that the synthetic method alone serves as an adequate expression of the Kantian standpoint. This new transcendental method is proof by reference to the possibility of experience. Experience is given as psychological fact. The conditions which can alone account for it, as psychological fact, also suffice to prove its objective validity; but at the same time they limit that validity to the phenomenal realm.

We have next to enquire to what extent these methods are consistently employed in the *Critique*. This is a problem over which there has been much controversy, but which seems to have been answered in a quite final manner by Vaihinger. It is universally recognised that the *Critique* professes to follow the synthetic method, and that the *Prolegomena*, for the sake of a simpler and more popular form of exposition, adopts the analytic method. How far these two works live up to their professions, especially the *Critique* in its two editions, is the only point really in question. Vaihinger found two diametrically opposed views dividing the field. Paulsen, Riehl, and Windelband maintain the view that Kant starts from the fact that mathematics, pure natural science, and metaphysics contain synthetic *a priori* judgments claiming to be valid. Kant's problem is to test these claims; and his answer is that they are valid in mathematics and pure natural science, but not in metaphysics. Paulsen, and those who follow him, further contend that in the first edition this method is in the main consistently held to, but that in the second edition, owing to the occasional employment (especially in the *Introduction*) of the analytic method of the *Prolegomena*, the argument is perverted and confused: Kant assumes what he ought first to have proved. Fischer, on the other hand, and in a kindred manner also B. Erdmann, maintain that Kant never actually doubted the validity of synthetic *a priori* judgments; starting from their validity, in order to explain it, Kant discovers the conditions upon which it rests, and in so doing is able to show that these conditions are not of such a character as to justify the professed judgments of metaphysics.

Vaihinger combines portions of both views, while completely accepting neither. Hume's profound influence upon the development and formulation of Kant's Critical problem can hardly be exaggerated, but it ought not to prevent us from realising that this problem, *in its first form*, was quite independently discovered. As the letter of 1772 to Herz clearly shows, Kant was brought to the problem, how an idea in us can relate to an object, by the inner development of his own views, through reflection upon the view of thought which he had developed in the *Dissertation* of 1770. The conformity between thought and things is in that letter presented, not as a sceptical objection, but as an actual fact calling for explanation. He does not ask whether there is such conformity, but only how it should be possible. Even after the further complication, that thought is synthetic as well as *a priori*, came into view through the influence of Hume, the problem still continued to present itself to Kant in this non-sceptical light. And this largely determines the wording of his exposition, even in passages in which the demands of the synthetic method are being quite amply fulfilled. Kant, as it would seem, never himself doubted the validity of the mathematical sciences. But since their validity is not beyond possible impeachment, and since metaphysical knowledge, which is decidedly questionable, would appear to be of somewhat similar type, Kant was constrained to recognise that, from the point of view of strict proof, such assumption of validity is not really legitimate.

Though, therefore, the analytic method would have resolved Kant's own original difficulty, only the synthetic method is fully adequate to the situation.

Kant accordingly sets himself to prove that whether or not we are ready (as he himself is) to recognise the validity of scientific judgments, the correctness of this assumption can be firmly established. And being thus able to prove its correctness, he for that very reason does not hesitate to employ it in his introductory statement. The problem, he says, is that of 'understanding' how synthetic *a priori* judgments can be valid. A 'difficulty,' a 'mystery,' a 'secret,' lies concealed in them. How can a predicate be ascribed to a subject term which does not contain it? And even more strangely (if that be possible), how can *a priori* judgments legislate for objects which are independent existences? Such judgments, even if valid beyond all disputing, would still call for explanation. This is, indeed, Kant's original and ground problem. As already indicated, no one, save only Hume, had hitherto perceived its significance. Plato, Malebranche, and Crusius may have dwelt upon it, but only to suggest explanations still stranger and more mystical than the mysterious fact itself.

Paulsen is justified in maintaining that Kant, in both editions of the *Critique*, recognises the validity of mathematics and pure natural science. The fact of their validity is less explicitly dwelt upon in the first edition, but is none the less taken for granted. The sections transferred from the *Prolegomena* to the *Introduction* of the second edition make no essential change, except merely in the emphasis with which Kant's belief in the existence of valid *a priori* synthetic judgments is insisted upon. As has already been stated, only by virtue of this initial assumption is Kant in position to maintain that there is an alternative to the strict synthetic method. The *problem* from which he starts is common to both methods, and for that reason the formulation used in the *Prolegomena* can also be employed in the *Introduction* to the *Critique*. Only in their manner of solving the problem need they differ. Kant's Critical problem first begins with this presupposition of validity, and does not exist save through it. He does not first seek to discover whether such judgments are valid, and then to explain them. He accepts them as valid, but develops a method of argument which suffices for proof as well as for explanation. The argument being directed to both points simultaneously, and establishing both with equal cogency, it may legitimately be interpreted in either way, merely as explanation, or also as proof. Kant does not profess or attempt to keep exclusively to any one line of statement. Against the dogmatists he insists upon the necessity of *explaining* the validity of *a priori* synthetic judgments, against the sceptics upon the possibility of *proving* their validity. And constantly he uses ambiguous terms, such as 'justification' (*Rechtfertigung*), 'possibility,' that may indifferently be read in either sense. But though the fundamental demand which characterises the synthetic method in its distinction from the analytic thus falls into the background, and is only occasionally insisted upon, it is none the less fulfilled. So far as regards the main argument of the *Critique* in either edition, the validity of synthetic *a priori* judgments is not required as a premiss. It is itself independently proved.

The manner in which Kant thus departs from the strict application of the synthetic method may be illustrated by an analysis of his argument in the *Aesthetic*. Only in the arguments of the first edition in regard to space and time is the synthetic method employed in its ideal and rigorous form. For the most part, even in the first edition, instead of showing how the *a priori* character of pure and applied mathematics follows from conclusions independently established, he assumes both pure and applied mathematics to be given as valid, and seeks only to show how the independently established results of the *Aesthetic* enable him to explain and render comprehensible their recognised characteristics. This is not, indeed, any very essential modification of the synthetic method; for his independently established results suffice for deducing all that they are used to explain. The validity of mathematics is not employed as a premiss. Kant's argument is, however, made less clear by the above procedure.

Further difficulty is caused by Kant's occasional employment, even in the first edition, of the analytic method. He several times cites as an argument in support of his view of space the fact that it alone will account for the existing science of geometry. That is to say, he employs geometry, viewed as valid, to

prove the correctness of his view of space. Starting from that science as given, he enquires what are the conditions which can alone render it possible. These conditions are found to coincide with those independently established. Now this is a valid argument when employed in due subordination to the main synthetic method. It offers welcome *confirmation* of the results of that method. It amounts in fact to this, that having proved (by application of the transcendental method) the mathematical sciences to be valid, everything which their validity necessarily implies must be granted. Kant's reasoning here becomes circular, but it is none the less valid on that account. This further complication of the argument is, however, dangerously apt to mislead the reader. It is in great part the cause of the above division among Kant's commentators. The method employed in the *Prolegomena* is simply this form of argument systematised and cut free from all dependence upon the transcendental method of proof.

The whole matter is, however, still further complicated by the distinction, which we have already noted, between real and ideal possibility. Are the given synthetic *a priori* judgments valid? That is one question. Can the Critical philosophy discover, completely enumerate, and prove in a manner never before done, all the possible synthetic *a priori* principles? That is a very different problem, and when raised brings us to the further discussion of Kant's transcendental method. The question at issue is no longer merely whether or not certain given judgments are valid, and how, if valid, they are to be accounted for. The question is now that of discovering and of proving principles which have not been established by any of the special sciences. This shifting of the problem is concealed from Kant himself by his omission to distinguish between the undemonstrated axioms of the mathematical sciences and their derivative theorems, between the principles employed by the physicist without enquiry into their validity and the special laws based upon empirical evidence.

As regards the mathematical axioms, the problem is fairly simple. As we shall see later, in the *Aesthetic*, they do not require a deduction in the strict transcendental sense. They really fall outside the application of the transcendental method. They require only an "exposition." But in regard to the fundamental principles of natural science we are presented with the problem of discovery as well as of proof. Unlike the axioms of the mathematician, they are frequently left unformulated. And many postulates, such as that there is a *lex continui in natura*, are current in general thought, and claim equal validity with the causal principle. Kant has thus to face the question whether in addition to those principles employed more or less explicitly by the scientist, others, such as might go to form an immanent metaphysics of nature, may not also be possible.

B. (*a*) Psychological and logical possibility. — Both have to be recognised and accounted for. Let us consider each in order.

(1) Psychological possibility. — What are the *subjective* conditions of *a priori* synthetic judgments? *Through what mental faculties* are they rendered possible? Kant replies by developing what may be called a transcendental psychology. They depend upon space and time as forms of sensibility, upon the *a priori* concepts of understanding, and upon the synthetic activities by which the imagination schematises these concepts and reduces the given manifold to the unity of apperception. This transcendental psychology is the necessary complement of the more purely epistemological analysis. But on this point Kant's utterances are extremely misleading. His Critical enquiry has, he declares, nothing in common with psychology. In the *Preface* to the first edition we find the following passage: "This enquiry ... [into] the pure understanding itself, its possibility and the cognitive faculties upon which it rests ..., although of great importance for my chief purpose, does not form an essential part of it." The question, he adds, "how is the faculty of thought itself possible?... is as it were a search for the cause of a given effect, and therefore is of the nature of an hypothesis [or 'mere opinion'], though, as I shall show elsewhere, this is not really so." The concluding words of this passage very fairly express Kant's hesitating and inconsistent procedure. Though he has so explicitly eliminated from the central enquiry of the *Critique* all psychological determination of the mental powers, statements as to their constitution are none the less

implied, and are involved in his epistemological justification alike of *a priori* knowledge and of ordinary experience. If we bear in mind that Kant is here attempting to outline the possible causes of given effects, and that his conclusions are therefore necessarily of a more hypothetical character than those obtained by logical analysis, we shall be prepared to allow him considerable liberty in their formulation. But in certain respects his statements are precise and definite — the view, for instance, of sensations as non-spatial, of time as a form of inner sense, of the productive imagination as pre-conditioning our consciousness, of spontaneity as radically distinct from receptivity, of the pure forms of thought as not acquired through sense, etc. No interpretation which ignores or under-estimates this psychological or subjective aspect of his teaching can be admitted as adequate.

(2) Logical or epistemological possibility. — How can synthetic *a priori* judgments be *valid*? This question itself involves a twofold problem. How, despite their synthetic character, can they possess truth, *i.e.* how can we pass from their subject terms to their predicates? And secondly, how, in view of their origin in our human reason, can they be objectively valid, *i.e.* legislate for the independently real? How can we pass beyond the subject-predicate relation to real things? This latter is the Critical problem in the form in which it appears in Kant’s letter of 1772 to Herz. The former is the problem of synthesis which was later discovered.

(*b*) (1) Possibility of explanation and (2) possibility of existence. — (1) How can synthetic *a priori* judgments be *accounted for*? How, despite their seemingly inconsistent and apparently paradoxical aspects, can their validity (their validity as well as their actuality being taken for granted) be rendered *comprehensible*? (2) The validity of such judgments has been called in question by the empiricists, and is likewise inexplicable even from the dogmatic standpoint of the rationalists. How, then, can these judgments *be possible at all*? These two meanings of the term ‘possible’ connect with the ambiguity, above noted, in the term ‘how.’ The former problem can be solved by an analytic method; the latter demands the application of the more radical method of synthetic reconstruction.

(*c*) Real and ideal possibility. — We have to distinguish between the possible validity of those propositions which the mathematical and physical sciences profess to have established and the possible validity of those principles such as that of causality, which are postulated by the sciences, but which the sciences do not attempt to prove, and which in certain cases they do not even formulate. The former constitute an actually existent body of scientific knowledge, demonstrated in accordance with the demands of scientific method. The latter are employed by the scientist, but are not investigated by him. The science into which they can be fitted has still to be created; and though some of the principles composing it may be known, others remain to be discovered. All of them demand such proof and demonstration as they have never yet received. This new and ideal science is the scientific metaphysics which Kant professes to inaugurate by means of the *Critique*. In reference to the special sciences, possibility means the conditions of the actually given. In reference to the new and ideal metaphysics, possibility signifies the conditions of the realisation of that which is sought. In view of this distinction, the formula — How are synthetic *a priori* judgments possible? — will thus acquire two very different meanings. (1) How are the existing *a priori* synthetic judgments to be accounted for? (2) How may all the really fundamental judgments of that type be exhaustively discovered and proved? Even in regard to immanent metaphysics Kant interprets the formula in both ways. This is due to his frequent confusion of immanent metaphysics with the principles of natural science. Its propositions are then regarded as given, and only their general validity calls for proof. It is, however, in the problem of ideal possibility that the essential problem of the *Critique* lies; and that is a further reason why it cannot be adequately dealt with, save by means of the synthetic method.

Experience. — Throughout the *Introduction* the term *experience* has (even at times in one and the same sentence) two quite distinct meanings, (1) as product of sense and understanding acting co-operatively, and (2) as the raw material (the impressions) of sense. Considerable confusion is thereby caused.

Understanding and reason are here, as often elsewhere in the *Critique*, used as equivalent terms. Throughout the entire two first sections of the *Introduction* to the second edition the term reason does not occur even once. As first mentioned, it is taken as the source of metaphysical judgments.

General (a priori) truths have an inner necessity and must be clear and certain by themselves. — These statements are not in accordance with Kant’s new Critical teaching. They have remained uncorrected from a previous way of thinking. This must be one reason for the recasting of this paragraph in the second edition.

Even with (unter) our experiences there is mingled knowledge which must be of a priori origin. — Kant is here distinguishing the *immanent a priori*, such as that involved in any causal judgment, from the *transcendent a priori* dwelt upon in the next paragraph. The latter is expressed through metaphysical judgments, such as ‘God exists,’ ‘the soul is immortal.’

Original concepts and judgments derived from them. — Cf. B 5-6.

Pure. — In the title of the section the term *pure* (*rein*) is, as the subsequent argument shows, taken as exactly equivalent to *a priori*. As Vaihinger notes, the adjective *apriorisch* had not yet been invented. The opposite of pure is here empirical (*empirisch*).

All our knowledge begins with experience. — This is a stronger statement than any in the corresponding paragraphs of the first edition. Had Kant proceeded to develop its consequences, he would have had to recast the entire *Introduction*, setting the problem of empirical knowledge alongside that of the *a priori*. As it is, he is forced to subdivide the absolutely *a priori* into the pure and the mixed.

By objects which affect (rühren) our senses. The raw material of sensuous impressions. — These incidental statements call for discussion. Cf. below, p-8, 120-1, 274 ff.

A knowledge of objects which we call experience. — Kant does not keep to this definition. The term experience is still used in its other and narrower sense, as in the very next paragraph, when Kant states that knowledge does not, perhaps, arise solely from experience (= sense impressions).

In respect of time. — This statement, taken as an account of Kant's teaching in the *Critique*, is subject to two reservations. In the *Aesthetic* Kant sometimes claims a temporal antecedence for the *a priori*. And secondly, the *a priori* is not for Kant merely logical. It also possesses a dynamical priority.

Even experience itself is a compound. — The "even" seems to refer to the distinction drawn in A 2 between the immanent and the transcendent *a priori*.

It is therefore a question whether there exists such knowledge independent of experience. — This question was not raised in the first edition. The alternative methods, analytic and synthetic, are discussed above, ff.

Such knowledge is called a priori and is distinguished from empirical knowledge. — Throughout the *Introduction*, in both editions equally, Kant fails to state the problems of the *Critique* in a sufficiently comprehensive manner. He speaks as if the *Critique* dealt only with the absolutely *a priori*, in its two forms, as immanent scientific knowledge and as transcendent speculation. It also deals with the equally important and still more fundamental problem of accounting for the possibility of *experience*. Our empirical knowledge involves an *a priori* element, and may not therefore be opposed to *a priori* knowledge in the manner of the passage before us.

This term a priori is not yet definite enough. — It is frequently employed in a merely relative sense. Thus we can say of a person who undermines the foundations of his house that he might have known *a priori* that it would collapse, that is, that he need not wait for the experience of its actual fall. But still he could not know this entirely *a priori*; he had first to learn from experience that bodies are heavy, and will fall when their supports are taken away. But as dealt with in the *Critique* the term *a priori* is used in an absolute sense, to signify that knowledge which is independent, not of this or that experience only, but of all impressions of the senses. Thus far Kant's position is comparatively clear; but he proceeds to distinguish two forms within the absolutely *a priori*, namely, mixed and pure. The absolutely *a priori* is mixed when it contains an empirical element, pure when it does not. ("Pure" is no longer taken in the meaning which it has in the title of the section. It signifies not the *a priori* as such, but only one subdivision of it.) Thus after defining absolutely *a priori* knowledge as independent of all experience, Kant takes it in one of its forms as involving empirical elements. The example which he gives of an absolutely *a priori* judgment, which yet is not pure, is the principle: every change has its cause. "Change" is an empirical concept, but the synthetic relation asserted is absolutely *a priori*. In the next section this same proposition is cited as a *pure* judgment *a priori*— "pure" being again used in its more general meaning as synonymous with *a priori*. This confusion results from Kant's exclusive preoccupation with the *a priori*, and consequent failure to give due recognition to the correlative problem of the empirical judgment. The omitted factor retaliates by thus forcing its way into Kant's otherwise clean-cut divisions. Also, it is not true that the relative *a priori* falls outside the sphere of the Critical enquiry. Such judgment expresses necessity or objectivity, and for that reason demands a transcendental justification no less urgently than the absolutely *a priori*. The finding of such justification is, indeed, the central problem of the *Analytic*.

The subdivisions of the *a priori* may be tabulated thus:

A priori knowledge —

Relative, *e.g.* every unsupported house must fall.

Absolute —

Mixed, *e.g.* every change has its cause.

Pure, *e.g.* a straight line is the shortest

distance between two points.

The term *pure* (*rein*) thus acquires a second meaning distinct from that defined above. It is no longer employed as identical with *a priori*, but as a subdivision of it, meaning *unmixed*. Its opposite is no longer the empirical, but the impure or mixed. Owing, however, to the fact that "pure" (in its first meaning) is identical with the *a priori*, it shares in all the different connotations of the latter, and accordingly is also employed to denote that which is *not relative*. But "pure" has yet another meaning peculiar to itself. The phrase "independent of experience" has in reference to "pure" an ambiguity from which it does not suffer in its connection with "*a priori*" (since mathematical knowledge, whether pure or applied, is always regarded by Kant as *a priori*). It may signify either independence as regards *content and validity*, or independence as regards *scope*. The latter meaning is narrower than the former. By the former meaning it denotes that which originates, and can possess truth, independently of experience. By the latter it signifies that which is not only independent of sense but also applies to the non-sensuous. In this latter meaning pure knowledge therefore signifies transcendent knowledge. Its opposite is the immanent. The various meanings of "pure" (four in number) may be tabulated as follows:

(*a*) (1) *A priori*: independent of experience as regards origin and validity. (Its opposite = empirical.)

(2) Absolutely independent of experience. (Its opposite = relative.)

(3) Unmixed with experience. (Its opposite = impure or mixed.)

(*b*) (4) Independent of experience as regards scope = transcendent. (Its opposite = immanent.)

All these varied meanings contribute to the ambiguity of the title of the *Critique*. Kant himself employs the title in all of the following senses:

1. Critique of absolutely pure *a priori* knowledge, determination of its sources, conditions, scope and limits.
2. Critique of all *a priori* knowledge, relative as well as absolute, in so far as it depends upon *a priori* principles, determination, etc.
3. Critique of all knowledge, whether *a priori* or empirical, determination, etc.
4. Critique of transcendent knowledge, its sources and limits.

Further meanings could also be enumerated but can be formulated by the reader for himself in the light of the ambiguities just noted. The special context in each case can alone decide how the title is to be understood. If a really adequate definition of the purpose and scope of the *Critique* is sought by the reader, he must construct it for himself. The following may perhaps serve. *The* Critique *is an enquiry into the sources, conditions, scope and limits of our knowledge, both a priori and empirical, resulting in the construction of a new system of immanent metaphysics; in the light of the conclusions thus reached, it also yields an analysis and explanation of the transcendental illusion to which transcendent metaphysics, both as a natural disposition and as a professed science, is due.*

Kant further complicates matters by offering a second division of the absolutely *a priori*, viz. into the original and the derivative. Also, by implication, he classes relative *a priori* judgments among the propositions to be reckoned with by the *Critique*; and yet in B 4 he speaks of the proposition, all bodies are heavy, as merely empirical.

A criterion. — Necessity and universality are valid criteria of the *a priori* (= the non-empirical). This follows from Kant's view of the empirical as synonymous with the contingent (*zufällig*). Experience gives

only the actual; the *a priori* alone yields that which cannot be otherwise.

"Necessity and strict universality are thus safe criteria of *a priori* knowledge, and are inseparable from one another. But since in the employment of these criteria the empirical limitation of judgments is sometimes more easily shown than their contingency, or since, as frequently happens, their unlimited universality can be more convincingly proved than their necessity, it is advisable to use the two criteria separately, each being by itself infallible."

Now Kant is here, of course, assuming the main point to be established, namely, that experience is incapable of accounting for such universality and necessity as are required for our knowledge, both ordinary and scientific. We have already considered this assumption, and have also anticipated misunderstanding by noting the important qualifications to which, from Kant's new Critical standpoint, the terms 'necessity' and 'universality' become subject. The very specific meaning in which Kant employs the term *a priori* must likewise be borne in mind. Though negatively the *a priori* is independent of experience, positively it originates in our human reason. The necessity and universality which differentiate the *a priori* distinguish it only from the humanly accidental. The *a priori* has no absolute validity. From a metaphysical standpoint, it is itself contingent. As already stated, all truth is for Kant merely *de facto*. The necessary is not that which cannot be conceived to be otherwise, nor is it the unconditioned. Our reason legislates only for the world of appearance. But as yet Kant gives no hint of this revolutionary reinterpretation of the rationalist criteria. One of the chief unfortunate consequences of the employment in this *Introduction* of the analytic method of the *Prolegomena* is that it tends to mislead the reader by seeming to commit Kant to a logical *a priori* of the Leibnizian type.

To show that, if experience is to be possible, [pure a priori propositions] are indispensable, and so to prove their existence a priori. — At first sight Kant would seem to be here referring to the alternative synthetic method of procedure, *i.e.* to the *transcendental* proof of the *a priori*. The next sentence shows, however, that neither in intention nor in fact is that really so. He argues only that *a priori* principles, such as the principle of causality, are necessary in order to give "certainty" to our experience; such a principle must be postulated if inductive inference is to be valid. Experience could have no [scientific] certainty, "if all rules according to which it proceeds were themselves in turn empirical, and therefore contingent. They could hardly be regarded as first principles." There is no attempt here to prove that empirical knowledge *as such* necessarily involves the *a priori*. Also the method of argument, though it seeks to establish the *necessity* of the *a priori*, is not transcendental or Critical in character. It is merely a repetition of the kind of argument which both Hume and Leibniz had already directed against the sensationalist position. Very strangely, considering that these sentences have been added in the second edition, and therefore subsequent to the writing of the objective deduction, Kant gives no indication of the deeper problem to which he finally penetrated. The explanation is, probably, that to do so would have involved the recasting of the entire *Introduction*. Even on the briefest reference, the hard-and-fast distinction between the *a priori* and the empirical, as two distinct and separate classes of judgment, would have been undermined, and the reader would have been made to feel the insufficiency of the analysis upon which it is based. The existence of the deeper view is betrayed only through careless employment of the familiar phrase "possibility of experience." For, as here used, it is not really meant. "Certainty of experience" — a very different matter — is the meaning that alone will properly fit the context.

Reason and understanding. — They are here distinguished, having been hitherto, in A 1-2, employed as synonymous. The former carries us beyond the field of all possible experience; the latter is limited to the world of sense. Thus both *Reason* and *understanding* are here used in their narrowest meaning.

These inevitable problems of pure Reason itself are God, freedom, and immortality. The science which, with all its methods, is in its final intention directed solely to the solution of these problems, is called metaphysics. — These sentences are characteristic of the second edition with its increased

emphasis upon the positive results of the *Critique* on the one hand, and with its attitude of increased favour towards transcendent metaphysics on the other. The one change would seem to be occasioned by the nature of the criticisms passed upon the first edition, as, for instance, by Moses Mendelssohn who describes Kant as “the all-destroyer” (*der alles zermalmende*). The other is due to Kant’s preoccupation with the problems of ethics and of teleology. The above statements are repeated with even greater emphasis in B 395 *n*. The definition here given of metaphysics is not strictly kept to by Kant. As above noted, Kant really distinguishes within it two forms, immanent and transcendent. In so doing, however, he still regards transcendent metaphysics as the more important. Immanent metaphysics is chiefly of value as contributing to the solution of the “inevitable problems of pure Reason.”

A 3-4 = B 7-8. — The reasons, here cited by Kant, for the failure of philosophical thinking to recognise the difference between immanent and transcendent judgments are: (1) the misunderstood character, and consequent misleading influence, of *a priori* mathematical judgments; (2) the fact that once we are beyond the sensible sphere, experience can never contradict us; (3) natural delight in the apparent enlargement of our knowledge; (4) the ease with which logical contradictions can be avoided; (5) neglect of the distinction between analytic and synthetic *a priori* judgments. Vaihinger points out that in the *Fortschritte* Kant adds a sixth reason — confusion of the concepts of understanding with the Ideas of Reason. Upon the first of the above reasons the best comment is that of the *Methodology*. But the reader must likewise bear in mind that in B xvi Kant develops his new philosophical method on the analogy of the mathematical method. The latter is, he claims, *mutatis mutandis*, the true method of *legitimate* speculation, *i.e.* of immanent metaphysics. The one essential difference (as noted by Kant), which has been overlooked by the dogmatists, is that philosophy gains its knowledge from concepts, mathematics from the construction of concepts.

Remain investigations only. — Cf. *Prolegomena*, § 35.

The analysis of our concepts of objects. — Vaihinger’s interpretation, that the concepts here referred to are those which we “form *a priori* of things,” seems correct. The rationalists sought to deduce the whole body of rational psychology from the *a priori* conception of the soul as a simple substance, and of rational theology from the *a priori* conception of God as the all-perfect Being.

Analytic and synthetic judgments.— “All analytic judgments depend wholly on the law of contradiction, and are in their nature *a priori* cognitions, whether the concepts that supply them with matter be empirical or not. For the predicate of an affirmative analytic judgment is already contained in the concept of the subject, of which it cannot be denied without contradiction. In the same way its opposite is necessarily denied of the subject in an analytic, but negative, judgment by the same law of contradiction.... For this very reason all analytic judgments are *a priori* even when the concepts are empirical, as, for example, gold is a yellow metal; for to know this I require no experience beyond my concept of gold as a yellow metal: it is, in fact, the very concept, and I need only analyse it, without looking beyond it elsewhere.... [Synthetic judgments, *a posteriori* and *a priori*] agree in this, that they cannot possibly spring solely from the principle of analysis, the law of contradiction. They require a quite different principle. From whatever they may be deduced, the deduction must, it is true, always be in accordance with the principle of contradiction. For that principle must never be violated. But at the same time everything cannot be deduced from it.”

In A 594 = B 622 analytic judgments are also spoken of as identical; but in the *Fortschritte* this use of terms is criticised:

“Judgments are analytic if their predicate only represents clearly (*explicite*) what was thought obscurely (*implicite*) in the concept of the subject, *e.g.* all bodies are extended. Were we to call such judgments identical only confusion would result. For identical judgments contribute nothing to the clearness of the concept, and that must be the purpose of all judging. Identical judgments are therefore empty, *e.g.* all bodies are bodily (or to use another term material) beings. Analytic judgments do, indeed,

ground themselves upon identity and can be resolved into it; but they are not identical. For they demand analysis and serve for the explanation of the concept. In identical judgments, on the other hand, *idem* is defined *per idem*, and nothing at all is explained.”

Vaihinger cites the following contrasted examples of analytic and synthetic judgments:

Analytic. — (*a*) Substance is that which exists only as subject in which qualities inhere. (*b*) Every effect has a cause. (*c*) Everything conditioned presupposes a condition.

Synthetic. — (*a*) Substance is permanent. (*b*) Every event has a cause. (c) Everything conditioned presupposes an unconditioned.

B 11-12. — The first half of this paragraph is transcribed practically word for word from the *Prolegomena*. The second half is a close restatement of an omitted paragraph of the first edition. The chief addition lies in the concluding statement, that “experience is itself a synthetic connection of intuitions.” This is in keeping with statements made in the deduction of the categories in the second edition, and in the paragraph inserted in the proof of the second analogy in the second edition. The *x* has strangely been omitted in the second edition in reference to empirical judgments, though retained in reference to synthetic *a priori* judgments.

The proposition: everything which happens has its cause. — As we have already observed, Hume influenced Kant at two distinct periods in his philosophical development — in 1756-1763, and again at some time (not quite definitely datable) after February 1772. The first influence concerned the character of concrete causal judgments; the second related to the causal axiom. Though there are few distinctions which are more important for understanding the *Critique* than that of the difference between these two questions, it has nowhere been properly emphasised by Kant, and in several of the references to Hume, which occur in the *Critique* and in the *Prolegomena*, the two problems are confounded in a most unfortunate manner. The passages in the *Introduction* are clear and unambiguous; the influence exercised by Hume subsequent to February 1772 is quite adequately stated. The causal axiom claims to be *a priori*, and is, as Hume asserts, likewise synthetic. Consequently there are only two alternatives, each decisive and far-reaching. Either valid *a priori* synthesis must, contrary to all previous philosophical belief, be possible, or “everything which we call metaphysics must turn out to be a mere delusion of reason.” The solution of this problem is “a question of life and death to metaphysics.” To this appreciation of Hume, Kant adds criticism. Hume did not sufficiently universalise his problem. Had he done so, he would have recognised that pure mathematics involves *a priori* synthesis no less necessarily than do the metaphysical disciplines. From denying the possibility of mathematical science “his good sense would probably have saved him.” Hume’s problem, thus viewed, finds its final and complete expression in the formula: How are synthetic *a priori* judgments possible?

In A 760 = B 788 the account differs in two respects: first, it discusses the metaphysical validity of the causal axiom as well as its intrinsic possibility as a judgment; and secondly, reference is made to the conception of causality as well as to the axiom. The implied criticism of Hume is correspondingly modified. Otherwise, it entirely harmonises with the passages in the *Introduction*.

“Hume dwelt especially upon the principle of causality, and quite rightly observed that its truth, and even the objective validity of the concept of efficient cause in general, is based on no insight, *i.e.* on no *a priori* knowledge, and that its authority cannot therefore be ascribed to its necessity, but merely to its general utility in the course of experience and to a certain subjective necessity which it thereby acquires, and which he entitles custom. From the incapacity of our reason to make use of this principle in any manner that transcends experience he inferred the nullity of all pretensions of reason to advance beyond the empirical.”

Now so far, in these references to Hume, Kant has had in view only the problems of mathematical and physical science and of metaphysics. The problems involved in the possibility of empirical knowledge are left entirely aside. His account of Hume’s position and of his relation to Hume suffers change

immediately these latter problems are raised. And unfortunately it is a change for the worse. The various problems treated by Hume are then confounded together, and the issues are somewhat blurred. Let us take the chief passages in which this occurs. In A 764 = B 792 ff. Kant gives the following account of Hume's argument. Hume, recognising the impossibility of predicting an effect by analysis of the concept of the cause, or of discovering a cause from the concept of the effect, viewed all concrete causal judgments as merely contingent, and therefrom inferred the contingency of the causal axiom. In so doing Hume, Kant argues, confuses the legitimate and purely *a priori* inference from a given event to *some* antecedent with the very different inference, possible only through special experience, to a *specific* cause. Now this is an entire misrepresentation of Hume's real achievement, and may perhaps be explained, at least in part, as being due to the fact that Kant was acquainted with Hume's *Treatise* only through the indirect medium of Beattie's quotations. Hume committed no such blunder. He clearly recognised the distinction between the problem of the validity of the causal axiom and the problem of the validity of concrete causal judgments. He does not argue from the contingency of concrete causal laws to the contingency of the universal principle, but shows, as Kant himself recognises, that the principle is neither self-evident nor demonstrable *a priori*. And as necessity cannot be revealed by experience, neither is the principle derivable from that source. Consequently, Hume concludes, it cannot be regarded as objectively valid. It must be due to a subjective instinct or natural belief. (The two problems are similarly confounded by Kant in A 217 = B 264.)

In the *Introduction* to the *Prolegomena* there is no such confusion of the two problems, but matters are made even worse by the omission of all reference to Hume's analysis of the causal axiom. Only Hume's treatment of the concept of causality is dwelt upon. This is the more unfortunate, and has proved the more misleading, in that it is here that Kant makes his most explicit acknowledgment of his indebtedness to Hume. In §§ 27 ff. of the *Prolegomena* both problems reappear, but are again confounded. The section is preceded by sentences in which the problem of experience is emphasised; and in keeping with these prefatory remarks, Kant represents "Hume's *crux metaphysicorum*" as concerning only the concept of causality (viewed as a synthetic, and professedly *a priori*, connection between concrete existences). Yet in § 30 the causal axiom is also referred to, and together they are taken as constituting "Hume's problem."

Now if we bear in mind that Hume awakened Kant to both problems — how *a priori* knowledge is possible, and how experience is possible — this confusion can easily be understood. Kant had already in the early 'sixties studied Hume with profound admiration and respect. In the period subsequent to 1772 this admiration had only deepened; and constantly, as we may believe, Kant had returned with fresh relish to Hume's masterly analyses of causality and of inductive inference. It is not, therefore, surprising that as the years passed, and as the other elements in Hume's teaching revealed to him, through the inner growth of his own views, their full worth and significance, he should allow the contribution that had more specifically awakened him to fall into the background, and should, in vague fashion, ascribe to Hume's teaching as a whole the specific influence which was really due to one particular part. By 1783, the date of the *Prolegomena*, Kant's first enthusiasm over the discovery of the fundamental problem of *a priori* synthesis had somewhat abated, and the problem of experience had more or less taken its place. This would seem to be the reason why in the *Prolegomena* he thus deals with both aspects of Hume's problem, and why in so doing he gives a subordinate place to Hume's treatment of the causal axiom. But though the misunderstanding may be thus accounted for, it must none the less be deplored. For the reader is seriously misled, and much that is central to the Critical philosophy is rendered obscure. The influence which Kant in the *Prolegomena* thus ascribes to Hume was not that which really awakened him from his dogmatic slumber, but is in part that which he had assimilated at least as early as 1763, and in part that which acted upon him with renewed force when he was struggling (probably between 1778 and 1780) with the problems involved in the deduction of the categories. It was Hume's treatment of the causal axiom, and that alone, which, at some time subsequent to February 1772, was the really effective influence in

producing the Copernican change.

Purely a priori and out of mere concepts. — Vaihinger's comment seems correct: Kant means only that neither actual experience nor pure intuition can be resorted to. This does not contradict the complementary assertion, that the principle, everything which happens has its cause, can be known *a priori*, not immediately from the concepts involved in it, but only indirectly through the relation of these concepts to possible experience. "Possible experience," even though it stands for "something purely contingent," is itself a concept. Vaihinger quotes Apelt upon this "mysterious" type of judgment.

"Metaphysics is synthetic knowledge from mere concepts, not like mathematics from their construction in intuition, and yet these synthetic propositions cannot be known from bare concepts, *i.e.* not analytically. The necessity of the connection in those propositions is to be apprehended through thought alone, and yet is not to rest upon the form of thought, the principle of contradiction. The conception of a kind of knowledge which arises from bare concepts, and yet is synthetic, eludes our grasp. The problem is: How can one concept be necessarily connected with another, without also at the same time being contained in it?"

The paragraphs in B 14 to B 17 are almost verbal transcripts from *Prolegomena*, § 2 *c*, 2 ff.

Mathematical judgments are one and all (insgesammt) synthetic. — This assertion is carelessly made, and does not represent Kant's real view. In B 16 he himself recognises the existence of analytic mathematical judgments, but unduly minimises their number and importance.

All mathematical conclusions proceed according to the principle of contradiction. — To the objection made by Paulsen that Kant, in admitting that mathematical judgments can be deduced from others by means of the principle of contradiction, ought consistently to have recognised as synthetic only axioms and principles, Vaihinger replies as follows:

"The proposition — the angles of a triangle are together equal to two right angles — Kant regards as synthetic. It is indeed deduced from the axiom of parallels (with the aid of auxiliary lines), and to that extent is understood in accordance with the principle of contradiction.... The angles in the triangle constitute a special case of the angles in the parallel lines which are intersected by other lines. The principle of contradiction thus serves as vehicle in the deduction, because once the identity of A and A´ is recognised, the predicate *b*, which belongs to A, must also be ascribed to A´. But the proposition is not for that reason itself analytic in the Kantian sense. In the analytic proposition the predicate is derived from the analysis of the subject concept. But that does not happen in this case. The synthetic proposition can never be derived *in and by itself* from the principle of contradiction; ... but only with the aid of that principle *from other propositions*. Besides, in this deduction intuition must always be resorted to; and that makes an essential difference. Without it the identity of A and A´ cannot become known."

Pure mathematics.— "Pure," as thus currently used, is opposed only to applied, not to empirical. Kant here arbitrarily reads the latter opposition into it. Under this guise he begs the point in dispute.

7 + 5 = 12. — Though 7 + 5 = 12 expresses an identity or equality, it is an equality of the *objects* or *magnitudes*, 7 + 5 and 12, not of the concepts through which we think them. Analysis of the concepts can never reveal this equality. Only by constructing the concepts in intuition can it be recognised by the mind. This example has been already cited in the first edition. It is further elaborated in the *Prolegomena*, § 2 *c*, and is here transcribed. Kant's mode of stating his position is somewhat uncertain. He alternates between "the representation of 7 and 5," "the representation of the combination of 7 and 5," and "the concepts 7 and 5." His view would seem to be that there are *three* concepts involved. For the concept of 7 we must substitute the intuition of 7 points, for the concept of 5 the intuition of 5 points, and for the concept of their sum the intuitive operation of addition.

Call in the assistance of intuition, for instance our five fingers. — This statement, repeated from the *Prolegomena*, does not represent Kant's real position. The views which he has expressed upon the nature of arithmetical science are of the most contradictory character, but to one point he definitely commits

himself, namely, that, like geometrical science, it rests, not (as here asserted) upon empirical, but upon pure intuition. Except indirectly, by the reference to larger numbers, Kant here ignores his own important distinction between image and schema. The above statement would also make arithmetic dependent upon space.

Segner: Anfangsgründe der Arithmetik, translated from the Latin, second edition, Halle, 1773.

Natural science (physica) contains synthetic a priori judgments. — There is here a complication to which Vaihinger has been the first to draw attention. In the *Prolegomena* Kant emphasises the distinction between physics and pure or universal science of nature. The latter treats only the *a priori* form of nature (*i.e.* its necessary conformity to law), and is therefore a propaedeutic to physics which involves further empirical factors. For two reasons, however, this universal natural science falls short of its ideal. First, it contains empirical elements, such as the concepts of motion, impenetrability, inertia, etc. Secondly, it refers only to the objects of external sense, and not, as we should expect in a universal science, to natural existences without exception, *i.e.* to the objects of psychology as well as of physics. But among its principles there are, Kant adds, a few which are purely *a priori* and possess the universality required: *e.g.* such propositions as that *substance is permanent*, and that *every event has a cause*. Now these are the examples which ought to have been cited in the passage before us. Those actually given fall entirely outside the scope of the *Critique*. They are treated only in the *Metaphysische Anfangsgründe*. They belong to the relatively, not to the absolutely, pure science of nature. The source of the confusion Vaihinger again traces to Kant's failure to hold fast to the important distinction between immanent and transcendent metaphysics. His so-called pure or universal natural science (nature, as above noted, signifying for Kant "all that is") is really *immanent metaphysics*, and the propositions in regard to substance and causality ought therefore to be classed as metaphysical. This, indeed, is how they are viewed in the earlier sections of the *Prolegomena*. The distinction later drawn in § 15 is ignored. Pure natural science is identified with mathematical physics, and the propositions which in § 15 are spoken of as belonging to pure universal natural science are now regarded as metaphysical. "Genuinely metaphysical judgments are one and all synthetic.... For instance, the proposition — everything which in things is substance is permanent — is a synthetic, and properly metaphysical judgment." In § 5 the principle of causality is also cited as an example of a synthetic *a priori* judgment in metaphysics. But Kant still omits to draw a distinction between immanent and transcendent metaphysics; and as a consequence his classification of synthetic *a priori* judgments remains thoroughly confused. They are taken as belonging to three spheres, mathematics, physics (in the relative sense), and metaphysics. The implication is that this threefold distinction corresponds to the threefold division of the *Doctrine of Elements* into *Aesthetic*, *Analytic*, and *Dialectic*. Yet, as a matter of fact, the propositions of mathematical physics, in so far as they are examples of applied mathematics, are dealt with in the *Aesthetic*, and in so far as they involve concepts of motion and the like fall entirely outside the scope of the *Critique*, while the *Analytic* deals with those *metaphysical* judgments (such as the principle of causality) which are of immanent employment.

As the new paragraphs in the *Introduction* to the second edition are transferred without essential modification from the *Prolegomena*, they are open to the same criticism. To harmonise B 17 with the real teaching of the *Critique*, it must be entirely recast. Instead of "natural science" (*physica*) we must read "pure universal natural science [= immanent metaphysics]," and for the examples given we must substitute those principles of substance and causality which are dealt with in the *Analytic*. The next paragraph deals with metaphysics in its transcendent form, and accordingly states the problem peculiar to the *Dialectic*.

Metaphysics. — This paragraph deals *explicitly* only with transcendent judgments, but as the terms used are ambiguous, it is possible that those of immanent metaphysics are also referred to. The paragraph is not taken from the *Prolegomena*. The corresponding passage in the *Prolegomena* deals only with the judgments of immanent metaphysics.

The real problem of pure reason is contained in the question: How are synthetic a priori judgments possible? — Cf. above, p ff., 33 ff., 43 ff.

David Hume. — Cf. above, p ff.

A theoretical knowledge. — *i.e.* Kant explicitly leaves aside the further problem, whether such judgments may not also be possible in the practical (moral) and other spheres.

How is pure natural science possible? — The note which Kant appends shows that he is here taking natural science in the relative sense. The same irrelevant instances are again cited.

As these sciences really exist. — Cf. below, ff.

The poor progress which metaphysics has hitherto made. — Cf. *Preface* to the second edition; *Prolegomena*, § 4, and A 175 ff.

How is metaphysics as a science possible? — We may now consider how this and the three preceding questions are related to one another and to the various divisions of the *Critique*. The four subordinate questions within the main problem — How are synthetic *a priori* judgments possible? — are here stated by Kant as:

1. How is pure mathematics possible?
2. How is pure natural science possible?
3. How is metaphysics as natural disposition possible?
4. How is metaphysics as science possible?

There is little difficulty as regards 1 and 2. The first is dealt with in the *Aesthetic*, and the second in the *Analytic*, though, owing to the complexity of the problems, the *Aesthetic* and *Analytic* are wider than either query, and cannot be completely separated. Applied mathematics is dealt with in the *Analytic* as well as in the *Aesthetic*, and in both the determination of the limits of scientific knowledge is equally important with that of accounting for its positive acquisitions. The third and fourth questions raise all manner of difficulties. Notwithstanding the identical mode of formulation, they do not run on all fours with the two preceding. The first two are taken as referring to actually existing and valid sciences. It is the ground of their *objective validity* that is sought. But what is investigated in the third question falsely lays claim to the title of science; we can enquire only as to the ground of its *subjective* possibility. In the fourth question, the problem takes still another form. Kant now seeks to determine *whether* a new, not yet existing, science of metaphysics is possible, and *in what manner* it can be validly constructed. The manifoldness of the problems is thus concealed by the fixity of the common formula. Now with what divisions of the *Critique* are the two last questions connected? It has been suggested that the third question is dealt with in the *Dialectic* and the fourth in the *Methodology*, the four questions thus corresponding to the four main divisions of the *Critique*. But this view is untenable, especially in its view of the fourth question. The division of the *Critique* is by dichotomy into *doctrine of elements* and *doctrine of methods*, the former including the *Aesthetic* and *Logic*, and the *Logic* being again divided into *Analytic* and *Dialectic*. Its problems stand in an equally complex subordination; they cannot be isolated from one another, and set merely side by side. Secondly, it has been maintained that the third question is dealt with in the introduction to the *Dialectic* (in its doctrine of Ideas), and the fourth in the *Dialectic* proper. This view is fairly satisfactory as regards the third question, but would involve the conclusion that the fourth question refers only to transcendent metaphysics, and that it therefore receives a negative answer. But that is not Kant's view of metaphysics *as a science*. The *Critique* is intended to issue in a new and genuine body of metaphysical teaching.

The key to the whole problem of the four questions is not to be found in the *Critique*. This section is transcribed from §§ 4-5 of the *Prolegomena*, and is consequently influenced by the general arrangement of the latter work. This fourfold division was indeed devised for the purposes of the argument of the *Prolegomena*, which is developed on the analytic method, and for that reason it cannot be reconciled with the very different structure of the *Critique*. Yet even the *Prolegomena* suffers from confusion, due to

Kant's failure to distinguish between universal and relative natural science on the one hand, and between immanent and transcendent metaphysics on the other. The four questions do not coincide with those of the *Critique*. Instead of the third — how is metaphysics as natural disposition possible? — we find: *how is metaphysics in general possible?* In §§ 4, 5, Kant's argument is clear and straightforward. Pure mathematical science and mathematical physics are actually existing sciences. The synthetic *a priori* judgments which they contain must be recognised as valid. Metaphysics makes similar claims. But, as is sufficiently proved by the absence of agreement among philosophers, its professions are without ground. It transgresses the limits of possible experience, and contains only pretended knowledge. This false transcendent metaphysics is refuted in the *Dialectic*. Kant was, however, equally convinced that an *immanent* metaphysics is possible, and that its grounds and justification had been successfully given in the *Analytic*. His problem as formulated in the *Prolegomena* is accordingly threefold: (1) how are the existing rational sciences, mathematical and physical, possible? (2) *in the light of the insight acquired by this investigation*, what is the origin and explanation of the existing pretended sciences of transcendent metaphysics? and (3) in what manner can we establish a positive metaphysics that will harmonise with reason's true vocation? So far all is clear and definite. But the unresolved difficulty, as to the relation in which natural science and immanent metaphysics stand to one another, brings confusion in its train. As already noted, in § 15 natural science is displaced by immanent metaphysics (though not under that name); and as a result the fourth question reduces to the second, and the above threefold problem has to be completely restated. The *Prolegomena* has, however, already been divided into four parts; and in the last division Kant still continues to treat the fourth question as distinct from that which has been dealt with in the second division, though, as his answer shows, they are essentially the same. The answer given is that metaphysics as a science is possible only in and through the *Critique*, and that though the whole *Critique* is required for this purpose, the *content* of the new science is embodied in the *Analytic*.

In the second edition of the *Critique* the confusion between natural science and immanent metaphysics still persists, and a new source of ambiguity is added through the reformulation of the third question. It is now limited to the problem of the *subjective* origin of metaphysics as a natural disposition. The fourth question has therefore to be widened, so as to include transcendent as well as immanent, the old as well as the new, metaphysics. But save for this one alteration the entire section is inspired by considerations foreign to the *Critique*; this section, like B 17, must be recast before it will harmonise with the subsequent argument.

Every kind of knowledge is called pure, etc. — These sentences are omitted in the second edition. They have been rendered unnecessary by the further and more adequate definition of "pure" given in B 3 ff.

Reason is the faculty which supplies the principles of knowledge a priori. — This statement should, as Vaihinger points out, be interpreted in the light of A 299 = B 355.

"Reason, like understanding, can be employed in a merely formal, *i.e.* logical manner, wherein it abstracts from all content of knowledge. But it is also capable of a real use, since it contains within itself the source of certain concepts and principles, which it does not borrow either from the senses or from the understanding."

Reason is taken in the first of the above meanings. Reason in its real use, when extended so as to include pure sensibility and understanding, is the pure reason referred to in the next sentence of the *Critique*. *A priori* is here used to signify the relatively *a priori*; in the next sentence it denotes the absolutely *a priori*.

An Organon of pure reason. — What follows, from this point to the middle of the next section, is a good example of Kant's patchwork method of piecing together old manuscript in the composition of the *Critique*. There seems to be no way of explaining its bewildering contradictions save by accepting Vaihinger's conclusion that it consists of three separate accounts, written at different times, and

representing different phases in the development of Kant's views.

I. The first account, beginning with the above words and ending with "already a considerable gain" (*schon sehr viel gewonnen ist*), is evidently the oldest. It reveals the influence of the *Dissertation*. It distinguishes:

1. Critique of pure reason (= *Propaedeutic*).
2. Organon of pure reason.
3. System of pure reason.

1. Critique is a critical examination (*Beurtheilung*) of pure reason, its sources and limits. The implication (obscured by the direct relating of *Critique* to *System*) is that it prepares the way for the *Organon*.

2. Organon comprehends all the principles by which pure knowledge can be acquired and actually established.

3. System is the complete application of such an *Organon*.

This classification is, as Paulsen was the first to remark, an adaptation of the *Dissertation* standpoint.

II. The second account begins: "I entitle all knowledge transcendental," but is broken by the third account — from "Such a *Critique*" to the end of the paragraph — which has been inserted into the middle of it. It is then continued in the next section. It distinguishes:

1. Critique of pure reason.

2. Transcendental philosophy.

1. Critique contains the principles of all *a priori synthetical* knowledge, tracing an architectonic plan which guarantees the completeness and certainty of all the parts.

2. Transcendental philosophy contains their complete analytic development, and is therefore the system of such knowledge.

III. The third account ("Such a *Critique*" to end of paragraph) in its main divisions follows the first account: 1. *Critique*, 2. *Organon* or *Canon*, 3. *System*. But they are now defined in a different manner. *Critique* is a propaedeutic for the *Organon*. But *Organon*, which signifies the totality of the principles through which pure knowledge is attained and extended, may not be possible. In that case the *Critique* is a preparation only for a *Canon*, *i.e.* the totality of the principles of the *proper* employment of reason. The *Organon* or *Canon*, in turn, will render possible a *System* of the philosophy of pure reason, the former yielding a system in extension of *a priori* knowledge, the latter a system which defines the limits of *a priori* knowledge.

It is impossible to reduce these divergencies to a single consistent view. They illustrate the varying sense in which Kant uses the term "metaphysics." In the first account, even though that account is based on a distinction drawn in the *Dissertation*, the *system* of metaphysics is immanent; in the second it is also transcendent; in the third it is neutral.

Propaedeutic. — That the *Critique* is only propaedeutic to a *System* of pure reason was later denied by Kant in the following emphatic terms:

"I must here observe that I cannot understand the attempt to ascribe to me the view that I have sought to supply only a Propaedeutic to transcendental philosophy, not the System of this philosophy. Such a view could never have entered my thoughts, for I have myself praised the systematic completeness (*das vollendete Ganze*) of the pure philosophy in the *Critique of Pure Reason* as the best mark of its truth."

Kant thus finally, after much vacillation in his use of the terms, came to the conclusion that *Critique*, *Transcendental Philosophy*, and *System* all coincide. Meantime he has forgotten his own previous and conflicting utterances on this point.

As regards speculation negative only.— “Speculation” here signifies the theoretical, as opposed to the practical. The qualifying phrase is in line with other passages of the second edition, in which it is emphasised that the conclusions of the *Critique* are positive in their practical (moral) bearing.

Transcendental — transcendent. — Kant was the first to distinguish between these two terms. In the scholastic period, in which they first appear, they were exactly synonymous, the term transcendent being the more usual. The verb, to transcend, appears in Augustine in its widest metaphysical sense. “Transcende et te ipsum.” “Cuncta corpora transcenderunt [Platonici] quaerentes Deum; omnem animam mutabilesque omnes spiritus transcenderunt quaerentes summum Deum.” The first employment of the term in a more specific or technical sense occurs in a treatise, *De natura generis*, falsely ascribed to Thomas Aquinas. In this treatise *ens*, *res*, *aliquid*, *unum*, *bonum*, *verum* are entitled *transcendentia*. To understand the meaning in which the word is here used, we have, it would seem, to take account of the influence exercised upon Aquinas by a mystical work of Arabian origin, entitled *De causis*. It contained reference to the Neo-Platonic distinction between the Aristotelian categories, which the Neo-Platonists regarded as being derivative, and the more universal concepts, *ens*, *unum*, *verum*, *bonum*. To these latter concepts Aquinas gave a theological application. *Ens* pertains to essence, *unum* to the person of the Father, *verum* to the person of the Son, *bonum* to the person of the Holy Ghost. In the *De natura generis* the number of these supreme concepts is increased to six by the addition of *res* and *aliquid*, and as just stated the title *transcendentia* is also now applied for the first time. In this meaning the term transcendent and its synonym transcendental are of frequent occurrence in Scholastic writings. The *transcendentia* or *transcendentalia* are those concepts which so transcend the categories as to be themselves predicable of the categories. They are the “*termini vel proprietates rebus omnibus cuiusque generis convenientes*.” Thus Duns Scotus speaks of *ens* as the highest of the “*transcendental*” concepts. The term also occurs in a more or less similar sense in the writings of Campanella, Giordano Bruno, Francis Bacon, and Spinoza. The last named gives a psychological explanation of the “termini *Transcendentales* ... ut Ens, Res, Aliquid” as standing for ideas that are in the highest degree confused owing to the multiplicity of the images which have neutralised one another in the process of their generation. Berkeley also speaks of the “transcendental maxims” which lie outside the field of mathematical enquiry, but which influence all the particular sciences. Evidently the term has become generalised beyond its stricter scholastic meaning. Lambert employs transcendent in an even looser sense to signify concepts which represent what is common to both the corporeal and the intellectual world. We may, indeed, assert that in Kant’s time the terms transcendent and transcendental, while still remaining synonymous, and though used on the lines of their original Scholastic connotation, had lost all definiteness of meaning and all usefulness of application. Kant took advantage of this situation to distinguish sharply between them, and to impose upon each a meaning suitable to his new Critical teaching.

“Transcendental” is primarily employed by Kant as a name for a certain kind of knowledge. Transcendental knowledge is knowledge not of objects, but of the nature and conditions of our *a priori* cognition of them. In other words, *a priori* knowledge must not be asserted, simply because it is *a priori*, to be transcendental; this title applies only to such knowledge as constitutes a *theory* or *science* of the *a priori*. Transcendental knowledge and transcendental philosophy must therefore be taken as coinciding; and as thus coincident, they signify the science of the possibility, nature, and limits of *a priori* knowledge. The term similarly applies to the subdivisions of the *Critique*. The *Aesthetic* is transcendental in that it establishes the *a priori* character of the forms of sensibility; the *Analytic* in that it determines the *a priori* principles of understanding, and the part which they play in the constitution of knowledge; the *Dialectic* in that it defines and limits the *a priori* Ideas of Reason, to the perverting power of which all false metaphysics is due. That this is the primary and fundamental meaning common to the various uses of the term is constantly overlooked by Max Müller. Thus in A 15 = B 30 he translates *transcendentale Sinnenlehre* “doctrine of transcendental sense” instead of as “transcendental doctrine of sense.” In

transforming *transcendentale Elementarlehre* into "elements of transcendentalism" he avoids the above error, but only by inventing a word which has no place in Kant's own terminology.

But later in the *Critique* Kant employs the term transcendental in a second sense, namely, to denote the *a priori* factors in knowledge. All representations which are *a priori* and yet are applicable to objects are transcendental. The term is then defined through its distinction from the empirical on the one hand, and from the transcendent on the other. An intuition or conception is transcendental when it originates in pure reason, and yet at the same time goes to constitute an *a priori* knowledge of objects. The contrast between the transcendental and the transcendent, as similarly determined upon by Kant, is equally fundamental, but is of quite different character. That is transcendent which lies entirely beyond experience; whereas the transcendental signifies those *a priori* elements which underlie experience as its necessary conditions. The transcendent is always unknowable. The transcendental is that which by conditioning experience renders all knowledge, whether *a priori* or empirical, possible. The direct opposite of the transcendent is the immanent, which as such includes both the transcendental and the empirical. Thus while Kant employs the term transcendental in a very special sense which he has himself arbitrarily determined, he returns to the original etymological meaning of the term transcendent. It gains a specifically Critical meaning only through being used to expound the doctrine that all knowledge is limited to sense-experience. The attempt to find some similar etymological justification for Kant's use of the term transcendental has led Schopenhauer and Kuno Fischer to assert that Kant entitles his philosophy transcendental because it transcends both the dogmatism and the scepticism of all previous systems! Another attempt has been made by Stirling and Watson, who assert, at least by implication, that the transcendental is a species of the transcendent, in that while the latter transcends the scope of experience, the former transcends its sense-content. Kant himself, however, nowhere attempts to justify his use of the term by any such argument.

A third meaning of the term transcendental arises through its extension from the *a priori* intuitions and concepts to the processes and faculties to which they are supposed to be due. Thus Kant speaks of the transcendental syntheses of apprehension, reproduction, and recognition, and of the transcendental faculties of imagination and understanding. In this sense the transcendental becomes a title for the conditions which render experience possible. And inasmuch as processes and faculties can hardly be entitled *a priori*, Kant has in this third application of the term departed still further from his first definition of it.

The distinction between the transcendental and the transcendent may be illustrated by reference to the Ideas of reason. Regarded as regulative only, *i.e.* merely as ideals which inspire the understanding in the pursuit of knowledge, they are transcendental. Interpreted as constitutive, *i.e.* as representing absolute realities, they are transcendent. Yet, despite the fundamental character of this distinction, so careless is Kant in the use of his technical terms that he also employs transcendental as exactly equivalent in meaning to transcendent. This is of constant occurrence, but only two instances need here be cited. In the important phrase "transcendental ideality of space and time" the term transcendental is used in place of the term transcendent. For what Kant is asserting is that judged from a *transcendent* point of view, *i.e.* from the point of view of the thing in itself, space is only subjectively real. The phrase is indeed easily capable of the orthodox interpretation, but, as the context clearly shows, that is not the way in which it is actually being used by Kant. Another equally surprising example is to be found in the title "transcendental dialectic." Though it is defined in A 63-4 = B 88 in correct fashion, in A 297 = B 354 and A 308-9 = B 365-6 it is interpreted as treating of the illusion involved in transcendent judgments, and so virtually as meaning *transcendent* dialectic.

Not a Critique of books and systems. — Kant here inserts a statement from the omitted *Preface* to the first edition. He now adds that the *Critique* will supply a criterion for the valuation of all other systems.

A 13 = B 27. — Kant's reason for omitting the title of Section II in the second edition was no doubt its inconsistency with the assertion of its opening sentence, viz. that the *Critique* is *not* transcendental

philosophy, but only a preparation for it. Instead of it, Kant has introduced the more appropriate heading placed over the preceding paragraph.

The highest principles of morals do not belong to transcendental philosophy. — Cf. A 801 = B 829. The alteration made in this passage in the second edition indicates a transition towards the opposite view which Kant developed in the *Critique of Practical Reason*.

The division of this science. — Kant in this paragraph alternates in the most bewildering fashion between the *Critique* and *Transcendental Philosophy*. In this first sentence the *Critique* seems to be referred to. Later it is *Transcendental Philosophy* that is spoken of.

Doctrine of Elements and Doctrine of Methods. — Cf. A 707 ff. = B 735 ff., and below, p, 563.

Two stems, sensibility and understanding, which may perhaps spring from a common root. — Kant sometimes seems to suggest that imagination is this common root. It belongs both to sensibility and to understanding, and is passive as well as spontaneous. But when so viewed, imagination is virtually regarded as an unknown supersensuous power, "concealed in the depths of the soul." The supersensuous is the point of union of our disparate human faculties, as well as of nature and freedom, mechanism and teleology.

The transcendental doctrine of sense would necessarily constitute the first part of the Science of Elements.— "Necessarily constitute the first part" translates *zum ersten Theile gehören müssen*. This Vaihinger explains as an archaic mode of expression, equivalent to *ausmachen*. The point is important because, if translated quite literally, it might seem to conflict with the division actually followed, and to support the alternative division given in the *Critique of Practical Reason*. The first *Critique* is divided thus:

I. Doctrine of Elements.

1. Aesthetic.
2. Logic.
   (*a*) Analytic.
   (*b*) Dialectic.

II. Doctrine of Methods.

In the *Critique of Practical Reason* a much more satisfactory division is suggested:

I. Doctrine of Elements.

1. Analytic.
   (*a*) Aesthetic (Sense).
   (*b*) Logic (Understanding).
2. Dialectic.

II. Doctrine of Methods.

The first division rests on somewhat irrelevant distinctions derived from the traditional logic; the other is more directly inspired by the distinctions which naturally belong to Kant's own philosophical system.

THE TRANSCENDENTAL DOCTRINE OF ELEMENTS

PART I. THE TRANSCENDENTAL AESTHETIC

THE *Aesthetic* opens with a series of definitions. Intuition (*Anschauung*) is knowledge (*Erkenntnis*) which is in immediate relation to objects (*sich auf Gegenstände unmittelbar bezieht*). Each term in this definition calls for comment. *Anschauung* etymologically applies only to visual sensation. Kant extends it to cover sensations of all the senses. The current term was *Empfindung*. Kant's reason for introducing the term intuition in place of sensation was evidently the fact that the latter could not be made to cover space and time. We can speak of pure intuitions, but not of pure sensations. *Knowledge* is used in a very wide sense, not strictly consistent with A 50-1 = B 74-5. The phrase *sich bezieht* is quite indefinite and ambiguous. Its meaning will depend upon the interpretation of its context. *Object* is used in its widest and most indefinite meaning. It may be taken as signifying content (*Inhalt*, a term which does not occur in this passage, but which Kant elsewhere employs). That, at least, is the meaning which best fits the context. For when Kant adds that intuition relates itself to objects *immediately*, it becomes clear that he has in mind its distinction from conception (*Begriff*) which as expressing the universal is related to objects only indirectly, representing some one or more attributes of the *given* objects. Ultimately the whole content of conception must be given. The phrase "relates itself to objects" may, therefore, be paraphrased "has some content, such as red or cold, as its immediate object." Through the content of intuition the whole material of thought is supplied. Intuition in itself is blind, but not empty. "Thoughts without content are empty; intuitions without concepts are blind."

But the phrase "is in relation to objects" has also for Kant a second meaning, implied in the above, but supplementary to it. As he states in the very next sentence, intuition can have an object, meaning thereby a content, only in so far as that content is *given*. The material of thought must be supplied; it cannot be invented. The only mode, however, in which it can be supplied, at least to the human mind, is through the affecting of the mind by "the object." This is an excellent instance of Kant's careless mode of expressing himself. In the first part of the sentence object means *object of intuition*. In the latter part it signifies the *cause of intuition*. And on Kant's view the two cannot coincide. The object which affects the mind is independently real; the immediate object of the intuition is a sense-content, which Kant, following the universally accepted view of his time, regards as purely subjective. The term object is thus used in two quite distinct meanings within one and the same sentence.

Kant's definition of intuition, when stated quite explicitly, and cleared of all ambiguity, is therefore as follows. *Intuition is the immediate apprehension of a content which as given is due to the action of an independently real object upon the mind*. This definition is obviously not meant to be a description of intuition as it presents itself to introspection, but to be a reflective statement of its indispensable conditions. Also it has in view only empirical intuitions. It does not cover the pure intuitions space and time. Though space and time are given, and though each possesses an intrinsic content, these contents are not due to the action of objects upon the sensibility.

"An intuition is such a representation as immediately depends upon the presence of the object. Hence it seems impossible *originally* to intuit *a priori* because intuition would in that event take place without either a former or a present object to refer to, and by consequence could not be intuition."

This interpretation is borne out by Kant's answer to Beck when the latter objected that only through subsumption under the categories can a representation become objective. Kant replies in a marginal note, the meaning of which, though difficult to decipher, admits of a fairly definite interpretation.

"The determining of a concept through intuition so as to yield knowledge of the object falls within the province of the faculty of judgment, but not the relation of the intuition to an object in general [*i.e.* the view of it as having a content which is given and which is therefore due to some object], for that is merely

the logical use of the representation, whereby it is thought as falling within the province of knowledge. On the other hand, if this single representation is related only to the subject, the use is aesthetic (feeling), and the representation cannot be an act of knowledge."

Mind (*Gemüt*) is a neutral term without metaphysical implications. It is practically equivalent to the term which is substituted for it in the next paragraph, power of representation (*Vorstellungsfähigkeit*). Representation (*Vorstellung*) Kant employs in the widest possible meaning. It covers any and every cognitive state. The definition here given of sensibility— "the capacity (receptivity) to obtain representations through the mode in which we are affected by objects" — is taken directly over from the *Dissertation*. In this definition, as in that of intuition, Kant, without argument or question, postulates the existence of independently existing objects. The existence of given sensations presupposes the existence of things in themselves. Sensibility is spoken of as the source both of objects and of intuitions. This is legitimate since object and intuition mutually imply one another; the latter is the apprehension of the former. By "objects" is obviously meant what in the third paragraph is called the matter of appearances, *i.e.* sensations in their objective aspect, as qualities or contents. The term "object" is similarly employed in the last line of this first paragraph.

Understanding (*Verstand*) is defined only in its logical or discursive employment. Kant wisely defers all reference to its more fundamental synthetic activities. *In us* (*bei uns*) is an indirect reference to the possibility of intellectual (non-sensuous) intuition which is further developed in other parts of the *Aesthetic*. Sensuous intuition is due to affection by an object. In intellectual intuition the mind must produce the object in the act of apprehending it.

Kant's definition of intuition applies, as already noted, only to empirical intuition. He proceeds to define the relation in which sensation (*Empfindung*) stands to empirical intuition. What he here says amounts to the assertion that through sensation intuition acquires its object, *i.e.* that *sensation is the content of intuition*. And that being so, it is also through sensation that empirical intuition acquires its relation to the object (= thing in itself) which causes it. (That would seem to be the meaning of the ambiguous second sentence; but it still remains uncertain whether the opposition intended is to pure or to intellectual intuition.) If this interpretation of the paragraph be correct, sensation is counted as belonging exclusively to the content side of subjective apprehension. But Kant views sensation in an even more definite manner than he here indicates. Though sensation is given, it likewise involves a reaction of the mind.

"Whatever is sensuous in knowledge depends upon the subject's peculiar nature, in so far as it is capable of this or that modification upon the presence of the object."

Thus for Kant sensation is a modification or state of the subject, produced by affection through an object. The affection produces a modification or state of the subject, and this subjective modification is the sensation.

"Sensation is a perception [*Perception*] which relates itself solely to the subject as the modification of its state."

This view of sensation, as subjective, was universally held in Kant's day. He accepts it without argument or question. That it could possibly be challenged never seems to have occurred to him. He is equally convinced that it establishes the existence of an actually present object.

"Sensation argues the presence of something, but depends as to its quality upon the nature of the subject." "Sensation presupposes the actual presence of the object."

Kant's view of sensation, as developed in the *Aesthetic*, thus involves three points: (1) It must be counted as belonging to the content side of mental apprehension. (2) Though a quality or content, it is purely subjective, depending upon the nature of our sensibility. (3) It is due to the action of some object upon the sensibility.

Kant distinguishes between sensation (*Empfindung*) and feeling (*Gefühl*). It had been usual to employ

them as synonyms.

“We understand by the word sensation an objective representation of the senses; and in order to preclude the danger of being misunderstood, we shall denote that which must always remain merely subjective and can constitute absolutely no representation of an object by the ordinary (*sonst üblichen*) term feeling.”

Appearance (*Erscheinung*) is here defined as the undetermined object of an intuition. By undetermined object is meant, as we have seen, the object in so far as it consists of the given sense contents. When these contents are interpreted through the categories they become *phenomena*.

“Appearances so far as they are thought as objects according to the unity of the categories are called phenomena.”

But this distinction between appearance and phenomenon is not held to by Kant. He more usually speaks of the categorised objects as appearances. The term phenomenon is of comparatively rare occurrence in the *Critique*. This has been concealed from English readers, as both Meiklejohn and Max Müller almost invariably translate *Erscheinung* phenomenon. The statement that appearance is the *object* of an empirical intuition raises a very fundamental and difficult question, namely, as to the relation in which representation stands to the represented. Frequently Kant’s argument implies this distinction, yet constantly he speaks and argues as if it were non-existent. We have to recognise two tendencies in Kant, subjectivist and phenomenalist. When the former tendency is in the ascendent, he regards all appearances, all phenomena, all empirical objects, as representations, modifications of the sensibility, merely subjective. When, on the other hand, his thinking is dominated by the latter tendency, appearances gain an existence independent of the individual mind. They are known through subjective representations, but must not be directly equated with them. They have a genuine objectivity. To this distinction, and its consequences, we shall have frequent occasion to return.

The phenomenalist standpoint is dominant in these first two paragraphs of the *Aesthetic*, and it finds still more pronounced expression in the opening of the third paragraph. “That in the appearances which *corresponds* (*correspondirt*) to sensation, I call its matter.” This sentence, through the use of the term corresponds, clearly implies a distinction between sensation and the real object apprehended in and through it. That, in turn, involves a threefold distinction, between sensation as subjective content (= appearance in the strict sense), the real enduring object in space (= phenomenon, the categorised object, appearance in its wider and more usual sense), and the thing in itself. Yet in the immediately following sentence Kant says that “the matter of all appearance is given *a posteriori*.” By “matter of appearance” Kant must there mean sensations, for they alone are given *a posteriori*. On this view the phenomena or empirical objects reduce to, and consist of, sensations. The intermediate term of the above threefold distinction is eliminated. The matter of appearance does not correspond to, but itself *is*, sensation. Thus in these successive sentences the two conflicting tendencies of Kant’s teaching find verbal expression. They intervene even in the preliminary definition of his terms. This fundamental conflict cannot, however, be profitably discussed at this stage.

The manifold of appearance (*das Mannichfaltige der Erscheinung*). The meaning to be assigned to this phrase must depend upon the settlement of the above question. But in this passage it allows only of a subjectivist interpretation, whereby sensations *are* appearance. The given sensations as such constitute a manifold; as objects in space they are already ordered. Kant’s more usual phrase is “the manifold of intuition.” His adoption of the term “manifold” (the *varia* of the *Dissertation*) expresses his conviction that synthesis is indispensable for all knowledge, and also his correlative view that nothing absolutely simple can be apprehended in sense-experience. By the manifold Kant does not mean, however, as some of his commentators would seem to imply, the chaotic or disordered. The emphasis is on manifoldness or plurality, as calling for reduction to unity and system. The unity has to be *found* in it, not introduced into it forcibly from the outside. The manifold has to be *interpreted*, even though the principles of interpretation

may originate independently of it. Though, for instance, the manifold as given is not in space and time, the specific space and time relations assigned by us are determined for us by the inherent nature of the manifold itself.

The form of appearance is defined — if the definition given in the first edition be translated literally — as “that which causes (*dasjenige, welches macht dass*) the manifold of appearance to be intuited as ordered in certain relations.” This phrase is employed by Kant in other connections, and, as Vaihinger points out, need not necessarily indicate activity. “Sensation is that in our knowledge which causes it to be called *a posteriori* knowledge.” In the second edition Kant altered the text from “*geordnet angeschaut wird*” to “*geordnet werden kann*.” The reason probably was that the first edition’s wording might seem to imply that the form is (as the *Dissertation* taught) capable in and by itself of ordering the manifold. Throughout the second edition Kant makes more prominent the part which understanding plays in the apprehension of space.

This distinction between matter and form is central in Kant’s system. As he himself says:

“These are two conceptions which underlie all other reflection, so inseparably are they bound up with all employment of the understanding. The one [matter] signifies the determinable in general, the other [form] its determination.”

On the side of matter falls the manifold, given, empirical, contingent material of sense; on the side of form fall the unifying, *a priori*, synthetic, relational instruments of sensibility and thought. For Kant these latter are no mere abstractions, capable of being *distinguished* by the mind; they differ from the matter of experience in nature, in function, and in origin. Upon this dualistic mode of conceiving the two factors depends the strength as well as the weakness of his position. To its perverting influence most of the unsatisfactory features of his doctrine of space and time can be directly traced. But to it is also due his appreciation of the new Critical problems, with their revolutionary consequences, as developed in the *Analytic*.

Kant proceeds to argue: (*a*) that the distinction is between two elements of fundamentally different nature and origin. The matter is given *a posteriori* in sensation; the form, as distinct from all sensation, must lie ready *a priori* in the mind. (*b*) Kant also argues that form, because of its separate origin, is capable of being contemplated apart from all sensation. The above statements rest upon the unexpressed assumption that sensations have no spatial attributes of any kind. In themselves they have only intensive, not extensive, magnitude. Kant assumes this without question, and without the least attempt at proof. The assumption appears in Kant’s writings as early as 1768 as a self-evident principle; and throughout the *Critique* is treated as a premiss for argument, never as a statement calling for proof. The only kind of supporting argument which is even indirectly suggested by Kant is that space cannot by itself act upon the senses. This would seem to be his meaning when he declares that it is no object, but only an *ens imaginarium*. “Space is no object of the senses.” Such argument, however, presupposes that space can be conceived apart from objects. It is no proof that an extended object may not yield extended sensations. Kant completely ignores the possibility that formal relations may be given in and with the sensations. If our sensibility, in consequence of the action of objects upon it, is able to generate qualitative sensations, why, as Vaihinger very pertinently enquires, should it be denied the power of also producing, in consequence of these same causes, impressions of quantitative formal nature? Sensations, on Kant’s view, are the product of mind much more than of objects. Why, then, may not space itself be sensational? From the point of view of empirical science there is no such radical difference between cause and effect in the latter case as exists in the former. As Herbert Spencer has remarked, Kant makes the enormous assumption

“...that no differences among our sensations are determined by any differences in the *non-ego* (for to say that they are so determined is to say that the form under which the *non-ego* exists produces an effect upon the *ego*); and as it similarly follows that the order of coexistence and sequence among these

sensations is not determined by any order in the *non-ego*; we are compelled to conclude that all these differences and changes in the *ego* are self-determined."

Kant's argument in the *Dissertation* is exactly of this nature.

"Objects do not strike the senses by their form. In order, therefore, that the various impressions from the object acting on the sense may coalesce into some whole of representation, there is required an inner principle of the mind through which in accordance with stable and innate laws that manifold may take on some form."

In the paragraph before us Kant may, at first sight, seem to offer an argument. He is really only restating his premiss. "That wherein alone sensations can be arranged (*sich ordnen*) and placed in a certain form cannot itself again be sensation." Now, of course, if the term sensation is to be limited to the sense qualities, *i.e.* to content or matter, conceived as existing apart from all formal relations, the formal elements cannot possibly be sensational. The legitimacy of that limitation is, however, the question at issue. It cannot be thus decided by an arbitrary verbal distinction.

"Were the contention that the relations of sensations are not themselves sensed correct, the inference to the pure apriority of the form of our perception would be inevitable. For sensation is the sole form of interaction between consciousness and reality.... But that contention is false. The relations of sensations, their determined coexistence and sequence, impress consciousness, just as do the sensations. We feel this impression in the compulsion which the determinateness of the empirical manifolds lays upon the perceiving consciousness. The mere affection of consciousness by these relations does not, indeed, by itself suffice for their apprehension; but neither does it suffice for the apprehension of the sensation itself. Thus there is in these respects no difference between the matter and the form of appearance."

In this way, then, by means of his definition of sensation, Kant surreptitiously introduces his fundamental assumption. That assumption reappears as the conclusion that since the form of appearance cannot be sensation, it does not arise through the action of the object, and consequently must be *a priori*. Though the paragraph seems to offer an argument in support of the apriority of space and time, it is found on examination merely to unfold a position adopted without the slightest attempt at proof.

The form of appearance must lie ready in the mind. — Comment upon this, in order to be adequate, had best take the form of a systematic discussion of Kant's views, here and elsewhere, of space as an *a priori* form of intuition. As already stated, the definition which Kant gives of intuition — as knowledge which stands in immediate relation to objects — applies only to empirical intuition. Though by the term object Kant, in so far as he is definite, means content, that content is such as can arise only through the action of some independent object upon the sensibility. In other words, the content apprehended must be sensuous. Now such a view of intuition obviously does not apply to pure intuition. As the concluding line of the paragraph before us states, pure intuition "can be contemplated in separation from all sensation;" and as the next paragraph adds, it exists in the mind "without any actual object of the senses." Yet Kant does not mean to imply that it is without content of any kind. "This pure form of sensibility may also itself be called pure intuition." "It can be known before all actual perception, and for that reason is called pure intuition." Though, therefore, pure intuition has an intrinsic content, and is the immediate apprehension of that content, it stands in no relation to any actual independent object. The content as well as the form is *a priori*. That, however, raises wider questions, and these we must now discuss.

Here, as in most of his fundamental positions, Kant entertains divergent and mutually contradictory doctrines. Only in his later utterances does he in any degree commit himself to one consistent view. The position to which he finally inclines must not, however, be allowed to dominate the interpretation of his earlier statements. The *Aesthetic* calls for its own separate exegesis, quite as if it formed by itself an independent work. Its problems are discussed from a standpoint more or less peculiar to itself. The commentator has the twofold task of stating its argumentation both in its conflict with, and in its relation to, the other parts of the *Critique*.

One essential difference between Kant's earlier and later treatments of space is that in his earlier utterances it is viewed almost exclusively as a psychological *a priori*. The logical aspect of the problem first receives anything like adequate recognition in the *Analytic*. If we keep this important fact in mind, two distinct and contradictory views of the psychological nature of space intuition can be traced throughout the *Aesthetic*. On one view, it antedates experience as an actual, completed, conscious intuition. On the other view, it precedes experience only as a potential disposition. We rule ourselves out from understanding Kant's most explicit utterances if we refuse to recognise the existence of both views. Kant's commentators have too frequently shut their eyes to the first view, and have then blamed Kant for using misleading expressions. It is always safer to take Kant quite literally. He nearly always means exactly what he says at the time when he says it. Frequently he holds views which run completely counter to present-day psychology, and on several occasions he flatly contradicts what he has with equal emphasis maintained in other contexts. The aspects of Kant's problems are so complex and various, and he is so preoccupied in doing complete justice to each in turn, that the question of the mutual consistency of his results is much less considered than is ideally desirable.

The two views can be more explicitly formulated. The first view alone is straightforward and unambiguous. Space lies ready (*liegt bereit*) in the mind, *i.e.* it does not arise. Prior even to sense-experience it exists as a *conscious* intuition. For this reason it can be contemplated apart from all sensation. It still remains when all sense content is thought away, and yet is not a mere form. In independence of the sensuous manifold it possesses a pure manifold of its own. The ground thesis of the second view — that space, prior to sense-experience, exists only as a permanent endowment of the mind — is likewise unambiguous. But in its development Kant throws consistency to the winds. The possible ways in which, on the second view, consciousness of space may be gained, can be tabulated as follows:

(*a*) By reflection upon the activity of the mind in the
construction of experience, yielding the intuition of a pure
manifold; or (*b*) by reflection upon the space-endowed
products of experience. The latter mode of reflection may reveal:

(α) A pure manifold distinct from the manifold of sense; or

(β) Space as a form of the sensuous manifold.

There are thus three different ways (*a*, α, β) in which the second view can be developed: (*a*) represents the view of the *Dissertation* (1770), of the reply to Eberhard (1790), and of those parts of the first edition's deduction of the categories which are of very early origin; (α) represents the final standpoint of the *Analytic*; (β), the prevailing view of the present day, is nowhere accepted by Kant.

Kant's utterances in the *Aesthetic* are all of them coloured by the first main view. We can best approach them by way of the contrasted teaching of the *Dissertation* of 1770. The teaching there formulated practically coincides, as above stated, with (*a*) of the second main view. Space, he maintains, is neither innate nor acquired from sense-experience.

"Certainly both conceptions [of time and of space] are undoubtedly acquired, not indeed by abstraction from our sensations of objects (for sensation gives the matter, not the form of human cognition), but from the mind's own action in co-ordinating its sensations in accordance with unchanging laws. Each represents, as it were, an immutable type, and so can be known intuitively. Sensations excite this act of mind but do not contribute to the intuition. There is here nothing innate except this law of the mind

according to which it conjoins in a certain manner the sensations derived from the presence of some object.”

How this view is to be reconciled with the contention, no less explicitly maintained, that space is not only a form of intuition but itself a pure intuition, Kant does not make clear. Reflection upon an activity of the mind may yield the representation of space as a form; it is difficult to comprehend how it should also yield an *a priori* content.

Kant nowhere in the *Critique* directly discusses the question whether the representation of space is innate or acquired. Such suggestions as occur refer (with the solitary exceptions of A 196 = B 241 and B 166 ff.) only to the categories, or as in the *Prolegomena* to the Ideas of reason. But in 1790 Kant in his reply to Eberhard again formulates the view of the *Dissertation*. The *Critique* allows, he there says, of no innate representations. All, without exception, are acquired. But of certain representations there is an original acquisition (*ursprüngliche Erwerbung*). Their ground (*Grund*) is inborn. In the case of space this ground is the mind’s peculiar capacity for acquiring sensations in accordance with its subjective constitution.

“This first formal ground is alone inborn, not the space representation itself. For it always requires impressions to determine the faculty of knowledge to the representation of an object (which in every case is its own action). Thus arises the formal intuition, which we name space, as an originally acquired representation (the form of outer objects in general), the ground of which (as mere receptivity) is likewise inborn, and the acquisition of which long antedates the determinate *conception* of things which are in accordance with this form.”

That last remark is confusing. Kant cannot mean that the representation of space is acquired prior to sense-experience, but only that since the mind gains it by reflection upon its own activity, it is among the first things to be apprehended — an extremely questionable assertion, could the premisses be granted. If “the determinate conception of things” comes late, still later must come the determinate conception of anything so abstract as pure space. The above passage thus repeats without essential modification the teaching of the *Dissertation*, and is open to the same objections. This teaching coincides with that of Leibniz in his *Nouveaux Essais*; and in formulating it in the *Dissertation* Kant was very probably influenced by Leibniz. Though it is an improvement upon the more extreme forms of the Cartesian doctrine of innate ideas, it does not go sufficiently far.

Now while Kant thus in 1770 and in 1790 so emphatically teaches that the representation of space is not innate, he none the less, in the intermediate period represented by the *Aesthetic*, would seem to maintain the reactionary view. Space is no mere potential disposition. As a conscious representation it lies ready in the mind. What, then, were the causes which constrained Kant to go back upon his own better views and to adopt so retrograde a position? The answer must be conjectural, but may perhaps be found in the other main point in which the teaching of the *Aesthetic* is distinguished from that of the *Dissertation*. Throughout the *Critique* Kant insists that space is a form of *receptivity*. It is *given* to the mind. It has nothing to do with spontaneity or understanding, and therefore cannot be acquired by reflection upon any activity of the mind. But neither can it, as *a priori*, be acquired from without. Consequently it cannot be acquired at all. But if given, and yet not acquired, it must as a representation lie ready in the mind from the very birth of consciousness. Constrained by such reasoning, Kant views it as given in all its completeness just as truly as is a sensation of colour or sound. This conclusion may not be satisfactory. Kant’s candid recognition of it is, however, greatly preferable to the blurring of the issue by most of his commentators.

Kant came, no doubt, to the more consistent position of the *Aesthetic* chiefly through further reflection upon the arguments of the *Dissertation*, and especially by recognition of the fact that though reflection upon an activity of the mind may be regarded as yielding a form of intuition, it can hardly be capable of yielding a pure manifold which can be substituted for, and take the place of, the manifold of sense. There

are for Kant only two ways of escape from this unhappy quandary: (*a*) Either he must return to the *Dissertation* position, and admit that the mind is active in the construction of space. This he does in the 1790 reply to Eberhard, but only by misrepresenting his own teaching in the *Critique*. In order consistently to maintain that space is acquired by reflection upon an activity of the mind, he would have to recast the entire *Aesthetic*, as well as much of the *Analytic*, and to do so in ways which cannot genuinely harmonise with the main tendencies of his teaching. (*b*) No such obstacle lay in the way of an alternative modification of his position. Kant might very easily have given up the contention that space is a pure intuition. If he had been willing to recognise that the sole possible manifold of intuition is sensuous, he could then have maintained that though space is innate as a potential form of receptivity, it is acquired only through reflection upon the space-endowed products of sensibility. So obvious are the advantages of this position, so completely does it harmonise with the facts of experience and with the teaching of modern psychology, and so obscure are the various passages in which Kant touches on this central issue, that many of his most competent commentators are prepared to regard it as being the actual teaching of the *Critique*. The evidence seems to me, however, to refute this interpretation of Kant's position. The traditional, Cartesian, semi-mystical worship of mathematical truth, as altogether independent of the contingencies of sense-experience, and as a body of knowledge absolutely distinct in origin from the merely empirical sciences, influences Kant's thinking even at the very moment when he is maintaining, in opposition to the Cartesians, that its subject matter is a merely subjective intuition. Kant, as it would seem, still maintains that there is a pure manifold of intuition distinct from the manifold of sense; and so by the inevitable logic of his thought is constrained to view space as innate in conscious form. This is not, of course, a conclusion which he could permanently stand by, but its elimination would have involved a more radical revision of his whole view of pure intuition and of mathematical science than he was willing to undertake. Though in the *Analytic* he has come to recognise that it is acquired by reflection upon *objects*, to the end he would seem to persist in the difficult contention that such reflection yields a pure manifold distinct from the manifold of sense. His belief that mathematical science is based upon pure intuition prevented him from recognising that though space may be a pure form of intuition, it can never by itself constitute a complete intuition. Its sole possible *content* is the manifold of sense. But even apart from the fact that our apprehension of space is always empirically conditioned, Kant's view of mathematical propositions as grounded in intuition is, as already observed, not itself tenable. For though intuitions may perhaps be the ultimate subject matter of geometry, concepts are its sole possible instruments. Intuitions yield scientific insight in exact proportion to our powers of restating their complex content in the terms of abstract thought. Until the evidence which they supply has been thus intellectually tested and defined, they cannot be accepted as justifying even the simplest proposition.

The complicated ambiguities of Kant's treatment of space may be illustrated and further clarified by discussion of another difficulty. Is space a *totum analyticum* or a *totum syntheticum*? Does the whole precondition the parts, or does it arise through combination of the parts? Or to ask another but connected question, do we intuit infinitude, or is it conceptually apprehended only as the presupposition of our limited intuitions? To these questions diametrically opposite answers can be cited from the *Critique*. As we have above noted, Kant teaches in the *Aesthetic* that space is given as a whole, and that the parts arise only by limitation of it. But in A 162 = B 203 we find him also teaching that a magnitude is to be entitled extensive

"...when the representation of the parts makes possible, and therefore necessarily precedes, the representation of the whole. I cannot represent to myself a line, however small, without drawing it in thought, *i.e.* generating from a point all its parts one after another, and thus for the first time recording this intuition."

He adds in the second edition that extensive magnitude cannot be apprehended save through a "synthesis of the manifold," a "combination of the homogeneous."

The note which Kant appends to B 136 is a very strange combination of both views. It first of all reaffirms the doctrine of the *Aesthetic* that space and time are not concepts, but intuitions within which as in a unity a multitude of representations are contained; and then proceeds to argue that space and time, as thus *composite*, must presuppose an antecedent synthesis. In A 505 = B 533 we find a similar attempt to combine both assertions.

"The parts of a given appearance are first given through and in the regress of *decomposing synthesis* (*decomponirenden Synthesis*)."

The clash of conflicting tenets which Kant is striving to reconcile could hardly find more fitting expression than in this assertion of an *analytic synthesis*. The same conflict appears, though in a less violent form, in A 438 = B 466.

"Space should properly be called not *compositum* but *totum*, since its parts are possible only in the whole, not the whole through the parts. It might, indeed, be said to be a *compositum* that is *ideale*, but not *reale*. That, however, is a mere subtlety."

The arguments by which Kant proves space to be an *a priori* intuition rest upon the view that *space is given as infinite*, and that *its parts arise through limitation of this prior-existent whole*. But a principle absolutely fundamental to the entire *Critique* is the counter principle, that all analysis rests upon and presupposes a previously exercised synthesis. *Synthesis or totality as such can never be given*. Only in so far as a whole is synthetically constructed can it be apprehended by the mind. *Representation of the parts precedes and renders possible representation of the whole.*

The solution of the dilemma arising out of these diverse views demands the drawing of two distinctions. First, between a synthesised totality and a principle of synthesis; the former may involve a prior synthesis; the latter does not depend upon synthesis, but expresses the predetermined nature of some special form of synthesis. Secondly, it demands a distinction between the *a priori* manifolds of space and time and the empirical manifold which is apprehended in and through them. This, as we have already noted, is a distinction difficult to take quite seriously, and is entirely unsupported by psychological evidence. But it would seem to be insisted upon by Kant, and to have been a determining factor in the formulation of several of his main doctrines.

In terms of the first distinction we are compelled to recognise that the view of space which underlies the *Aesthetic* is out of harmony with the teaching of the *Analytic*. In the *Aesthetic* Kant interprets space not merely as a form of intuition but also as a formal intuition, which is given complete in its totality, and which is capable of being apprehended independently of its empirical contents, and even prior to them. That would seem to be the view of space which is presupposed in Kant's explanation of pure mathematical science. The passages from the *Analytic*, quoted above, are, however, its express recantation. Space, as the intuition of a manifold, is a *totum syntheticum*, not a *totum analyticum*. It is constructed, not given. The divergence of views between the *Aesthetic* and the *Analytic* springs out of the difficulty of meeting at once the logical demands of a world which Kant conceives objectively, and the psychological demands which arise when this same world is conceived as subjectively conditioned. In principle, the whole precedes the parts; in the process of being brought into existence as an intuition, the parts precede the whole. The principle which determines our apprehension of any space, however small or however large, is that it exists in and through universal space. This is the principle which underlies both the synthetic construction of space and also its apprehension once it is constructed. In principle, therefore, *i.e.* in the order of logical thought, the whole precedes the parts. The process, however, which this principle governs and directs, cannot start with space as a whole, but must advance to it through synthesis of smaller parts.

But Kant does not himself recognise any conflict between this teaching and the doctrine of the *Aesthetic*. He seems to himself merely to be making more definite a position which he has consistently held all along; and this was possible owing to his retention and more efficient formulation of the second

of the two distinctions mentioned above, viz. that between the manifold of sense and the manifold of intuition. This distinction enables him to graft the new view upon the old, and so in the very act of insisting upon the indispensableness of the conceptual syntheses of understanding, none the less to maintain his view of geometry as an intuitive science.

"Space and time contain a manifold of pure *a priori* intuition, but at the same time are conditions of the receptivity of our mind — conditions under which alone it can receive representations of objects, and which therefore must also affect the concept of them. But if this manifold is to be known, the spontaneity of our thinking requires that it be gone through in a certain way, taken up, and connected. This action I name synthesis.... Such a synthesis is pure, if the manifold is not empirical, but is given *a priori*, as is that of space and of time."

Thus Kant recognises that space, as apprehended by us, is constructed, not given, and so by implication that the infinitude of space is a principle of apprehension, not a given intuition. But he also holds to the view that it contains a pure, and presumably infinite, manifold, given as such. In what this pure manifold consists, and how the description of it as a manifold, demanding synthesis for its apprehension, is to be reconciled with its continuity, Kant nowhere even attempts to explain. Nor does he show what the simple elements are from which the synthesis of apprehension and reproduction in pure intuition might start. The unity and multiplicity of space are, indeed, as he himself recognises, inseparably involved in one another; and recognition of this fact must render it extremely difficult to assign them to separate faculties. For the same reason it is impossible to distinguish temporally, as Kant so frequently does, the processes of synthesis and of analysis, making the former in all cases precede the latter in time. The very nature of space and time, and, as he came to recognise, the very nature of all Ideas of reason, in so far as they involve the notion of the unconditioned, conflict with such a view.

Even when Kant is dealing with space as a principle of synthesis, he speaks with no very certain voice. In the *Analytic* it is ascribed to the co-operation of sensibility and understanding. In the *Dialectic* it is, by implication, ascribed to Reason; and in the *Metaphysical First Principles* it is explicitly so ascribed.

"Absolute space cannot be object of experience; for space without matter is no object of perception, and yet it is a necessary conception of Reason, and therefore nothing but a mere Idea." "Absolute space is not necessary as a conception of an actual object, but as an Idea which can serve as rule...."

Kant's teaching in the *Critique of Judgment* is a further development of this position.

"The mind listens to the voice of Reason which, for every given magnitude — even for those that can never be entirely apprehended, although (in sensible representation) they are judged as entirely given — requires totality.... It does not even except the infinite (space and past time) from this requirement; on the contrary, it renders it unavoidable to think the infinite (in the judgment of common reason) as *entirely given* (in its totality). But the infinite is absolutely (not merely comparatively) great. Compared with it everything else (of the same kind of magnitudes) is small. But what is most important is that the mere ability to think it as *a whole* indicates a faculty of mind which surpasses every standard of sense.... The *bare capability of thinking* the given infinite without contradiction requires in the human mind a faculty itself supersensible. For it is only by means of this faculty and its Idea of a noumenon ... that the infinite of the world of sense, in the pure intellectual estimation of magnitude, can be *completely* comprehended *under* one concept.... Nature is, therefore, sublime in those of its phenomena, whose intuition brings with it the Idea of its infinity.... For just as imagination and *understanding,* in judging of the beautiful, generate a subjective purposiveness of the mental powers by means of their harmony, so imagination and *Reason* do so by means of their conflict."

Kant has here departed very far indeed from the position of the *Aesthetic*.

THE TRANSCENDENTAL AESTHETIC

SECTION I

SPACE

METAPHYSICAL EXPOSITION OF THE CONCEPTION OF SPACE

Space: First Argument.— “Space is not an empirical concept (*Begriff*) which has been abstracted from outer experiences. For in order that certain sensations be related to something outside me (*i.e.* to something in another region of space from that in which I find myself), and similarly in order that I may be able to represent them as outside [and *alongside*] one another, and accordingly as not only [qualitatively] different but as in different places, the representation of space must be presupposed (*muss schon zum Grunde liegen*). The representation of space cannot, therefore, be empirically obtained at second-hand from the relations of outer appearance. This outer experience is itself possible at all only through that representation.”

The first sentence states the thesis of the argument: *space is not an empirical concept abstracted from outer experiences*. The use of the term *Begriff* in the title of the section, and also in this sentence, is an instance of the looseness with which Kant employs his terms. It is here synonymous with the term representation (*Vorstellung*), which covers intuitions as well as general or discursive concepts. Consequently, the contradiction is only verbal, not real, when Kant proceeds to prove that the concept of space is an intuition, not a concept. But this double employment of the term is none the less misleading. When Kant employs it in a strict sense, it signifies solely the general class concept. All true concepts are for Kant of that single type. He has not re-defined the term concept in any manner which would render it applicable to the relational categories. For unfortunately, and very strangely, he never seems to have raised the question whether categories are not also concepts. The application to the forms of understanding of the separate title categories seems to have contented him. Much that is obscure and even contradictory in his teaching might have been prevented had he recognised that the term concept is a generic title which includes, as its sub-species, both general notions and relational categories.

Kant’s limitation of the term concept to the merely generic, and his consequent equating of the categorical proposition with the assertion of the substance-attribute relation, would seem in large part to be traceable to his desire to preserve for himself, in the pioneer labours of his Critical enquiries, the guiding clues of the distinctions drawn in the traditional logic. Kant insists on holding to them, at least in outward appearance, at whatever sacrifice of strict consistency. Critical doctrine is made to conform to the exigencies of an artificial framework, with which its own tenets are only in very imperfect harmony. Appreciation of the ramifying influence, and, as regards the detail of exposition, of the far-reaching consequences, of this desire to conform to the time-honoured rubrics, is indeed an indispensable preliminary to any adequate estimate whether of the strength or of the defects of the Critical doctrines. As a separate and ever-present influence in the determining of Kant’s teaching, this factor may conveniently and compendiously be entitled Kant’s logical *architectonic*. We shall have frequent occasion to observe its effects.

The second sentence gives expression to the fact through which Kant proves his thesis. Certain sensations, those of the special senses as distinguished from the organic sensations, are related to

something which stands in a different region of space from the embodied self, and consequently are apprehended as differing from one another not only in quality but also in spatial position. As is proved later in the *Analytic*, thought plays an indispensable part in constituting this reference of sensations to objects. Kant here, however, makes no mention of this further complication. He postulates, as he may legitimately do at this stage, the fact that our sensations are thus objectively interpreted, and limits his enquiry to the spatial factor. Now the argument, as Vaihinger justly points out, hinges upon the assumption which Kant has already embodied in his definition of the "form" of sense, viz. that sensations are non-spatial, purely qualitative. Though this is an assumption of which Kant nowhere attempts to give proof, it serves none the less as an unquestioned premiss from which he draws all-important conclusions. This first argument on space derives its force entirely from it.

The proof that the representation of space is non-empirical may therefore be explicitly stated as follows. As sensations are non-spatial and differ only qualitatively, the representation of space must have been added to them. And not being supplied by the given sensations, it must, as the only alternative, have been contributed by the mind. The representation of space, so far from being derived from external experience, is what first renders it possible. As a subjective form that lies ready in the mind, it precedes experience and co-operates in generating it. This proof of the apriority of space is thus proof of the priority of the *representation* of space to every empirical perception.

In thus interpreting Kant's argument as proving more than the thesis of the first sentence claims, we are certainly reading into the proof more than Kant has himself given full expression to. But, as is clearly shown by the argument of the next section, we are only stating what Kant actually takes the argument as having proved, namely, that the representation of space is not only non-empirical but is likewise of subjective origin and precedes experience in temporal fashion.

The point of view which underlies and inspires the argument can be defined even more precisely. Kant's conclusion may be interpreted in either of two ways. The form of space may precede experience only as a potentiality. Existing as a power of co-ordination, it will come to consciousness only indirectly through the addition which it makes to the given sensations. Though subjective in origin, it will be revealed to the mind only in and through experience. This view may indeed be reconciled with the terms of the proof. But a strictly literal interpretation of its actual wording is more in keeping with what, as we shall find, is the general trend of the *Aesthetic* as a whole. We are then confronted by a very different and extremely paradoxical view, which may well seem too naive to be accepted by the modern reader, but which we seem forced, none the less, to regard as the view actually presented in the text before us. Kant here asserts, in the most explicit manner, that the mind, in order to construe sensations in spatial terms, must already be in possession of a *representation* of space, and that it is in the light of this representation that it apprehends sensations. The conscious representation of space precedes in time external experience. Such, then, would seem to be Kant's first argument on space. It seeks to establish a negative conclusion, viz. that space is not derived from experience. But, in so doing, it also yields a positive psychological explanation of its origin.

Those commentators who refuse to recognise that Kant's problem is in any degree psychological, or that Kant himself so regards it, and who consequently seek to interpret the *Aesthetic* from the point of view of certain portions of the *Analytic*, give a very different statement of this first argument. They state it in purely logical terms. Its problem, they claim, is not that of determining the origin of our representation of space, but only its logical relation to our specific sense-experiences. The notion of space in general precedes, as an indispensable logical presupposition, all particular specification of the space relation. Consciousness of space as a whole is not constructed from consciousness of partial spaces; on the contrary, the latter is only possible in and through the former.

Such an argument does of course represent a valuable truth; and it alone harmonises with much in Kant's maturer teaching; but we must not therefore conclude that it is also the teaching of the *Aesthetic*.

The *Critique* contains too great a variety of tendencies, too rich a complexity of issues, to allow of such simplification. It loses more than it gains by such rigorous pruning of the luxuriant secondary tendencies of its exposition and thought. And above all, this procedure involves the adoption by the commentator of impossible responsibilities, those of deciding what is essential and valuable in Kant's thought and what is irrelevant. The value and suggestiveness of Kant's philosophy largely consist in his sincere appreciation of conflicting tendencies, and in his persistent attempt to reduce them to unity with the least possible sacrifice. But in any case the logical interpretation misrepresents this particular argument. Kant is not here distinguishing between space in general and its specific modifications. He is maintaining that no space relation can be revealed in sensation. It is not only that the apprehension of any limited space presupposes the representation of space as a whole. Both partial and infinite space are of mental origin; sensation, as such, is non-spatial, purely subjective. And lastly, the fact that Kant means to assert that space is not only logically presupposed but is subjectively generated, is sufficiently borne out by his frequent employment elsewhere in the *Aesthetic* of such phrases as "the subjective condition of sensibility," "lying ready in our minds," and "necessarily preceding [as the form of the subject's receptivity] all intuitions of objects."

Second Argument. — Having proved by the first argument that the representation of space is not of empirical origin, Kant in the second argument proceeds to establish the positive conclusion that it is *a priori*. The proof, when all its assumptions are rendered explicit, runs as follows. *Thesis*: Space is a necessary representation, and consequently is *a priori*. *Proof*: It is impossible to imagine the absence of space, though it is possible to imagine it as existing without objects to fill it. A representation which it is impossible for the mind to be without is a necessary representation. But necessity is one of the two criteria of the *a priori*. The proof of the necessary character of space is therefore also a proof of its being *a priori*.

The argument, more freely stated, is that what is empirically given from without can be thought away, and that since space cannot be thus eliminated, it must be grounded in our subjective organisation, *i.e.* must be psychologically *a priori*. The argument, as stated by Kant, emphasises the apriority, not the subjectivity, of space, but none the less the asserted apriority is psychological, not logical in character. For the criterion employed is not the impossibility of thinking otherwise, but our incapacity to represent this specific element as absent. The ground upon which the whole argument is made to rest is the merely brute fact (asserted by Kant) of our incapacity to think except in terms of space.

The argument is, however, complicated by the drawing of a further consequence, which follows as a corollary from the main conclusion. From the subjective necessity of space follows its objective necessity. Space being necessary *a priori*, objects can only be apprehended in and through it. Consequently it is not dependent upon the objects apprehended, but itself underlies outer appearances as the condition of their possibility. This corollary is closely akin to the first argument on space, and differs from it only in orientation. The first argument has a psychological purpose. It maintains that the representation of space precedes external experience, causally conditioning it. The corollary has a more objective aim. It concludes that space is a necessary constituent of the external experience thus generated. The one proves that space is a necessary *subjective antecedent*; the other that it is a necessary *objective ingredient*.

To consider the proof in detail. The exact words which Kant employs in stating the *nervus probandi* of the argument are that we can never *represent* (*eine Vorstellung davon machen*) space as non-existent, though we can very well *think* (*denken*) it as being empty of objects. The terms *Vorstellung* and *denken* are vague and misleading. Kant himself recognises that it is possible to conceive that there are beings who intuit objects in some other manner than in space. He cannot therefore mean that we are unable to *think* or *conceive* space as non-existent. He must mean that we cannot in imagination intuit it as absent. It is the necessary form of all our intuitions, and therefore also of imagination, which is intuitive in character. Our consciousness is dependent upon given intuitions for its whole content, and to that extent

space is a form with which the mind can never by any possibility dispense. Pure thought enables it to realise this *de facto* limitation, but not to break free from it. Even in admitting the possibility of other beings who are not thus constituted, the mind still recognises its own ineluctable limitations.

Kant offers no proof of his assertion that space can be intuited in image as empty of all sensible content; and as a matter of fact the assertion is false. Doubtless the use of the vague term *Vorstellung* is in great part responsible for Kant's mistaken position. So long as imagination and thought are not clearly distinguished, the assertion is correspondingly indefinite. Pure space may possibly be *conceived*, but it can also be conceived as altogether non-existent. If, on the other hand, our imaginative power is alone in question, the asserted fact must be categorically denied. With the elimination of all sensible content space itself ceases to be a possible image. Kant's proof thus rests upon a misstatement of fact.

In a second respect Kant's proof is open to criticism. He takes the impossibility of imagining space as absent as proof that it originates from within. The argument is valid only if no other psychological explanation can be given of this necessity, as for instance through indissoluble association or through its being an invariable element in the given sensations. Kant's ignoring of these possibilities is due to his unquestioning belief that sensations are non-spatial, purely qualitative. That is a presupposition whose truth is necessary to the cogency of the argument.

Third Argument. — This argument, which was omitted in the second edition, will be considered in its connection with the transcendental exposition into which it was then merged.

Fourth (in second edition, Third) Argument. — The next two arguments seek to show that space is not a discursive or general concept but an intuition. The first proof falls into two parts, (*a*) We can represent only a single space. For though we speak of many spaces, we mean only parts of one and the same single space. Space must therefore be an intuition. For only intuition is thus directly related to a single individual. A concept always refers indirectly, *per notas communes*, to a plurality of individuals. (*b*) The parts of space cannot precede the one all-comprehensive space. They can be thought only in and through it. They arise through limitation of it. Now the parts (*i.e.* the attributes) which compose a concept precede it in thought. Through combination of them the concept is formed. Space cannot, therefore, be a concept. Consequently it must, as the only remaining alternative, be an intuition. Only in an intuition does the whole precede the parts. In a concept the parts always precede the whole. Intuition stands for multiplicity in unity, conception for unity in multiplicity.

The first part of the argument refers to the extension, the second part to the intension of the space representation. In both aspects it appears as intuitional.

Kant, in repeating his thesis as a conclusion from the above grounds, confuses the reader by an addition which is not strictly relevant to the argument, viz. by the statement that this intuition must be non-empirical and *a priori*. This is simply a recapitulation of what has been established in the preceding proofs. It is not, as might at first sight appear, part of the conclusion established by the argument under consideration. The reader is the more apt to be misled owing to the fact that very obviously arguments for the non-empirical and for the *a priori* character of space *can* be derived from proof (*b*). That space is non-empirical would follow from the fact that representation of space as a whole is necessary for the apprehension of any part of it. Empirical intuition can only yield the apprehension of a limited space. The apprehension of the comprehensive space within which it falls must therefore be non-empirical.

"As we intuitively apprehend (*anschauend erkennen*) not only the space of the object which affects our senses, but the whole space, space cannot arise out of the actual affection of the senses, but must precede it in time (*vor ihr vorhergehen*)."

But in spite of its forcibleness this argument is nowhere presented in the *Critique*.

Similarly, in so far as particular spaces can be conceived only in and through space as a whole, and in so far as the former are limitations of the one antecedent space, the intuition which underlies all external perception must be *a priori*. This is in essentials a stronger and more cogent mode of formulating the

second argument on space. But again, and very strangely, it is nowhere employed by Kant in this form.

The concluding sentence, ambiguously introduced by the words *so werden auch*, is tacked on to the preceding argument. Interpreted in the light of § 15 C of the *Dissertation*, and of the corresponding fourth argument on time, it may be taken as offering further proof that space is an intuition. The concepts of line and triangle, however attentively contemplated, will never reveal the proposition that in every triangle two sides taken together are greater than the third. An *a priori* intuition will alone account for such apodictic knowledge. This concluding sentence thus really belongs to the transcendental exposition; and as such ought, like the third argument, to have been omitted in the second edition.

Kant's proof rests on the assumption that there are only two kinds of representation, intuitions and concepts, and also in equal degree upon the further assumption that all concepts are of one and the same type. Intuition is, for Kant, the apprehension of an individual. Conception is always the representation of a class or genus. Intuition is immediately related to the individual. Conception is reflective or discursive; it apprehends a plurality of objects indirectly through the representation of those marks which are common to them all. Intuition and conception having been defined in this manner, the proof that space is single or individual, and that in it the whole precedes the parts, is proof conclusive that it is an intuition, not a conception. Owing, however, to the narrowness of the field assigned to conception, the realm occupied by intuition is proportionately wide, and the conclusion is not as definite and as important as might at first sight appear. By itself, it amounts merely to the statement, which no one need challenge, that space is not a generic class concept. Incidentally certain unique characteristics of space are, indeed, forcibly illustrated; but the implied conclusion that space on account of these characteristics must belong to receptivity, not to understanding, does not by any means follow. It has not, for instance, been proved that space and time are radically distinct from the categories, *i.e.* from the relational forms of understanding.

In 1770, while Kant still held to the metaphysical validity of the pure forms of thought, the many difficulties which result from the ascription of independent reality to space and time were, doubtless, a sufficient reason for regarding the latter as subjective and sensuous. But upon adoption of the Critical standpoint such argument is no longer valid. If all our forms of thought may be subjective, the existence of antinomies has no real bearing upon the question whether space and time do or do not have a different constitution and a different mental origin from the categories. The antinomies, that is to say, may perhaps suffice to prove that space and time are subjective; they certainly do not establish their sensuous character.

But though persistence of the older, un-Critical opposition between the intellectual and the sensuous was partly responsible for Kant's readiness to regard as radical the very obvious differences between a category such as that of substance and attribute and the visual or tactual extendedness with which objects are endowed, it can hardly be viewed as the really decisive influence. That would rather seem to be traceable to Kant's conviction that mathematical knowledge is unique both in fruitfulness and in certainty, and to his further belief that it owes this distinction to the *content* character of the *a priori* forms upon which it rests. For though the categories of the physical sciences are likewise *a priori*, they are exclusively *relational*, and serve only to organise a material that is empirically given. To account for the superiority of mathematical knowledge Kant accordingly felt constrained to regard space and time as not merely *forms* in terms of which we interpret the matter of sense, but as also themselves intuited *objects*, and as therefore possessing a character altogether different from anything which can be ascribed to the pure understanding. The opposition between forms of sense and categories of the understanding, in the strict Kantian mode of envisaging that opposition, is thus inseparably bound up with Kant's doctrine of space and time as being not only forms of intuition, but as also in their purity and independence themselves intuitions. *Even the sensuous subject matter of pure mathematics* — so Kant would seem to contend — *is* a priori *in nature*. If this latter view be questioned — and to the modern reader it is indeed a stone of stumbling — much of the teaching of the *Aesthetic* will have to be modified or at least restated.

Fifth (in second edition, Fourth) Argument. — This argument is quite differently stated in the two editions of the *Critique*, though the purpose of the argument is again in both cases to prove that space is an intuition, not a general concept. In the first edition this is proved by reference to the fact that space is given as an infinite magnitude. This characteristic of our space representation cannot be accounted for so long as it is regarded as a concept. A general conception of space which would abstract out those properties and relations which are common to all spaces, to a foot as well as to an ell, could not possibly determine anything in regard to magnitude. For since spaces differ in magnitude, any one magnitude cannot be a common quality. Space is, however, given us as determined in magnitude, namely, as being of infinite magnitude; and if a general conception of space relations cannot determine magnitude, still less can it determine infinite magnitude. Such infinity must be derived from limitlessness in the progression of intuition. Our conceptual representations of infinite magnitude must be derivative products, acquired from this intuitive source.

In the argument of the second edition the thesis is again established by reference to the infinity of space. But in all other respects the argument differs from that of the first edition. A general conception, which abstracts out common qualities from a plurality of particulars, contains an infinite number of possible different representations *under* it; but it cannot be thought as containing an infinite number of representations *in* it. Space must, however, be thought in this latter manner, for it contains an infinite number of coexisting parts. Since, then, space cannot be a concept, it must be an intuition.

The definiteness of this conclusion is somewhat obscured by the further characterisation of the intuition of space as *a priori*, and by the statement that it is the *original* (*ursprüngliche*) representation which is of this intuitive nature. The first addition must here, again, just as in the fourth argument, be regarded as merely a recapitulation of what has already been established, not a conclusion from the present argument. The introduction of the word ‘original’ seems to be part of Kant’s reply to the objections which had already been made to his admission in the first edition that there is a conception as well as an intuition of space. It is the *original given intuition* of space which renders such reflective conception possible.

The chief difficulty of these proofs arises out of the assertion which they seem to involve that space is given as actually infinite. There are apparently, on this point, two views in Kant, which were retained up to the very last, and which are closely connected with his two representations of space, on the one hand as a *formal intuition* given in its purity and in its completeness, and on the other hand as the *form of intuition*, which exists only so far as it is constructed, and which is dependent for its content upon given matter.

Third Argument, and Transcendental Exposition of Space. — The distinction between the metaphysical and the transcendental expositions, introduced in the second edition of the *Critique*, is one which Kant seems to have first made clear to himself in the process of writing the *Prolegomena*. It is a genuine improvement, marking an important distinction. It separates out two comparatively independent lines of argument. The terms in which the distinction is stated are not, however, felicitous. Kant’s reason for adopting the title metaphysical is indicated in the *Prolegomena*:

“As concerns the sources of metaphysical cognition, its very concept implies that they cannot be empirical.... For it must not be physical but metaphysical knowledge, *i.e.* knowledge lying beyond experience.... It is therefore *a priori* knowledge, coming from pure understanding and pure Reason.”

The metaphysical exposition, it would therefore seem, is so entitled because it professes to prove that space is *a priori*, not empirical, and to do so by analysis of its concept. Now by Kant’s own definition of the term transcendental, as the theory of the *a priori*, this exposition might equally well have been named the transcendental exposition. In any case it is an essential and chief part of the *Transcendental Aesthetic*. Such division of the *Transcendental Aesthetic* into a metaphysical and a transcendental part involves a twofold use, wider and narrower, of one and the same term. Only as descriptive of the whole *Aesthetic* is transcendental employed in the sense defined.

Exposition (*Erörterung*, Lat. *expositio*) is Kant's substitute for the more ordinary term definition. Definition is the term which we should naturally have expected; but as Kant holds that no given concept, whether *a priori* or empirical, can be defined in the strict sense, the substitutes the term exposition, using it to signify such definition of the nature of space as is possible to us. To complete the parallelism Kant speaks of the transcendental enquiry as also an exposition. It is, however, in no sense a definition. Kant's terms here, as so often elsewhere, are employed in a more or less arbitrary and extremely inexact manner.

The distinction between the two expositions is taken by Kant as follows. The metaphysical exposition determines the nature of the concept of space, and shows it to be a given *a priori* intuition. The transcendental exposition shows how space, when viewed in this manner, renders comprehensible the possibility of synthetic *a priori* knowledge.

The omission of the third argument on space from the second edition, and its incorporation into the new transcendental exposition, is certainly an improvement. In its location in the first edition, it breaks in upon the continuity of Kant's argument without in any way contributing to the further definition of the concept of space. Also, in emphasising that mathematical knowledge depends upon the *construction* of concepts, Kant presupposes that space is intuitional; and that has not yet been established.

The argument follows the strict, rigorous, synthetic method. From the already demonstrated *a priori* character of space, Kant deduces the apodictic certainty of all geometrical principles. But though the paragraph thus expounds a consequence that follows from the *a priori* character of space, not an argument in support of it, something in the nature of an argument is none the less implied. The fact that this view of the representation of space alone renders mathematical science possible can be taken as confirming this interpretation of its nature. Such an argument, though circular, is none the less cogent. Consideration of Kant's further statements, that were space known in a merely empirical manner we could not be sure that in all cases only one straight line is possible between two points, or that space will always be found to have three dimensions, must meantime be deferred.

In the new transcendental exposition Kant adopts the analytic method of the *Prolegomena*, and accordingly presents his argument in independence of the results already established. He starts from the assumption of the admitted validity of geometry, as being a body of synthetic *a priori* knowledge. Yet this, as we have already noted, does not invalidate the argument; in both the first and the last paragraphs it is implied that the *a priori* and intuitive characteristics of space have already been proved. From the synthetic character of geometrical propositions Kant argues that space must be an intuition. Through pure concepts no synthetic knowledge is possible. Then from the apodictic character of geometry he infers that space exists in us as pure and *a priori*; no experience can ever reveal necessity. But geometry also exists as an applied science; and to account for our power of anticipating experience, we must view space as existing only in the perceiving subject as the form of its sensibility. If it precedes objects as the necessary subjective condition of their apprehension, we can to that extent predetermine the conditions of their existence.

In the concluding paragraph Kant says that this is the only explanation which can be given of the possibility of geometry. He does not distinguish between pure and applied geometry, though the proof which he has given of each differs in a fundamental respect. Pure geometry presupposes only that space is an *a priori* intuition; applied geometry demands that space be conceived as the *a priori* form of external sense. Only in reference to applied geometry does the Critical problem arise: — viz. how we can form synthetic judgments *a priori* which yet are valid of objects; or, in other words, how judgments based upon a subjective form can be objectively valid. But any attempt, at this point, to define the nature and possibility of applied geometry must anticipate a result which is first established in *Conclusion b*. Though, therefore, the substitution of this transcendental exposition for the third space argument is a decided improvement, Kant, in extending it so as to cover applied as well as pure mathematics, overlooks the real sequence of his argument in the first edition. The employment of the analytic method, breaking in,

as it does, upon the synthetic development of Kant's original argument, is a further irregularity.

It may be noted that in the third paragraph Kant takes the fact that geometry can be applied to objects as proof of the subjectivity of space. He refuses to recognise the possibility that space may be subjective as a form of receptivity, and yet also be a mode in which things in themselves exist. This, as regards its conclusion, though not as regards its argument, is therefore an anticipation of *Conclusion a*. In the last paragraph Kant is probably referring to the views both of Leibniz and of Berkeley.

CONCLUSIONS FROM THE ABOVE CONCEPTS

Conclusion a. — *Thesis*: Space is not a property of things in themselves, nor a relation of them to one another. Proof: The properties of things in themselves can never be intuited prior to their existence, *i.e. a priori*. Space, as already proved, is intuited in this manner. In other words, the apriority of space is by itself sufficient proof of its subjectivity.

This argument has been the subject of a prolonged controversy between Trendelenburg and Kuno Fischer. Trendelenburg was able to prove his main point, namely, that the above argument is quite inconclusive. Kant recognises only two alternatives, either space as objective is known *a posteriori*, or being an *a priori* representation it is subjective in origin. There exists a third alternative, namely, that though our intuition of space is subjective in origin, space is itself an inherent property of things in themselves. The central thesis of the rationalist philosophy of the Enlightenment was, indeed, that the independently real can be known by *a priori* thinking. Even granting the validity of Kant's later conclusion, first drawn in the next paragraph, that space is the subjective form of all external intuition, that would only prove that it does not belong to *appearances*, prior to our apprehension of them; nothing is thereby proved in regard to the character of things in themselves. We anticipate by *a priori* reasoning only the nature of appearances, never the constitution of things in themselves. Therefore space, even though *a priori*, may belong to the independently real. The above argument cannot prove the given thesis.

Vaihinger contends that the reason why Kant does not even attempt to argue in support of the principle, that the *a priori* must be purely subjective, is that he accepts it as self-evident. This explanation does not, however, seem satisfactory. But Vaihinger supplies the data for modification of his own assertion. It was, it would seem, the existence of the antinomies which first and chiefly led Kant to assert the subjectivity of space and time. For as he then believed that a satisfactory solution of the antinomies is possible only on the assumption of the subjectivity of space and time, he regarded their subjectivity as being conclusively established, and accordingly failed to examine with sufficient care the validity of his additional proof from their apriority. This would seem to be confirmed by the fact that when later, in reply to criticisms of the arguments of the first edition, he so far modified his position as to offer reasons in support of the above general principle, even then he nowhere discussed the principle in reference to the forms of sense. All his discussions concern only the possible independent reality of the forms of thought. To the very last Kant would seem to have regarded the above argument as an independent, and by itself a sufficient, proof of the subjectivity of space.

The refutation of Trendelenburg's argument which is offered by Caird is inconclusive. Caird assumes the chief point at issue, first by ignoring the possibility that space may be known *a priori* in reference to appearances and yet at the same time be transcendently real; and secondly by ignoring the fact that to deny spatial properties to things in themselves is as great a violation of Critical principles as to assert them. One point, however, in Caird's reply to Trendelenburg calls for special consideration, viz. Caird's contention that Kant did actually take account of the third alternative, rejecting it as involving the "absurd" hypothesis of a pre-established harmony. Undoubtedly Kant did so. But the contention has no relevancy to the point before us. The doctrine of pre-established harmony is a metaphysical theory which presupposes the possibility of gaining knowledge of things in themselves. For that reason alone Kant was

bound to reject it. A metaphysical proof of the validity of metaphysical judgments is, from the Critical point of view, a contradiction in terms. As the validity of *all* speculations is in doubt, a proof which is speculative cannot meet our difficulties. And also, as Kant himself further points out, the pre-established harmony, even if granted, can afford no solution of the Critical problem how *a priori* judgments can be passed upon the independently real. The judgments, thus guaranteed, could only possess *de facto* validity; we could never be assured of their necessity. It is chiefly in these two inabilities that Kant locates the "absurdity" of a theory of pre-established harmony. The refutation of that theory does not, therefore, amount to a disproof of the possibility which we are here considering.

Conclusion b. — The next paragraph maintains two theses: (*a*) that space is the form of all outer intuition; (*b*) that this fact explains what is otherwise entirely inexplicable and paradoxical, namely, that we can make *a priori* judgments which yet apply to the objects experienced. The first thesis, that the pure intuition of space is only conceivable as the form of appearances of outer sense, is propounded in the opening sentence without argument and even without citation of grounds. The statement thus suddenly made is not anticipated save by the opening sentences of the section on space. It is an essentially new doctrine. Hitherto Kant has spoken of space only as an *a priori* intuition. The further assertion that as such it must necessarily be conceived as the form of outer sense (*i.e.* not only as a formal intuition but also as a form of intuition), calls for the most definite and explicit proof. None, however, is given. It is really a conclusion from points all too briefly cited by Kant in the general *Introduction*, namely, from his distinction between the matter and the form of sense. The assertions there made, in a somewhat casual manner, are here, without notification to the reader, employed as premisses to ground the above assertion. His thesis is not, therefore, as by its face value it would seem to profess to be, an inference from the points established in the preceding expositions. It interprets these conclusions in the light of points considered in the *Introduction*; and thereby arrives at a new and all-important interpretation of the nature of the *a priori* intuition of space.

The second thesis employs the first to explain how prior to all experience we can determine the relations of objects. Since (*a*) space is merely the form of outer sense, and (*b*) accordingly exists in the mind prior to all empirical intuition, all appearances must exist in space, and we can predetermine them from the pure intuition of space that is given to us *a priori*. Space, when thus viewed as the *a priori* form of outer sense, renders comprehensible the validity of applied mathematics.

As we have already noted, Kant in the second edition obscures the sequence of his argument by offering in the new transcendental exposition a justification of applied as well as of pure geometry. In so doing he anticipates the conclusion which is first drawn in this later paragraph. This would have been avoided had Kant given two separate transcendental expositions. First, an exposition of pure mathematics, placed immediately after the metaphysical exposition; for pure mathematics is exclusively based upon the results of the metaphysical exposition. And secondly, an exposition of applied mathematics, introduced after *Conclusion b*. The explanation of applied geometry is really the more essential and central of the two, as it alone involves the truly Critical problem, how judgments formed *a priori* can yet apply to objects. *Conclusion b* constitutes, as Vaihinger rightly insists, the very heart of the *Aesthetic*. The arrangement of Kant's argument diverts the reader's attention from where it ought properly to centre.

The use which Kant makes of the *Prolegomena* in his statement of the new transcendental exposition is one cause of the confusion. The exposition is a brief summary of the corresponding *Prolegomena* sections. In introducing this summary into the *Critique* Kant overlooked the fact that in referring to applied mathematics he is anticipating a point first established in *Conclusion b*. The real cause, however, of the trouble is common to both editions, namely Kant's failure clearly to appreciate the fundamental distinction between the view that space is an *a priori* intuition and the view that it is the *a priori* form of all external intuition, *i.e.* of outer sense. He does not seem to have fully realised how very different are those two views. In consequence of this he fails to distinguish between the transcendental expositions of

pure and applied geometry.

Third paragraph. — Kant proceeds to develop the subjectivist conclusions which follow from *a* and *b*.

"We may say that space contains all things which can appear to us externally, but not all things in themselves, whether intuited or not, nor again all things intuited by any and every subject."

This sentence makes two assertions: (*a*) space does not belong to things in and by themselves; (*b*) space is not a necessary form of intuition for all subjects whatsoever.

The grounds for the former assertion are not here considered, and that is doubtless the reason why the *oder nicht* is excised in Kant's private copy of the *Critique*. As we have seen, Kant does not anywhere in the *Aesthetic* even attempt to offer argument in support of this assertion. In defence of (*a*) Kant propounds for the first time the view of sensibility as a limitation. Space is a limiting condition to which human intuition is subject. Whether the intuitions of other thinking beings are subject to the same limitation, we have no means of deciding. But for all human beings, Kant implies, the same conditions must hold universally.

In the phrase "transcendental ideality of space" Kant, it may be noted, takes the term ideality as signifying subjectivity, and the term transcendental as equivalent to transcendent. He is stating that judged from a *transcendent* point of view, *i.e.* from the point of view of the thing in itself, space has a merely subjective or "empirical" reality. This is an instance of Kant's careless use of the term transcendental. Space is empirically real, but taken *transcendently*, is merely ideal.

KANT'S ATTITUDE TO THE PROBLEMS OF MODERN GEOMETRY

This is an appropriate point at which to consider the consistency of Kant's teaching with modern developments in geometry. Kant's attitude has very frequently been misrepresented. As he here states, he is willing to recognise that the forms of intuition possessed by other races of finite beings may not coincide with those of the human species. But in so doing he does not mean to assert the possibility of other *spatial* forms, *i.e.* of spaces that are non-Euclidean. In his pre-Critical period Kant had indeed attempted to deduce the three-dimensional character of space as a consequence of the law of gravitation; and recognising that that law is in itself arbitrary, he concluded that God might, by establishing different relations of gravitation, have given rise to spaces of different properties and dimensions.

"A science of all these possible kinds of space would undoubtedly be the highest enterprise which a finite understanding could undertake in the field of geometry."

But from the time of Kant's adoption, in 1770, of the Critical view of space as being the universal form of our outer sense, he seems to have definitely rejected all such possibilities. Space, to be space at all, must be Euclidean; the uniformity of space is a presupposition of the *a priori* certainty of geometrical science. One of the criticisms which in the *Dissertation* he passes upon the empirical view of mathematical science is that it would leave open the possibility that "a space may some time be discovered endowed with other fundamental properties, or even perhaps that we may happen upon a two-sided rectilinear figure." This is the argument which reappears in the third argument on space in the first edition of the *Critique*. The same examples are employed with a somewhat different wording.

"It would not even be necessary that there should be only one straight line between two points, though experience invariably shows this to be so. What is derived from experience has only comparative universality, namely, that which is obtained through induction. We should therefore only be able to say that, so far as hitherto observed, no space has been found which has more than three dimensions."

But that Kant should have failed to recognise the possibility of other spaces does not by itself point to any serious defect in his position. There is no essential difficulty in reconciling the recognition of such spaces with his fundamental teaching. He admits that other races of finite beings may perhaps intuit through *non-spatial* forms of sensibility; he might quite well have recognised that those other forms of

intuition, though not Euclidean, are still spatial. It is in another and more vital respect that Kant's teaching lies open to criticism. Kant is convinced that space is given to us in intuition as being definitely and irrevocably Euclidean in character. Both our intuition and our thinking, when we reflect upon space, are, he implies, bound down to, and limited by, the conditions of Euclidean space. And it is in this positive assumption, and not merely in his ignoring of the possibility of other spaces, that he comes into conflict with the teaching of modern geometry. For in making the above assumption Kant is asserting that we definitely know physical space to be three-dimensional, and that by no elaboration of concepts can we so remodel it in thought that the axiom of parallels will cease to hold. Euclidean space, Kant implies, is *given* to us as an unyielding form that rigidly resists all attempts at conceptual reconstruction. Being quite independent of thought and being given as complete, it has no inchoate plasticity of which thought might take advantage. The modern geometer is not, however, prepared to admit that *intuitional* space has any definiteness or preciseness of nature apart from the concepts through which it is apprehended; and he therefore allows, as at least possible, that upon clarification of our concepts space may be discovered to be radically different from what it at first sight appears to be. In any case, the perfecting of the concepts must have some effect upon their object. But even — as the modern geometer further maintains — should our space be definitely proved, upon analytic and empirical investigation, to be Euclidean in character, other possibilities will still remain open for speculative thought. For though the nature of our intuitional data may constrain us to interpret them through one set of concepts rather than through another, the competing sets of alternative concepts will represent genuine possibilities beyond what the actual is found to embody.

Thus the defect of Kant's teaching, in regard to space, as judged in the light of the later teaching of geometrical science, is closely bound up with his untenable isolation of the *a priori* of sensibility from the *a priori* of understanding. Space, being thus viewed as independent of thought, has to be regarded as limiting and restricting thought by the unalterable nature of its initial presentation. And unfortunately this is a position which Kant continued to hold, despite his increasing recognition of the part which concepts must play in the various mathematical sciences. In the deduction of the first edition we find him stating that synthesis of apprehension is necessary to all representation of space and time. He further recognises that all arithmetical processes are syntheses *according to concepts*. And in the *Prolegomena* there occurs the following significant passage.

"Do these laws of nature lie in space, and does the understanding learn them by merely endeavouring to find out the fruitful meaning that lies in space; or do they inhere in the understanding and in the way in which it determines space according to the conditions of the synthetical unity towards which its concepts are all directed? Space is something so uniform and as to all particular properties so indeterminate, that we should certainly not seek a store of laws of nature in it. That which determines space to the form of a circle or to the figures of a cone or a sphere, is, on the contrary, the understanding, so far as it contains the ground of the unity of these constructions. The mere universal form of intuition, called space, must therefore be the substratum of all intuitions determinable to particular objects, and in it, of course, the condition of the possibility and of the variety of these intuitions lies. But the unity of the objects is solely determined by the understanding, and indeed in accordance with conditions which are proper to the nature of the understanding...."

Obviously Kant is being driven by the spontaneous development of his own thinking towards a position much more consistent with present-day teaching, and completely at variance with the hard and fast severance between sensibility and understanding which he had formulated in the *Dissertation* and has retained in the *Aesthetic*. In the above *Prolegomena* passage a plasticity is being allowed to space, sufficient to permit of essential modification in the conceptual processes through which it is articulated. But, as I have just stated, that did not lead Kant to disavow the conclusions which he had drawn from his previous teaching.

This defect in Kant's doctrine of space, as expounded in the *Aesthetic*, indicates a further imperfection in his argument. He asserts that the form of space cannot vary from one human being to another, and that for this reason the judgments which express it are universally valid. Now, in so far as Kant's initial datum is consciousness of time, he is entirely justified in assuming that everything which can be shown to be a necessary condition of such consciousness must be uniform for all human minds. But as his argument is not that consciousness of *Euclidean* space is necessary to consciousness of time, but only that consciousness of the *permanent* in space is a required condition, he has not succeeded in showing the necessary uniformity of the human mind as regards the specific mode in which it intuits space. The permanent might still be apprehended as permanent, and therefore as yielding a possible basis for consciousness of sequence, even if it were apprehended in some four-dimensional form.

Fourth Paragraph. — The next paragraph raises one of the central problems of the *Critique*, namely, the question as to the kind of reality possessed by appearances. Are they subjective, like taste or colour? Or have they a reality at least relatively independent of the individual percipient? In other words, is Kant's position subjectivism or phenomenalism? Kant here alternates between these positions. This fourth paragraph is coloured by his phenomenalism, whereas in the immediately following fifth paragraph his subjectivism gains the upper hand. The taste of wine, he there states, is purely subjective, because dependent upon the particular constitution of the gustatory organ on which the wine acts. Similarly, colours are not properties of the objects which cause them.

"They are only modifications of the sense of sight which is affected in a certain manner by the light.... They are connected with the appearances only as effects accidentally added by the particular constitution of the sense organs."

Space, on the other hand, is a necessary constituent of the outer objects. In contrast to the subjective sensations of taste and colour, it possesses objectivity. This mode of distinguishing between space and the matter of sense implies that extended objects are not mere ideas, but are sufficiently independent to be capable of acting upon the sense organs, and of thereby generating the sensations of the secondary qualities.

Kant, it must be observed, refers only to taste and colour. He says nothing in regard to weight, impenetrability, and the like. These are revealed through sensation, and therefore on his view ought to be in exactly the same position as taste or colour. But if so, the relative independence of the extended object can hardly be maintained. Kant's distinction between space and the sense qualities cannot, indeed, be made to coincide with the Cartesian distinction between primary and secondary qualities.

A second difference, from Kant's point of view, between space and the sense qualities is that the former can be represented *a priori*, in complete separation from everything empirical, whereas the latter can only be known *a posteriori*. This, as we have seen, is a very questionable assertion. The further statement that all determinations of space can be represented in the same *a priori* fashion is even more questionable. At most the difference is only between a homogeneous subjective form yielded by outer sense and the endlessly varied and consequently unpredictable contents revealed by the special senses. The contention that the former can be known apart from the latter implies the existence of a pure manifold additional to the manifold of sense.

Fifth Paragraph. — In the next paragraph Kant emphasises the distinction between the empirical and the transcendental meanings of the term appearance. A rose, viewed *empirically*, as a thing with an intrinsic independent nature, may appear of different colour to different observers.

"The *transcendental* conception of appearances in space, on the other hand, is a Critical reminder that nothing intuited in space is a thing in itself, that space is not a form inhering in things in themselves ... and that what we call outer objects are nothing but mere representations of our sensibility, the form of which is space."

In other words, the distinction drawn in the preceding paragraph between colour as a subjective effect and space as an objective existence is no longer maintained. Kant, when thus developing his position on subjectivist lines, allows no kind of independent existence to anything in the known world. Objects as known are mere Ideas (*blosse Vorstellungen unserer Sinnlichkeit*), the sole correlate of which is the unknowable thing in itself. But even in this paragraph both tendencies find expression. "Colour, taste, etc., must not rightly be regarded as properties of things, but only as changes in the subject." This implies a threefold distinction between subjective sensations, empirical objects in space, and the thing in itself. The material world, investigated by science, is recognised as possessing a relatively independent mode of existence.

Substituted Fourth Paragraph of second edition. — In preparing the second edition Kant himself evidently felt the awkwardness of this abrupt juxtaposition of the two very different points of view; and he accordingly adopts a non-committal attitude, substituting a logical distinction for the ontological. Space yields synthetic judgments *a priori*; the sense qualities do not. Only in the concluding sentence does there emerge any definite phenomenalist implication. The sense qualities, "as they are mere sensations and not intuitions, in themselves reveal no object, least of all [an object] *a priori*." The assertion that the secondary qualities have no *ideality* implies a new and stricter use of the term ideal than we find anywhere in the first edition — a use which runs counter to Kant's own constant employment of the term. On this interpretation it is made to signify what though subjective is also *a priori*. Here, as in many of the alterations of the second edition, Kant is influenced by the desire to emphasise the points which distinguish his idealism from that of Berkeley.

THE TRANSCENDENTAL AESTHETIC

SECTION II

TIME

METAPHYSICAL EXPOSITION OF THE CONCEPTION OF TIME

Time: First Argument. — This argument is in all respects the same as the first argument on space. The thesis is that the representation of time is not of empirical origin. The proof is based on the fact that this representation must be previously given in order that the perception of coexistence or succession be possible. It also runs on all fours with the first argument in the *Dissertation*.

"*The idea of time does not originate in, but is presupposed by the senses.* When a number of things act upon the senses, it is only by means of the idea of time that they can be represented whether as simultaneous or as successive. Nor does succession generate the conception of time; but stimulates us to form it. Thus the notion of time, even if acquired through experience, is very badly defined as being a series of actual things existing one *after* another. For I can understand what the word *after* signifies only if I already know what time means. For those things are *after* one another which exist at *different* times, as those are *simultaneous* which exist at one and the same time."

Second Argument. — Kant again applies to time the argument already employed by him in dealing with space. The thesis is that time is given *a priori*. Proof is found in the fact that it cannot be thought away, *i.e.* in the fact of its subjective necessity. From this subjective necessity follows its objective necessity, so far as all appearances are concerned. In the second edition Kant added a phrase— "as the general condition of their possibility" — which is seriously misleading. The concluding sentence is thereby made to read as

if Kant were arguing from the objective necessity of time, *i.e.* from its necessity as a constituent in the appearances apprehended, to its apriority. It is indeed possible that Kant himself regarded this objective necessity of time as contributing to the proof of its apriority. But no such argument can be accepted. Time may be necessary to appearances, *once appearances are granted*. This does not, however, prove that it must therefore precede them *a priori*. This alteration in the second edition is an excellent, though unfortunate, example of Kant's invincible carelessness in the exposition of his thought. It has contributed to a misreading by Herbart and others of this and of the corresponding argument on space.

"Let us not talk of an absolute space as the presupposition of all our constructed figures. Possibility is nothing but thought, and it arises only when it is thought. Space is nothing but possibility, for it contains nothing save images of the existent; and absolute space is nothing save the abstracted general possibility of such constructions, abstracted from it after completion of the construction. The necessity of the representation of space ought never to have played any rôle in philosophy. To think away space is to think away the *possibility* of that which has been previously posited as *actual*. Obviously that is impossible, and the opposite is necessary."

Were Kant really arguing here and in the second argument on space solely from the *objective* necessity of time and space, this criticism would be unanswerable. But even taking the argument in its first edition form, as an argument from the *psychological* necessity of time, it lies open to the same objection as the argument on space. It rests upon a false statement of fact. We cannot retain time in the absence of all appearances of outer and inner sense. With the removal of the given manifold, time itself must vanish.

Fourth Argument. — This argument differs only slightly, and mainly through omissions, from the fourth of the arguments in regard to space; but a few minor points call for notice. (*a*) In the first sentence, instead of intuition, which alone is under consideration in its contrast to conception, Kant employs the phrase "pure form of intuition." (*b*) In the third sentence Kant uses the quite untenable phrase "given through a single object (*Gegenstand*)." Time is not given from without, nor is it due to an object. (*c*) The concluding sentences properly belong to the transcendental exposition. They are here introduced, not in the ambiguous manner of the fourth argument on space, but explicitly as a further argument in proof of the intuitive character of time. The synthetic proposition which Kant cites is taken neither from the science of motion nor from arithmetic. It expresses the nature of time itself, and for that reason is immediately contained in the intuition of time.

Fifth Argument. — This argument differs fundamentally from the corresponding argument on space, whether of the first or of the second edition, and must therefore be independently analysed. The thesis is again that time is an intuition. Proof is derived from the fact that time is a representation in which the parts arise only through limitation, and in which, therefore, the whole must precede the parts. The original (*ursprüngliche*) time-representation, *i.e.* the fundamental representation through limitation of which the parts arise as secondary products, must be an intuition.

To this argument Kant makes two explanatory additions. (*a*) As particular times arise through limitation of one single time, time must in its original intuition be given as infinite, *i.e.* as unlimited. The infinitude of time is not, therefore, as might seem to be implied by the prominence given to it, and by analogy with the final arguments of both the first and the second edition, a part of the proof that it is an intuition, but only a consequence of the feature by which its intuitive character is independently established. The unwary reader, having in mind the corresponding argument on space, is almost inevitably misled. All reference to infinitude could, so far as this argument is concerned, have been omitted. The mode in which the argument opens seems indeed to indicate that Kant was not himself altogether clear as to the cross-relations between the arguments on space and time respectively. The real parallel to this argument is to be found in the second part of the fourth argument on space. That part was omitted by Kant in his fourth argument on time, and is here developed into a separate argument. This is, of course, a further cause of confusion to the reader, who is not prepared for such arbitrary rearrangement. Indeed it is not surprising

to find that when Kant became the reader of his own work, in preparing it for the second edition, he was himself misled by the intricate perversity of his exposition. In re-reading the argument he seems to have forgotten that it represents the second part of the fourth argument on space. Interpreting it in the light of the fifth argument on space which he had been recasting for the second edition, it seemed to him possible, by a slight alteration, to bring this argument on time into line with that new proof. This unfortunately results in the perverting of the entire paragraph. The argument demands an opposition between intuition in which the whole precedes the parts, and conception in which the parts precede the whole. In order to bring the opposition into line with the new argument on space, according to which a conception contains an infinite number of parts, not in it, but only under it, Kant substitutes for the previous parenthesis the statement that "concepts contain only partial representations," meaning, apparently, that their constituent elements are merely abstracted attributes, not real concrete parts, or in other words, not strictly parts at all, but only partial representations. But this does not at all agree with the context. The point at issue is thereby obscured.

(*b*) The main argument rests upon and presupposes a very definite view as to the manner in which alone, according to Kant, concepts are formed. Only if this view be granted as true of all concepts without exception is the argument cogent. This doctrine of the concept is accordingly stated by Kant in the words of the parenthesis. The partial representations, *i.e.* the different properties which go to constitute the object or content conceived, precede the representation of the whole. "The aggregation of co-ordinate attributes (*Merkmale*) constitutes the totality of the concept." Upon the use which Kant thus makes of the traditional doctrine of the concept, and upon its lack of consistency with his recognition of relational categories, we have already dwelt.

Third Argument and the Transcendental Exposition. — The third argument ought to have been omitted in the second edition, and its substance incorporated in the new transcendental exposition, as was done with the corresponding argument concerning space. The excuse which Kant offers for not making the change, namely, his desire for brevity, is not valid. By insertion in the new section the whole matter could have been stated just as briefly as before.

The purpose of the transcendental exposition has been already defined. It is to show how time, when viewed in the manner required by the results of the metaphysical deduction, as an *a priori* intuition, renders synthetic *a priori* judgments possible.

This exposition, as it appears in the third argument of the first edition, grounds the apodictic character of two axioms in regard to time on the proved apriority of the representation of time, and then by implication finds in these axioms a fresh proof of the apriority of time.

The new transcendental exposition extends the above by two further statements: (*a*) that only through the intuition of time can any conception of change, and therewith of motion (as change of place), be formed; and (*b*) that it is because the intuition of time is an *a priori* intuition that the synthetic *a priori* propositions of the "general doctrine of motion" are possible. To take each in turn. (*a*) Save by reference to time the conception of motion is self-contradictory. It involves the ascription to one and the same thing of contradictory predicates, *e.g.* that an object both is and is not in a certain place. From this fact, that time makes possible what is not possible in pure conception, Kant, in his earlier rationalistic period, had derived a proof of the subjectivity of time. (*b*) In 1786 in the *Metaphysical First Principles of Natural Science* Kant had developed the fundamental principles of the general science of motion. He takes the opportunity of the second edition (1787) of the *Critique* to assign this place to them in his general system. The implication is that the doctrine of motion stands to time in the relation in which geometry stands to space. Kant is probably here replying, as Vaihinger has suggested, to an objection made by Garve to the first edition, that no science, corresponding to geometry, is based on the intuition of time. For two reasons, however, the analogy between mechanics and geometry breaks down. In the first place, the conception of motion is empirical; and in the second place, it presupposes space as well as time.

Kant elsewhere explicitly disavows this view that the science of motion is based on time. He had already done so in the preceding year (1786) in the *Metaphysical First Principles*. He there points out that as time has only one dimension, mathematics is not applicable to the phenomena of inner sense. At most we can determine in regard to them (in addition, of course, to the two axioms already cited) only the law that all these changes are continuous. Also in Kant's *Ueber Philosophie überhaupt* (written some time between 1780 and 1790, and very probably in or about the year 1789) we find the following utterance:

"The general doctrine of time, unlike the pure doctrine of space (geometry), does not yield sufficient material for a whole science."

Why, then, should Kant in 1787 have so inconsistently departed from his own teaching? This is a question to which I can find no answer. Apparently without reason, and contrary to his more abiding judgment, he here repeats the suggestion which he had casually thrown out in the *Dissertation* of 1770:

"Pure mathematics treats of space in geometry and of time in pure mechanics."

But in the *Dissertation* the point is only touched upon in passing. The context permits of the interpretation that while geometry deals with space, mechanics deals with time in addition to space.

KANT'S VIEWS REGARDING THE NATURE OF ARITHMETICAL SCIENCE

In the *Dissertation*, and again in the chapter on *Schematism* in the *Critique* itself, still another view is suggested, namely, that the science of arithmetic is also concerned with the intuition of time. The passage just quoted from the *Dissertation* proceeds as follows:

"Pure mathematics treats of space in geometry and of time in pure mechanics. To these has to be added a certain concept which is in itself intellectual, but which demands for its concrete actualisation (*actuatio*) the auxiliary notions of time and space (in the successive addition and in the juxtaposition of a plurality). This is the concept of number which is dealt with in *Arithmetic*."

This view of arithmetic is to be found in both editions of the *Critique*. Arithmetic depends upon the synthetic activity of the understanding; the conceptual element is absolutely essential.

"Our counting (as is easily seen in the case of large numbers) is a synthesis according to concepts, because it is executed according to a common ground of unity, as, for instance, the decade (*Dekadik*)." "The pure image ... of all objects of the senses in general is time. But the pure *schema* of quantity, in so far as it is a concept of the understanding, is *number*, a representation which combines the successive addition of one to one (homogeneous). Thus number is nothing but the unity of the synthesis of the manifold of a homogeneous intuition in general, whereby I generate time itself in the apprehension of the intuition."

This is also the teaching of the *Methodology*. Now it may be observed that in none of these passages is arithmetic declared to be the *science of time*, or even to be based on the intuition of time. In 1783, however, in the *Prolegomena*, Kant expresses himself in much more ambiguous terms, for his words imply that there is a parallelism between geometry and arithmetic.

"Geometry is based upon the pure intuition of space. Arithmetic produces its concepts of number through successive addition of units in time, and pure mechanics especially can produce its concepts of motion only by means of the representation of time."

The passage is by no means explicit; the "especially" (*vornehmlich*) seems to indicate a feeling on Kant's part that the description which he is giving of arithmetic is not really satisfactory. Unfortunately this casual statement, though never repeated by Kant in any of his other writings, was developed by Schulze in his *Erläuterungen*.

"Since geometry has space and arithmetic has counting as its object (and counting can only take place by means of time), it is evident in what manner geometry and arithmetic, that is to say pure mathematics, is

possible.”

Largely, as it would seem, through Schulze, whose *Erläuterungen* did much to spread Kant’s teaching, this view came to be the current understanding of Kant’s position. The nature of arithmetic, as thus popularly interpreted, is expounded by Schopenhauer in the following terms:

“In time every moment is conditioned by the preceding. The ground of existence, as law of the sequence, is thus simple, because time has only one dimension, and no manifoldness of relations can be possible in it. Every moment is conditioned by the preceding; only through the latter can we attain to the former; only because the latter was, and has elapsed, does the former now exist. All counting rests upon this nexus of the parts of time; its words merely serve to mark the single steps of the succession. This is true of the whole of arithmetic, which throughout teaches nothing but the methodical abbreviations of counting. Every number presupposes the preceding numbers as grounds of its existence; I can only reach them through all the preceding, and only by means of this insight into the ground of its existence do I know that, where ten are, there are also eight, six, four.”

Schulze was at once challenged to show that this was really Kant’s teaching, and the passage which he cited was Kant’s definition of the schema of number, above quoted. It is therefore advisable that we should briefly discuss the many difficulties which this passage involves. What does Kant mean by asserting that in the apprehension of number we generate time? Does he merely mean that time is required for the process of counting? Counting is a process through which numerical relations are discovered; and it undoubtedly occupies time. But so do all processes of apprehension, in the study of geometry no less than of arithmetic. That this is not Kant’s meaning, and that it is not even what Schulze, notwithstanding his seemingly explicit mode of statement, intends to assert, is clearly shown by a letter written by Kant to Schulze in November 1788. Schulze, it appears, had spoken of this very matter.

“*Time, as you justly remark, has no influence upon the properties of numbers* (as pure determinations of quantity), such as it may have upon the nature of those changes (of quantity) which are possible only in connection with a specific property of inner sense and its form (time). *The science of number, notwithstanding the succession which every construction of quantity demands, is a pure intellectual synthesis which we represent to ourselves in thought*. But so far as *quanta* are to be numerically determined, they must be given to us in such a way that we can apprehend their intuition in successive order, and such that their *apprehension* can be subject to time....”

No more definite statement could be desired of the fact that though in arithmetical science as in other fields of study our processes of apprehension are subject to time, the quantitative relations determined by the science are independent of time and are intellectually apprehended.

But if the above psychological interpretation of Kant’s teaching is untenable, how is his position to be defined? We must bear in mind the doctrine which Kant had already developed in his pre-Critical period, that mathematical differs from philosophical knowledge in that its concepts can have concrete individual form. In the *Critique* this difference is expressed in the statement that the mathematical sciences alone are able to *construct* their concepts. And as they are *pure* mathematical sciences, this construction is supposed to take place by means of the *a priori* manifold of space and of time. Now though Kant had a fairly definite notion of what he meant by the construction of geometrical figures in space, his various utterances seem to show that in regard to the nature of arithmetical and algebraic construction he had never really attempted to arrive at any precision of view. To judge by the passage already quoted from the *Dissertation*, Kant regarded space as no less necessary than time to the construction or intuition of number. “[The intellectual concept of number] demands for its concrete actualisation the auxiliary notions of time *and space* (in the successive addition and in the *juxtaposition of a plurality*)” A similar view appears in the *Critique* in A 140 = B 179 and in B 15. In conformity, however, with the general requirements of his doctrine of *Schematism*, Kant defines the schema of number in exclusive reference to

time; and, as we have noted, it is to this definition that Schulze appeals in support of his view of arithmetic as the science of counting and therefore of time. It at least shows that Kant perceived *some* form of connection to exist between arithmetic and time. But in this matter Kant's position was probably simply a corollary from his general view of the nature of mathematical science, and in particular of his view of geometry, the "exemplar" of all the others. Mathematical science, as such, is based on intuition; therefore arithmetic, which is one of its departments, must be so likewise. No attempt, however, is made to define the nature of the intuitions in which it has its source. Sympathetically interpreted, his statements may be taken as suggesting that arithmetic is the study of *series* which find concrete expression in the order of sequent times. The following estimate, given by Cassirer, does ample justice both to the true and to the false elements in Kant's doctrine.

"[Even discounting Kant's insistence upon the conceptual character of arithmetical science, and] allowing that he derives arithmetical concepts and propositions from the *pure intuition of time*, this teaching, to whatever objections it may lie open, has certainly not the merely *psychological* meaning which the majority of its critics have ascribed to it. If it contained only the trivial thought, that the empirical act of counting requires time, it would be completely refuted by the familiar objection which B. Beneke has formulated: 'The fact that time elapses in the process of counting can prove nothing; for what is there over which time does not flow?' It is easily seen that Kant is only concerned with the 'transcendental' determination of the concept of time, according to which it appears as the type of an ordered sequence. William [Rowan] Hamilton, who adopts Kant's doctrine, has defined algebra as 'science of pure time or *order in progression*.' That the whole content of arithmetical concepts can really be obtained from the fundamental concept of *order* in unbroken development, is completely confirmed by Russell's exposition. As against the Kantian theory it must, of course, be emphasised, that it is not the *concrete* form of time intuition which constitutes the *ground* of the concept of number, but that on the contrary the pure logical concepts of sequence and of order are already implicitly contained and embodied in that concrete form."

Much of the unsatisfactoriness of Kant's argument is traceable to his mode of conceiving the "construction" of mathematical concepts. All concepts, he seems to hold, even those of geometry and arithmetic, are abstract class concepts — the concept of triangle representing the properties common to all triangles, and the concept of seven the properties common to all groups that are seven. Mathematical concepts differ, however, from other concepts in that they are capable of *a priori* construction, that is, of having their objects represented in pure intuition. Now this is an extremely unfortunate mode of statement. It implies that mathematical concepts have a dual mode of existence, first as abstracted, and secondly as constructed. Such a position is not tenable. The concept of seven, in its primary form, is not abstracted from a variety of particular groups of seven; it is already involved in the apprehension of each of them as being seven. Nor is it a concept that is itself constructed. It may perhaps be described as being the representation of something constructed; but that something is not itself. It represents the process or method generative of the complex for which it stands. Thus Kant's distinction between the intuitive nature of mathematical knowledge and the merely discursive character of conceptual knowledge is at once inspired by the very important distinction between the product of construction and the product of abstraction, and yet at the same time is also obscured by the quite inadequate manner in which that latter distinction has been formulated. Kant has again adhered to the older logic even in the very act of revising its conclusions; and in so doing he has sacrificed the Critical doctrines of the *Analytic* to the pre-Critical teaching of the *Dissertation* and *Aesthetic*. *Mathematical concepts are of the same general type as the categories; their primary function is not to clarify intuitions, but to make them possible.* They are derivable from intuition only in so far as they have contributed to its constitution. If intuition contains factors additional to the concepts through which it is interpreted, these factors must remain outside the realm of mathematical science, until such time as conceptual analysis has proved itself capable of further

extension.

I may now summarise this general discussion. Though Kant in the first edition of the *Critique* had spoken of the mathematical sciences as based upon the intuition of space and time, he had not, despite his constant tendency to conceive space and time as parallel forms of existence, based any separate mathematical discipline upon time. His definition of number, in the chapter on *Schematism*, had recognised the essentially conceptual character of arithmetic, and had connected it with time only in a quite indirect manner. A passage in the *Prolegomena* is the one place in all Kant's writings in which he would seem to assert, though in brief and quite indefinite terms, that arithmetic is related to time as geometry is related to space. No such view of arithmetic is to be found in the second edition of the *Critique*. In the transcendental exposition of time, added in the second edition, only pure mechanics is mentioned. This would seem to indicate that Kant had made the above statement carelessly, without due thought, and that on further reflection he found himself unable to stand by it. The omission is the more significant in that Kant refers to arithmetic in the passages added in the second edition *Introduction*. The teaching of these passages, apart from the asserted necessity of appealing to fingers or points, harmonises with the view so briefly outlined in the *Analytic*. Arithmetic is a conceptual science; though it finds in ordered sequence its intuitional material, it cannot be adequately defined as being the science of time.

CONCLUSIONS FROM THE PRECEDING CONCEPTS

These *Conclusions* do not run parallel with the corresponding *Conclusions* in regard to space. In the first paragraph there are two differences. (*a*) Kant takes account of a view not considered under space, viz. that time is a self-existing substance. He rejects it on a ground which is difficult to reconcile with his recognition of a manifold of intuition as well as a manifold of sense, namely that it would then be something real without being a real object. In A 39 = B 57 and B 70 Kant describes space and time, so conceived, as *unendliche Undinge*. (*b*) Kant introduces into his first *Conclusion* the argument that only by conceiving time as the form of inner intuition can we justify *a priori* synthetic judgments in regard to objects.

Second Paragraph (Conclusion b). — This latter statement is repeated at the opening of the second *Conclusion*. The emphasis is no longer, however, upon the term "form" but upon the term "inner"; and Kant proceeds to make assertions which by no means follow from the five arguments, and which must be counted amongst the most difficult and controversial tenets of the whole *Critique*. (*a*) Time is not a determination of outer appearances. For it belongs neither to their shape nor to their position — and prudently at this point the property of motion is smuggled out of view under cover of an etc. *Time does not determine the relation of appearances to one another, but only* the relation of representations *in our inner state*. It is the form only of the intuition of ourselves and of our inner state. Obviously these are assertions which Kant cannot possibly hold to in this unqualified form. In the very next paragraph they are modified and restated. (*b*) As this inner intuition supplies no shape (*Gestalt*), we seek to make good this deficiency by means of analogies. We represent the time-sequence through a line progressing to infinity in which the manifold constitutes a series of only one dimension. From the properties of this line, with the one exception that its parts are simultaneous whereas those of time are always successive, we conclude to all the properties of time.

The wording of the passage seems to imply that such symbolisation of time through space is helpful but not indispensably necessary for its apprehension. That it is indispensably necessary is, however, the view to which Kant finally settled down. But he has not yet come to clearness on this point. The passage has all the signs of having been written prior to the *Analytic*. Though Kant seems to have held consistently to the view that time has, in or by itself, only one dimension, the difficulties involved drove him to recognise that this is true only of time as the order of our representations. It is not true of the objective time

apprehended in and through our representations. When later Kant came to hold that consciousness of time is conditioned by consciousness of space, he apparently also adopted the view that, by reference to space, time indirectly acquires simultaneity as an additional mode. The objective spatial world is in time, but in a time which shows simultaneity as well as succession. In the *Dissertation* Kant had criticised Leibniz and his followers for neglecting simultaneity, “the most important consequence of time.”

“Though time has only one dimension, yet the *ubiquity* of time (to employ Newton’s term), through which all things sensuously thinkable are *at some time*, adds another dimension to the quantity of actual things, in so far as they hang, as it were, upon the same point of time. For if we represent time by a straight line extended to infinity, and simultaneous things at any point of time by lines successively erected [perpendicular to the first line], the surface thus generated will represent the *phenomenal world* both as to substance and as to accidents.”

Similarly in A 182 = B 226 of the *Critique* Kant states that simultaneity is not a mode of time, since none of the parts of time can be simultaneous, and yet also teaches in A 177 = B 219 that, as the order of *appearances*, time possesses in addition to succession the two modes, duration and simultaneity. The significance of this distinction between time as the order of our inner states, and time as the order of objective appearances, we shall consider immediately.

A connected question is as to whether or not Kant teaches the possibility of simultaneous apprehension. In the *Aesthetic* and *Dialectic* he certainly does so. Space is given as containing coexisting parts, and can be intuited as such without successive synthesis of its parts. In the *Analytic*, on the other hand, the opposite would seem to be implied. The apprehension of a manifold can only be obtained through the successive addition or generation of its parts.

(*c*) Lastly, Kant argues that the fact that all the relations of time can be expressed in an outer intuition is proof that the representation of time is itself intuition. But surely if, as Kant later taught, time can be apprehended at all only in and through space, that, taken alone, would rather be a reason for denying it to be itself intuition. In any case it is difficult to follow Kant in his contention that the intuition of time is similar in general character to that of space.

Third Paragraph (Conclusion c). — Kant now reopens the question as to the relation in which time stands to outer appearances. As already noted, he has argued in the beginning of the previous paragraph that it cannot be a determination of outer appearances, but only of representations in our inner state. External appearances, however, as Kant recognises, can be known only in and through representations. To that extent they belong to inner sense, and consequently (such is Kant’s argument) are themselves subject to time. Time, as the immediate condition of our representations, is also the mediate condition of appearances. Therefore, Kant concludes, “all *appearances*, *i.e.* all *objects* of the senses, are in time, and necessarily stand in time-relations.”

Now quite obviously this argument is invalid if the distinction between representations and their objects is a real and genuine one. For if so, it does not at all follow that because our *representations* of objects are in time that the objects themselves are in time. In other words, the argument is valid only from the standpoint of extreme subjectivism, according to which objects are, in Kant’s own phraseology, *blosse Vorstellungen*. But the argument is employed to establish a realist conclusion, that outer objects, as objects, stand in time-relations to one another. In contradiction of the previous paragraph he is now maintaining that time is a determination of outer appearances, and that it reveals itself in the motion of bodies as well as in the flux of our inner states.

The distinction between representations and their objects also makes it possible for Kant both to assert and to deny that simultaneity is a mode of time. “No two years can be coexistent. Time has only one dimension. But existence (*das Dasein*), measured through time, has two dimensions, succession and simultaneity.” There are, for Kant, two orders of time, subjective and objective. Recognition of the latter (emphasised and developed in the *Analytic*) is, however, irreconcilable with his contention that time is

merely the form of inner sense.

We have here one of the many objections to which Kant's doctrine of time lies open. It is the most vulnerable tenet in his whole system. A mere list of the points which Kant leaves unsettled suffices to show how greatly he was troubled in his own mind by the problems to which it gives rise. (1) The nature of the *a priori* knowledge which time yields. Kant ascribes to this source sometimes only the two axioms in regard to time, sometimes pure mechanics, and sometimes also arithmetic. (2) Whether time only allows of, or whether it demands, representation through space. Sometimes Kant makes the one assertion, sometimes the other. (3) Whether it is possible to apprehend the coexistent without successive synthesis of its parts. This possibility is asserted in the *Aesthetic* and *Dialectic*, denied in the *Analytic*. (4) Whether simultaneity is a mode of time. (5) Whether, and in what manner, appearances of outer sense are in time. Kant's answer to 4 and to 5 varies according as he identifies or distinguishes representations and empirical objects.

The manifold difficulties to which a theory of time thus lies open are probably the reason why Kant, in the *Critique*, reverses the order in which he had treated time and space in the *Dissertation*. But the placing of space before time is none the less unfortunate. It greatly tends to conceal from the reader the central position which Kant has assigned to time in the *Analytic*. Consciousness of time is the fundamental fact, taken as bare fact, by reference to which Kant gains his transcendental proof of the categories and principles of understanding. In the *Analytic* space, by comparison, falls very much into the background. A further reason for the reversal may have been Kant's Newtonian view of geometry as the mathematical science *par excellence*. In view of his formulation of the Critical problem as that of accounting for synthetic *a priori* judgments, he would then naturally be led to throw more emphasis on space.

To sum up our main conclusions. Kant's view of time as a form merely of inner sense, and as having only one dimension, connects with his subjectivism. His view of it as inhering in objects, and as having duration and simultaneity as two of its modes, is bound up with his phenomenalism. Further discussion of these difficulties must therefore be deferred until we are in a position to raise the more fundamental problem as to the nature of the distinction between a representation and its object. Motion is not an inner state. Yet it involves time as directly as does the flow of our feelings and ideas. Kant's assertion that "time can no more be intuited externally than space can be intuited as something in us," if taken quite literally, would involve both the subjectivist assertion that motion of bodies is non-existent, and also the phenomenalist contention that an extended object is altogether distinct from a representation.

The *fourth* and *fifth* paragraphs call for no detailed analysis. Time is empirically real, transcendentally ideal — these terms having exactly the same meaning and scope as in reference to space. The fourth sentence in the fifth paragraph is curiously inaccurate. As it stands, it would imply that time is given through the senses. In the concluding sentences Kant briefly summarises and applies the points raised in these fourth and fifth paragraphs.

ELUCIDATION

First and Second Paragraphs. — Kant here replies to a criticism which, as he tells us in his letter of 1772 to Herz, was first made by Pastor Schulze and by Lambert. In that letter the objection and Kant's reply are stated as follows.

"In accordance with the testimony of inner sense, changes are something real. But they are only possible on the assumption of time. Time is, therefore, something real which belongs to the determinations of things in themselves. Why, said I to myself, do we not argue in a parallel manner: 'Bodies are real, in accordance with the outer senses. But bodies are possible only under the condition of space. Space is, therefore, something objective and real which inheres in the things themselves.' The cause [of this differential treatment of space and of time] is the observation that in respect to outer things we cannot infer from the reality of representations the reality of their objects, whereas in inner sense the thought or the existing of the thought and of myself are one and the same. Herein lies the key to the difficulty.

Undoubtedly I must think my own state under the form of time, and the form of the inner sensibility consequently gives me the appearance of changes. Now I do not deny that changes are something real any more than I deny that bodies are something real, but I thereby mean only that something real corresponds to the appearance. I may not even say the inner appearance undergoes change (*verändere sich*), for how could I observe this change unless it appeared to my inner sense? *To the objection that this leads to the conclusion that all things in the world objectively and in themselves are unchangeable, I would reply that they are neither changeable nor unchangeable.* As Baumgarten states in § 18 of his *Metaphysica*, the absolutely impossible is hypothetically neither possible nor impossible, since it cannot be mentally entertained under any condition whatsoever; so in similar manner *the things of the world are objectively or in themselves neither in one and the same state nor in different states at different times, for thus understood [viz. as things in themselves] they are not represented in time at all*."

Thus Kant's contention, both in this letter and in the passage before us, is that even our inner states would not reveal change if they could be apprehended by us or by some other being apart from the subjective form of our inner sense. We may not say that our inner states undergo change, or that they succeed one another, but only that to us they necessarily appear as so doing. Time is no more than subjectively real. As Körner writes to Schiller: "Without time man would indeed *exist* but not *appear*. Not his reality but only his appearance is dependent upon the condition of time." "Man *is* not, but only *appears*, when he undergoes change." The objects of inner sense stand in exactly the same position as those of outer sense. Both are appearances, and neither can be identified with the absolutely real. As Kant argues later in the *Critique*, inner processes are not known with any greater certainty or immediacy than are outer objects; the reality of time as subjective proves its unreality in relation to things in themselves. The statement that the constitution of things in themselves is "problematic" is an exceptional mode of expression for Kant. Usually — as indeed throughout the whole context of this passage — he asserts that though things in themselves are unknowable, we can with absolute certainty maintain that they are neither in space nor in time. Upon this point we have already dwelt in discussing Trendelenburg's controversy with Fischer.

Third Paragraph. — The third and fourth paragraphs of this section ought to have had a separate heading. They summarise the total argument of the *Aesthetic* in regard to space as well as time, distinguish its tenets from those of Newton and of Leibniz, and draw a general conclusion. The summary follows the strict synthetic method. The opening sentences illustrate Kant's failure to distinguish between the problems of pure and of applied mathematics, and also show how completely he tends to conceive mathematics as typified by geometry. The criticism of alternative views traverses the ground of the famous controversy between Leibniz and Clarke. Their *Streitschriften* were, as we have good circumstantial grounds for believing, a chief influence in the development of Kant's own views. Kant, who originally held the Leibnizian position, was by 1768 more or less converted to the Newtonian teaching, and in the *Dissertation* of 1770 developed his subjectivist standpoint with the conscious intention of retaining the advantages while remedying the defects of both alternatives. For convenience we may limit the discussion to space. (*a*) The view propounded by Newton, and defended by Clarke, is that space has an existence in and by itself, independent alike of the mind which apprehends it and of the objects with which it is filled. (*b*) The view held by Leibniz is that space is an empirical concept abstracted from our confused sense-experience of the relations of real things.

The criticism of (*a*) is twofold. First, it involves belief in an eternal and infinite *Unding*. Secondly, it leads to metaphysical difficulties, especially in regard to the existence of God. If space is absolutely real, how is it to be reconciled with the omnipresence of God? Newton's view of space as the sensorium Dei can hardly be regarded as satisfactory.

The objection to (*b*) is that it cannot account for the apodictic certainty of geometry, nor guarantee its application to experience. The concept of space, when regarded as of sensuous origin, is something that

may distort (and according to the Leibnizian teaching does actually distort) what it professes to represent, and is something from which restrictions that hold in the natural world have been omitted. As empirical, it cannot serve as basis for the universal and necessary judgments of mathematical science.

The first view has, however, the advantage of keeping the sphere of appearances open for mathematical science. As space is infinite and all-comprehensive, its laws hold universally. The second view has the advantage of not subjecting reality to space conditions. These advantages are retained, while the objections are removed, by the teaching of the *Aesthetic*.

Kant further criticises the former view in A 46 ff. = B 64 ff. There is no possibility of accounting for the *a priori* synthetic judgments of geometry save by assuming that space is the pure form of outer intuition. For though the Newtonian view will justify the assertion that the laws of space hold universally, it cannot explain how we come to know them *a priori*. And assuming, as Kant constantly does, that space cannot be both an *a priori* form of intuition and also independently real, he concludes that it is the former only.

In B 71 Kant also restates the metaphysical difficulties to which the Newtonian view lies open. In natural theology we deal with an existence which can never be the object of sensuous intuition, and which has to be freed from all conditions of space and time. This is impossible if space is so absolutely real that it would remain though all created things were annihilated.

Fourth Paragraph. — Space and time are the only two forms of sensibility; all other concepts belonging to the senses, such as motion and change, are empirical. As Kant has himself stated, no reason can be given why space and time are the sole forms of our possible intuition:

“Other forms of intuition than space and time, ... even if they were possible, we cannot render in any way conceivable and comprehensible to ourselves, and even assuming that we could do so, they still would not belong to experience, the only kind of knowledge in which objects are given to us.”

The further statement, frequently repeated in the *Critique*, that time itself does not change, but only what is in time, indicates the extent to which Kant has been influenced by the Newtonian receptacle view. As Bergson very justly points out, time, thus viewed as a homogeneous medium, is really being conceived on the analogy of space. “It is merely the phantom of space obsessing the reflective consciousness.”

GENERAL OBSERVATIONS ON THE TRANSCENDENTAL AESTHETIC

I. First Paragraph.— “To avoid all misapprehension” Kant proceeds to state “as clearly as possible” his view of sensuous knowledge. With this end in view he sets himself to enforce two main points: (*a*) that as space and time are only forms of sensibility, everything apprehended is only appearance; (*b*) that this is not a mere hypothesis but is completely certain. Kant expounds (*a*) indirectly through criticism of the opposing views of Leibniz and of Locke. But before doing so he makes in the next paragraph a twofold statement of his own conclusions.

Second Paragraph. — This paragraph states (*a*) that through intuition we can represent only appearances, not things in themselves, and (*b*) that the appearances thus known exist only in us. Both assertions have implications, the discussion of which must be deferred to the *Analytic*. The mention of the “relations of things by themselves” may, as Vaihinger suggests, be a survival from the time when (as in the *Dissertation*) Kant sought to reduce spatial to dynamical relations. The assertion that things in themselves are completely unknown to us goes beyond what the *Aesthetic* can establish and what Kant here requires to prove. His present thesis is only that no knowledge of things in themselves can be acquired either through the forms of space and time or through sensation; space and time are determined solely by our pure sensibility, and sensations by our empirical sensibility. Failure to recognise this is, in Kant’s view, one of the chief defects of the Leibnizian system.

Third and Fourth Paragraphs. Criticism of the Leibniz-Wolff Interpretation of Sensibility and of Appearance. — Leibniz vitiates both conceptions. Sensibility does not differ from thought in clearness but in content. It is a difference of kind. They originate in different sources, and neither can by any transformation be reduced to the other.

"Even if an appearance could become completely transparent to us, such knowledge would remain *toto coelo* different from knowledge of the object in itself." "Through observation and analysis of appearances we penetrate to the secrets of nature, and no one can say how far this may in time extend.... [But however far we advance, we shall never be able by means of] so ill-adapted an instrument of investigation [as our sensibility] to find anything except still other appearances, the non-sensuous cause of which we yet long to discover."

We should still know only in terms of the two inalienable forms of our sensibility. The dualism of thought and sense can never be transcended by the human mind. By no extension of its sphere or perfecting of its insight can sensuous knowledge be transformed into a conceptual apprehension of purely intelligible entities.

Leibniz's conception of appearances as things in themselves confusedly apprehended is equally false, and for the same reasons. Appearance and reality are related as distinct existences, each of which has its own intrinsic character and content. Through the former there can be no hope of penetrating to the latter. Appearance is subjective in matter as well as in form. For Leibniz our knowledge of appearances is a confused knowledge of things in themselves. Properly viewed, it is the apprehension, whether distinct or confused, of objects which are never things in themselves. Sense-knowledge, such as we obtain in the science of geometry, has often the highest degree of clearness. Conceptual apprehension is all too frequently characterised by obscurity and indistinctness.

This criticism of Leibniz, as expounded in these two paragraphs, is thoroughly misleading if taken as an adequate statement of Kant's view of the relations between sense and understanding, appearance and reality. These paragraphs are really a restatement of a passage in the *Dissertation*.

"It will thus be seen that we express the nature of the sensuous very inappropriately when we assert that it is the *more confusedly* known, and the nature of the intellectual when we describe it as the *distinctly* known. For these are merely logical distinctions, and obviously have nothing to do with the given facts which underlie all logical comparison. The sensuous may be absolutely distinct, and the intellectual extremely confused. That is shown on the one hand in *geometry*, the prototype of sensuous knowledge, and on the other in *metaphysics*, the instrument of all intellectual enquiry. Every one knows how zealously metaphysics has striven to dispel the mists of confusion which cloud the minds of men at large and yet has not always attained the happy results of the former science. Nevertheless each of these kinds of knowledge preserves the mark of the stock from which it has sprung. The former, however distinct, is on account of its origin entitled sensuous, while the latter, however confused, remains intellectual — as *e.g.* the *moral* concepts, which are known not by way of experience, but through the pure intellect itself. I fear, however, that Wolff by this distinction between the sensuous and the intellectual, which for him is merely logical, has checked, perhaps wholly (to the great detriment of philosophy), that noblest enterprise of antiquity, the investigation of *the nature of phenomena and noumena*, turning men's minds from such enquiries to what are very frequently only logical subleties."

The paragraphs before us give expression only to what is common to the *Dissertation* and to the *Critique*, and do so entirely from the standpoint of the *Dissertation*. Thus the illustration of the conception of "right" implies that things in themselves can be known through the understanding. The conception, as Kant says, represents "a moral property which belongs to actions in and by themselves." Similarly, in distinguishing the sensuous from "the intellectual," he says that through the former we do not apprehend things in themselves, thus implying that things in themselves can be known through the pure intellect. The view developed in the *Analytic*, alike of sensibility and of appearance, is radically

different. Sensibility and understanding *may* have a common source; and both are indispensably necessary for the apprehension of appearance. Neither can function save in co-operation with the other. Appearance does not differ from reality solely through its sensuous content and form, but also in the intellectual order or dispensation to which it is subject. But in the very act of thus deepening the gulf between appearance and reality by counting even understanding as contributing to the knowledge only of the former, he was brought back to a position that has kinship with the Leibnizian view of their interrelation. Since understanding is just as essential as sensibility to the apprehension of appearances, and since understanding differs from sensibility in the universality of its range, it enables us to view appearances in their relation to ultimate reality, and so to apprehend them as being, however subjective or phenomenal, ways in which the thing in itself presents itself to us. Such a view is, however, on Kant's principles, quite consistent with the further contention, that appearance does not differ from reality in a merely logical manner. Factors that are peculiar to the realm of appearance have intervened to transform the real; and in consequence even completed knowledge of the phenomenal — if such can be conceived as possible — would not be equivalent to knowledge of things in themselves.

Fifth Paragraph. Criticism of Locke's View of Appearance. — This paragraph discusses Locke's doctrine that the secondary qualities are subjective, and that in the primary qualities we possess true knowledge of things in themselves. The distinction is drawn upon empirical grounds, namely, that while certain qualities are uniform for more than one sense, and belong to objects under all conditions, others are peculiar to the different senses, and arise only through the accidental relation of objects to the special senses. This distinction is, Kant says, entirely justified from the physical standpoint. A rainbow is an appearance of which the raindrops constitute the true empirical reality. But Locke and his followers interpret this distinction wrongly. They ignore the more fundamental transcendental (*i.e.* metaphysical) distinction between empirical reality and the thing in itself. From the transcendental standpoint the raindrops are themselves merely appearance. Even their round shape, and the very space in which they fall; are only modifications of our sensuous intuition. The 'transcendental object' remains unknown to us.

When Kant thus declares that the distinction between primary and secondary qualities is justified (*richtig*) from the physical standpoint, he is again speaking from a phenomenalist point of view. And it may be noted that in developing his transcendental distinction he does not describe the raindrops as mere representations. His phrase is much more indefinite. They are "modifications or fundamental forms (*Grundlagen*) of our sensuous intuition."

Kant does not here criticise the view of sensibility which underlies Locke's view of appearance. But he does so in A 271 = B 327, completing the parallel and contrast between Leibniz and Locke.

"Leibniz *intellectualised* appearances, just as Locke, according to his system of noogony (if I may be allowed these expressions), *sensualised* all concepts of the understanding, *i.e.* interpreted them as simply empirical or abstracted concepts of reflection. Instead of interpreting understanding and sensibility as two quite different sources of representations, which yet can supply objectively valid judgments of things only in *conjunction* with each other, each of these great men holds only to one of the two, viewing it as in immediate relation to things in themselves. The other faculty is regarded as serving only to confuse or to order the representations which this selected faculty yields."

Proof that the above View of Space and Time is not a mere Hypothesis, but completely certain. — The proof, which as here recapitulated and developed follows the analytic method, has already been considered in connection with A 39 = B 56. It proceeds upon the assumption that space cannot be both an *a priori* form of intuition and also independently real. The argument as a whole lacks clearness owing to Kant's failure to distinguish between the problems of pure and applied geometry, between pure intuition and form of intuition. This is especially obvious in the very unfortunate and misleading second application of the triangle illustration. Kant's tendency to conceive mathematical science almost exclusively in terms of geometry is likewise illustrated.

“There is in regard to both [space and time] a large number of *a priori* apodictic and synthetic propositions. This is especially true of space, which for this reason will be our chief illustration in this enquiry.”

II. Paragraphs added in the Second Edition. — Kant proceeds to offer further proof of the ideality of the appearances (*a*) of outer and (*b*) of inner sense. Such proof he finds in the fact that these appearances consist solely of relations. (*a*) Outer appearances reduce without remainder to relations of position in intuition (*i.e.* of extension), of change of position (motion), and to the laws which express in merely relational terms the motive forces by which such change is determined. What it is that is thus present in space, or what the dynamic agencies may be to which the motion is due, is never revealed. But a real existent (*Sache an sich*) can never be known through mere relations. Outer sense consequently reveals through its representations only the relation of an object to the subject, not the intrinsic inner nature of the object in itself (*Object an sich*). Kant’s avoidance of the term *Ding an sich* may be noted.

(*b*) The same holds true of inner sense, not only because the representations of outer sense constitute its proper (*eigentlichen*) material, but also because time, in which these are set, contains only relations of succession, coexistence, and duration. This time (which as consisting only of relations can be nothing but a form) is itself, in turn, a mere relation. It is only the manner in which through its own activity the mind is affected by itself. But in order to be affected by itself it must have receptivity, in other words, sensibility. Time, consequently, must be regarded as the form of this inner sense.

That everything represented in time, like that which is represented in space, consists solely of relations, Kant does not, however, attempt to prove. He is satisfied with repeating the conclusion reached in the first edition of the *Aesthetic*, that, as time is the object of a sense, it must of necessity be appearance. This, like everything which Kant wrote upon inner sense, is profoundly unsatisfactory. The obscurities of his argument are not to be excused on the ground that “the difficulty, how a subject can have an internal intuition of itself, is common to every theory.” For no great thinker, except Locke, has attempted to interpret inner consciousness on the analogy of the senses. Discussion of the doctrine must meantime be deferred.

III. B 69. — Kant here formulates the important distinction between appearance (*Erscheinung*) and illusion (*Schein*). The main text is clear so far as it goes; but the appended note is thoroughly confused. Together they contain no less than three distinct and conflicting views of illusion. According to the main text, *Schein* signifies a representation, such as may occur in a dream, to which nothing real corresponds. *Erscheinung*, on the other hand, is always the appearance of a *given* object; but since the qualities of that object depend solely on our mode of intuition, we have to distinguish the object as appearance from the object as thing in itself.

“[Every appearance] has two sides, the one by which the object is viewed in and by itself, ... the other by which the form of the intuition of the object is taken into account....”

Obviously, when illusion is defined in the above manner, the assertion that objects in space are mere appearances cannot be taken as meaning that they are illusory.

But this view of illusion is peculiar to the passage before us and to A 38 = B 55. It occurs nowhere else, either in the *Critique* or in the *Prolegomena*; and it is not, as Kant has himself admitted, really relevant to the purposes of the *Critique*. The issues are more adequately faced in the appended note, which, however, at the same time, shows very clearly that Kant has not yet properly disentangled their various strands. The above definition of appearance is too wide. It covers illusory sense perception as well as appearance proper. The further qualification must be added, that the predicates of appearance are constant and are inseparable from its representation. Thus the space predicates can be asserted of any external object. Redness and scent can be ascribed to the rose. All of these are genuine appearances. If, on the other hand, the two handles, as observed by Galileo, are attributed to Saturn, roundness to a distant

square tower, bentness to a straight stick inserted in water, the result is mere illusion. The predicates, in such cases, do not stand the test of further observation or of the employment of other senses. Only in a certain position of its rings, relatively to the observer, does Saturn *seem* (*scheint*) to have two handles. The distant tower only *seems* to be round. The stick only *seems* to be bent. But the rose *is* extended and *is* red. Obviously Kant is no longer viewing *Schein* as equivalent to a merely mental image. It now receives a second meaning. It is illusion in the modern, psychological sense. It signifies an abnormal perception of an actually present object. The distinction between appearance and illusion is now reduced to a merely relative difference in constancy and universality of appearance. Saturn necessarily appears to Galileo as possessing two handles. A square tower viewed from the distance cannot appear to the human eye otherwise than round. A stick inserted in water must appear bent. If, however, Saturn be viewed under more favourable conditions, if the distance from the tower be diminished, if the stick be removed from the water, the empirical object will appear in a manner more in harmony with the possible or actual experiences of touch. The distinction is practical, rather than theoretical, in its justification. It says only that certain sets of conditions may be expected to remain uniform; those, for instance, physical, physiological, and psychical, which cause a rose to appear red. Other sets of conditions, such as those which cause the stick to appear bent, are exceptional, and for that reason the bentness may be discounted as illusion. Among the relatively constant are the space and time properties of bodies. To employ the terms of the main text, it is not only by illusion that bodies seem to exist outside me; they actually are there.

So long as we keep to the sphere of ordinary experience, and require no greater exactitude than practical life demands, this distinction is, of course, both important and valid. But Kant, by his references to Saturn, raises considerations which, if faced, must complicate the problem and place it upon an entirely different plane. If, in view of scientific requirements, the conditions of observation are more rigorously formulated, and if by artificial instruments of scientific precision we modify the perceptions of our human senses, what before was ranked as appearance becomes illusion; and no limit can be set to the transformations which even our most normal human experiences may thus be made to undergo. Even the most constant perceptions then yield to variation. The most that can be asserted is that throughout all change in the conditions of observation objects still continue to possess, in however new and revolutionary a fashion, some kind of space and time predicates. The application of this more rigorous scientific standard of appearance thus leads to a fourfold distinction between ultimate reality, scientific appearances, the appearances of ordinary consciousness, and the illusions of ordinary consciousness. The appearances of practical life are the illusions of science, and the appearances of science would similarly be illusions to any being who through ‘intuitive understanding’ could apprehend things in themselves.

But if the distinction between appearance and illusion is thus merely relative to the varying nature of the conditions under which observation takes place, it can afford no sufficient answer to the criticisms which Kant is here professing to meet. Kant has in view those critics (such as Lambert, Mendelssohn, and Garve) who had objected that if bodies in space are representations existing, as he so often asserts, only “within us,” their appearing to exist “outside us” is a complete illusion. These critics have, indeed, found a vulnerable point in Kant’s teaching. The only way in which he can effectively meet it is by frank recognition and development of the phenomenalism with which his subjectivism comes into so frequent conflict. That certain perceptions are more constant than others does not prove that all alike may not be classed as illusory. The criticism concerns only the reality of extended objects. From Kant’s own extreme subjectivist position they *are* illusions of the most thoroughgoing kind. If, as Kant so frequently maintains, objects are representations and exist only “within us,” their existence “outside us” must be denied. The criticism can be met only if Kant is prepared consistently to formulate and defend his own alternative teaching, that sensations arise through the action of external objects upon the sense-organs, and that the world of physical science has consequently a reality not reducible to mere representations in the

individual mind.

It may be objected that Kant has in the main text cited one essential difference between his position and that which is being ascribed to him. Extended objects, though mere representations, are yet due to, and conditioned by, things in themselves. They are illusory only in regard to their properties, not in regard to their existence. But this distinction is not really relevant. The criticism, as just stated, is directed only against Kant's view of space. The fact that the spatial world is a grounded and necessary illusion is not strictly relevant to the matter in dispute. Kant has, indeed, elsewhere, himself admitted the justice of the criticism. In A 780 = B 808 he cites as a possible hypothesis, entirely in harmony with his main results, though not in any degree established by them, the view

"that this life is an appearance only, that is, a sensuous representation of purely spiritual life, and that the whole sensible world is a mere image (*ein blosses Bild*) which hovers before our present mode of knowledge, and like a dream has in itself no objective reality."

Kant's reply is thus really only verbal. He claims that illusion, if constant, has earned the right to be called appearance. He accepts the criticism, but restates it in his own terms. The underlying phenomenalism which colours the position in his own thoughts, and for which he has not been able to find any quite satisfactory formulation, is the sole possible justification, if any such exists, for his contention that the criticism does not apply. Such phenomenalism crops out in the sentence, already partially quoted:

"If I assert that the quality of space and time, according to which, as a condition of their existence, I posit both external objects and my own soul, lies in my mode of intuition and not in these objects in themselves, I am not saying that only by illusion do bodies seem to exist outside me or my soul to be given in my self-consciousness."

But, so far, I have simplified Kant's argument by leaving out of account a third and entirely different view of illusion which is likewise formulated in the appended note. In the middle of the second sentence, and in the last sentence, illusion is defined as the attribution to the thing in itself of what belongs to it only in its relation to the senses. Illusion lies not in the object apprehended, but only in the *judgment* which we pass upon it. It is due, not to sense, but to understanding. Viewing illusion in this way, Kant is enabled to maintain that his critics are guilty of "an unpardonable and almost intentional misconception," since this is the very fallacy which he himself has been most concerned to attack. As he has constantly insisted, appearance is appearance just because it can never be a revelation of the thing in itself.

Now the introduction of this third view reduces the argument of the appended note to complete confusion. Its first occurrence as a parenthesis in a sentence which is stating an opposed view would seem to indicate that the note has been carelessly recast. Originally containing only a statement of the second view, Kant has connected therewith the view which he had already formulated in the first edition and in the *Prolegomena*. But the two views cannot be combined. By the former definition, illusion is necessitated but abnormal perception; according to the latter, it is a preventable error of our conscious judgment. The opposite of illusion is in the one case *appearance*, in the other *truth*. The retention of the reference to Saturn, in the statement of the third view at the end of the note, is further evidence of hasty recasting. While the rose and the extended objects are there treated as also things in themselves, Saturn is taken only in its phenomenal existence. In view of the general confusion, it is a minor inconsistency that Kant should here maintain, in direct opposition to A 28-9, that secondary qualities can be attributed to the empirical object.

This passage from the second edition is a development of *Prolegomena*, § 13, iii. Kant there employs the term appearance in a quite indefinite manner. For the most part he seems to mean by it any and every sense-experience, whether normal or abnormal, and even to include under it dream images. But it is also employed in the second of the above meanings, as signifying those sense-perceptions which harmonise with general experience. Illusion is throughout employed in the third of the above meanings. Kant's illustration, that of the apparently retrograde movements of the planets, necessitates a distinction between

apparent and real motion in space, and consequently leads to the fruitful distinction noted above. Kant gives, however, no sign that he is conscious of the complicated problems involved.

In the interval between the *Prolegomena* (1783) and the second edition of the *Critique* (1787) Mendelssohn had published (1785) his *Morgenstunden*. In its introduction, entitled *Vorerkenntniss von Wahrheit, Schein und Irrthum*, he very carefully distinguishes between illusion (*Sinnenschein*) and error of judgment (*Irrthum*). This introduction Kant had read. In a letter to Schütz he cites it by title, and praises it as "acute, original, and of exemplary clearness." It is therefore the more inexcusable that he should again in the second edition of the *Critique* have confused these two so radically different meanings of the term *Schein*. Mendelssohn, however, drew no distinction between *Schein* and *Erscheinung*. They were then used as practically synonymous, though of course *Schein* was the stronger term. Kant seems to have been the first to distinguish them sharply and to attempt to define the one in opposition to the other. But the very fact that *Erscheinung* and *Schein* were currently employed as equivalent terms, and that the distinction, though one of his own drawing, had been mentioned only in the most cursory manner in the first edition of the *Critique*, removes all justification for his retort upon his critics of "unpardonable misconception." His anger was really due, not to the objection in itself, but to the implied comparison of his position to that of Berkeley. Such comparison never failed to arouse Kant's wrath. For however much this accusation might be justified by his own frequent lapses into subjectivism of the most extreme type, even its partial truth was more than he was willing to admit. Berkeley represents in his eyes, not merely a subjectivist interpretation of the outer world, but the almost diametrical opposite of everything for which he himself stood. Discussion of Kant's relation to Berkeley had best, however, be introduced through consideration of the passage immediately following in which Kant refers to Berkeley by name.

III. (Second Part) B 70. — Kant urges that his doctrine of the ideality of space and time, so far from reducing objects to mere illusion, is the sole means of defending their genuine reality. If space and time had an independent existence, they would have to be regarded as more real than the bodies which occupy them. For on this view space and time would continue to exist even if all their contents were removed; they would be antecedent necessary conditions of all other existences. But space and time thus interpreted are impossible conceptions. The reality of bodies is thereby made to depend upon *Undinge*. If this were the sole alternative, "the good Bishop Berkeley [could] not be blamed for degrading bodies to mere illusion." We should, Kant maintains, have to proceed still further, denying even our own existence. For had Berkeley taken account of time as well as of space, a similar argument, consistently developed in regard to time, would have constrained him to reduce the self to the level of mere illusion. Belief in the reality of things in themselves, whether spiritual or material, is defensible only if space and time be viewed as subjective. In other words, Berkeley's idealism is an inevitable consequence of a realist view of space. But it is also its *reductio ad absurdum*.

["Berkeley in his dogmatic idealism] maintains that space, with all the things of which it is the inseparable condition, is something impossible in itself, and he therefore regards the things in space as merely imaginary entities (*Einbildungen*). Dogmatic idealism is inevitable if space be interpreted as a property which belongs to things in themselves. For, when so regarded, space, and everything to which it serves as condition, is a non-entity (*Unding*). The ground upon which this idealism rests we have removed in the *Transcendental Aesthetic*."

The term *Schein* is not employed throughout this passage in either of the two meanings of the appended note, but in that of the main text. It signifies a representation, to which no existence corresponds.

KANT'S RELATION TO BERKELEY

By idealism Kant means any and every system which maintains that the sensible world does not exist in the form in which it presents itself to us. The position is typified in Kant's mind by the Eleatics, by Plato,

and by Descartes, all of whom are rationalists. With the denial of reality to sense-appearances they combine a belief in the possibility of rationally comprehending its supersensible basis. Failing to appreciate the true nature of the sensible, they misunderstand the character of geometrical science, and falsely ascribe to pure understanding a power of intellectual intuition. Kant's criticisms of Berkeley show very clearly that it is this more general position which he has chiefly in view. To Berkeley Kant objects that only in sense-experience is there truth, that it is sensibility, not understanding, which possesses the power of *a priori* intuition, and that through pure understanding, acting in independence of sensibility, no knowledge of any kind can be acquired. In other words, Kant classes Berkeley with the rationalists. And, as we have already seen, he even goes the length of regarding Berkeley's position as the *reductio ad absurdum* of the realist view of space. Kant does, indeed, recognise that Berkeley differs from the other idealists, in holding an empirical view of space, and consequently of geometry, but this does not prevent Kant from maintaining that Berkeley's thinking is influenced by certain fundamental implications of the realist position. Berkeley's insight — such would seem to be Kant's line of argument — is perverted by the very view which he is attacking. Berkeley appreciates only what is false in the Cartesian view of space; he is blind to the important element of truth which it contains. Empiricist though he be, he has no wider conception of the function and powers of sensibility than have the realists from whom he separates himself off; and in order to comprehend those existences to which alone he is willing to allow true reality, he has therefore, like the rationalists, to fall back upon pure reason.

That Kant's criticism of Berkeley should be extremely external is not, therefore, surprising. He is interested in Berkeley's positive teaching only in so far as it enables him to illustrate the evil tendencies of a mistaken idealism, which starts from a false view of the functions of sensibility and of understanding, and of the nature of space and time. The key to the true idealism lies, he claims, in the Critical problem, how *a priori* synthetic judgments can be possible. This is the fundamental problem of metaphysics, and until it has been formulated and answered no advance can be made.

"My so-called (Critical) idealism is thus quite peculiar in that it overthrows ordinary idealism, and that through it alone *a priori* cognition, even that of geometry, attains objective reality, a thing which even the keenest realist could not assert till I had proved the ideality of space and time."

In order to make Kant's account of Berkeley's teaching really comprehensible, we seem compelled to assume that he had never himself actually read any of Berkeley's own writings. Kant's acquaintance with the English language was most imperfect, and we have no evidence that he had ever read a single English book. When he quotes Pope and Addison, he does so from German translations. Subsequent to 1781 he could, indeed, have had access to Berkeley's *Dialogues between Hylas and Philonous* in a German translation; but in view of the account which he continues to give of Berkeley's teaching, it does not seem likely that he had availed himself of this opportunity. As to what the indirect sources of Kant's knowledge of Berkeley may have been, we cannot decide with any certainty, but amongst them must undoubtedly be reckoned Hume's statements in regard to Berkeley in the *Enquiry*, and very probably also the references to Berkeley in Beattie's *Nature of Truth*. From the former Kant would learn of Berkeley's empirical view of space and also of the sceptical tendencies of his idealist teaching. From it he might also very naturally infer that Berkeley denies all reality to objects. By Beattie Kant would be confirmed in this latter view, and also in his contention that Berkeley is unable to supply a criterion for distinguishing between reality and dreams. Kant may also have received some impressions regarding Berkeley from Hamann.

To take Kant's criticisms of Berkeley more in detail. In the first edition of the *Critique* Kant passes two criticisms, without, however, mentioning Berkeley by name: first, that he overlooks the problem of time, and, like Descartes, ascribes complete reality to the objects of inner sense. This is the cause of a second error, namely, that he views the objects of outer sense as mere illusion (*blosser Schein*). Proceeding, Kant argues that inner and outer sense are really in the same position. Though they yield only appearances,

these appearances are conditioned by things in themselves. Through this relation to things in themselves they are distinguished from all merely subjective images. Berkeley is again referred to in the fourth *Paralogism*. His idealism is distinguished from that of Descartes. The one is dogmatic; the other is sceptical. The one denies the existence of matter; the other only doubts whether it is possible to prove it. Berkeley claims, indeed, that there are contradictions in the very conception of matter; and Kant remarks that this is an objection which he will have to deal with in the section on the *Antinomies*. But this promise Kant does not fulfil; and doubtless for the reason that, however unwilling he may be to make the admission, on this point his own teaching, especially in the *Dialectic*, frequently coincides with that of Berkeley. So little, indeed, is Kant concerned in the first edition to defend his position against the accusation of subjectivism, that in this same section he praises the sceptical idealist as a "benefactor of human reason."

"He compels us, even in the smallest advances of ordinary experience, to keep on the watch, lest we consider as a well-earned possession what we perhaps obtain only in an illegitimate manner. We are now in a position to appreciate the value of the objections of the idealist. They drive us by main force, unless we mean to contradict ourselves in our commonest assertions, to view all our perceptions, whether we call them inner or outer, as a consciousness only of what is dependent on our sensibility. They also compel us to regard the outer objects of these perceptions not as things in themselves, but only as representations, of which, as of every other representation, we can become immediately conscious, and which are entitled outer because they depend on what we call 'outer sense' whose intuition is space. Space itself, however, is nothing but an inner mode of representation in which certain perceptions are connected with one another."

These criticisms are restated in A 491-2 = B 519-20, with the further addition that in denying the existence of extended beings "the empirical idealist" removes the possibility of distinguishing between reality and dreams. This is a new criticism. Kant is no longer referring to the denial of unknowable things in themselves. He is now maintaining that only the Critical standpoint can supply an immanent criterion whereby real experiences may be distinguished from merely subjective happenings. This point is further insisted upon in the *Prolegomena*, but is nowhere developed with any direct reference to Berkeley's own personal teaching. Kant assumes as established that any such criterion must rest upon the *a priori*; and in this connection Berkeley is conveniently made to figure as a thoroughgoing empiricist.

The *Critique*, on its publication, was at once attacked, especially in the Garve-Feder review, as presenting an idealism similar to that of Berkeley. As Erdmann has shown, the original plan of the *Prolegomena* was largely modified in order to afford opportunity for reply to this "unpardonable and almost intentional misconception." Kant's references to Berkeley, direct and indirect, now for the first time manifest a polemical tone, exaggerating in every possible way the difference between their points of view. Only the transcendental philosophy can establish the possibility of *a priori* knowledge, and so it alone can afford a criterion for distinguishing between realities and dreams. It alone will account for the possibility of geometrical science; Berkeley's idealism would render the claims of that science wholly illusory. The Critical idealism transcends experience only so far as is required to discover the conditions which make empirical cognition possible; Berkeley's idealism is 'visionary' and 'mystical.' Even sceptical idealism now comes in for severe handling. It may be called "dreaming idealism"; it makes things out of mere representations, and like idealism in its dogmatic form it virtually denies the existence of the only true reality, that of things in themselves. Sceptical idealism misinterprets space by making it empirical, dogmatic idealism by regarding it as an attribute of the real. Both entirely ignore the problem of time. For these reasons they underestimate the powers of sensibility (to which space and time belong as *a priori* forms), and exaggerate those of pure understanding.

"The position of all genuine idealists from the Eleatics to Berkeley is contained in this formula: 'All cognition through the senses and experience is nothing but mere illusion, and only in the ideas of pure

understanding and Reason is there truth.’ The fundamental principle ruling all my idealism, on the contrary, is this: ‘All cognition of things solely from pure understanding or pure Reason is nothing but mere illusion and only in experience is there truth.’”

This is an extremely inadequate statement of the Critical standpoint, but it excellently illustrates Kant’s perverse interpretation of Berkeley’s teaching.

To these criticisms Kant gives less heated but none the less explicit expression in the second edition of the *Critique*. He is now much more careful to avoid subjectivist modes of statement. His phenomenalist tendencies are reinforced, and come to clearer expression of all that they involve. The fourth *Paralogism* with its sympathetic treatment of empirical idealism is omitted, and in addition to the above passage Kant inserts a new section, entitled *Refutation of Idealism*, in which he states his position in a much more adequate manner.

IV. B 71. — Kant continues the argument of A 39. If space and time condition all existence, they will condition even divine existence, and so must render God’s omniscience, which as such must be intuitive, not discursive, difficult of conception. Upon this point Kant is more explicit in the *Dissertation*.

“*Whatever is, is somewhere and sometime*, is a spurious axiom.... By this spurious principle all beings, even though they be known intellectually, are restricted in their existence by conditions of space and time. Philosophers therefore discuss every form of idle question regarding the locations in the corporeal universe of substances that are immaterial — and of which for that very reason there can be no sensuous intuition nor any possible spatial representation — or regarding the seat of the soul, and the like. And since the sensuous mixes with the intellectual about as badly as square with round, it frequently happens that the one disputant appears as holding a sieve into which the other milks the he-goat. The presence of immaterial things in the corporeal world is virtual, not local, although it may conveniently be spoken of as local. Space contains the conditions of possible interaction only when it is between material bodies. What, however, in immaterial substances constitutes the external relations of force between them or between them and bodies, obviously eludes the human intellect.... But when men reach the conception of a highest and extra-mundane Being, words cannot describe the extent to which they are deluded by these shades that flit before the mind. They picture God as present in a place: they entangle Him in the world where He is supposed to fill all space at once. They hope to make up for the [spatial] limitation they thus impose by thinking of God’s place *per eminentiam*, *i.e.* as infinite. But to be present in different places at the same time is absolutely impossible, since different places are mutually external to one another, and consequently what is in several places is outside itself, and is therefore present to itself outside itself — which is a contradiction in terms. As to time, men have got into an inextricable maze by releasing it from the laws that govern sense knowledge, and what is more, transporting it beyond the confines of the world to the Being that dwells there, as a condition of His very existence. They thus torment their souls with absurd questions, for instance, why God did not fashion the world many centuries earlier. They persuade themselves that it is easily possible to conceive how God may discern present things, *i.e.* what is actual in the time in which He is. But they consider that it is difficult to comprehend how He should foresee the things about to be, *i.e.* the actual in the time in which He is not yet. They proceed as if the existence of the Necessary Being descended successively through all the moments of a supposed time, and having already exhausted part of His duration, foresaw the eternal life that still lies before Him together with the events which [will] occur simultaneously [with that future life of His]. All these speculations vanish like smoke when the notion of time has been rightly discerned.”

The references in B 71-2 to the intuitive understanding are among the many signs of Kant’s increased preoccupation, during the preparation of the second edition, with the problems which it raises. Such understanding is not sensuous, but intellectual; it is not derivative, but original; the object itself is created in the act of intuition. Or, as Kant’s position may perhaps be more adequately expressed, all of God’s activities are creative, and are inseparable from the non-sensuous intuition whereby both they and their

products are apprehended by Him. Kant's reason for again raising this point may be Mendelssohn's theological defence of the reality of space in his *Morgenstunden*. Mendelssohn has there argued that just as knowledge of independent reality is confirmed by the agreement of different senses, and is rendered the more certain in proportion to the number of senses which support the belief, so the validity of our spatial perceptions is confirmed in proportion as men are found to agree in this type of experience with one another, with the animals, and with angelic beings. Such inductive inference will culminate in the proof that even the Supreme Being apprehends things in this same spatial manner. Kant's reply is that however general the intuition of space may be among finite beings, it is sensuous and derivative, and therefore must not be predicated of a Divine Being. For obvious reasons Kant has not felt called upon to point out the inadequacy of this inductive method to the solution of Critical problems. In A 42 Kant, arguing that our forms of intuition are subjective, claims that they do not necessarily belong to all beings, though they must belong to all men. He is quite consistent in now maintaining that their characteristics, as sensuous and derivative, do not necessarily preclude their being the common possession of all finite beings.

THE PARADOX OF INCONGRUOUS COUNTERPARTS

The purpose, as already noted, of the above sections II. to IV., as added in the second edition, is to afford 'confirmation' of the ideality of space and time. That being so, it is noticeable that Kant has omitted all reference to an argument embodied, for this same purpose, in § 13 of the *Prolegomena*. The matter is of sufficient importance to call for detailed consideration.

As the argument of the *Prolegomena* is somewhat complicated, it is advisable to approach it in the light of its history in Kant's earlier writings. It was to his teacher Martin Knutzen that Kant owed his first introduction to Newton's cosmology; and from Knutzen he inherited the problem of reconciling Newton's mechanical view of nature and absolute view of space with the orthodox Leibnizian tenets. In his first published work Kant seeks to prove that the very existence of space is due to gravitational force, and that its three-dimensional character is a consequence of the specific manner in which gravity acts. Substances, he teaches, are unextended. Space results from the connection and order established between them by the balancing of their attractive and repulsive forces. And as the law of gravity is merely contingent, other modes of interaction, and therefore other forms of space, with more than three dimensions, must be recognised as possible.

"A science of all these possible kinds of space would undoubtedly be the highest enterprise which a finite understanding could undertake in the field of geometry."

In the long interval between 1747 and 1768 Kant continued to hold to some such compromise, retaining Leibniz's view that space is derivative and relative, and rejecting Newton's view that it is prior to, and pre-conditions, all the bodies that exist in it. But in that latter year he published a pamphlet in which, following in the steps of the mathematician, Euler, he drew attention to certain facts which would seem quite conclusively to favour the Newtonian as against the Leibnizian interpretation of space. The three dimensions of space are primarily distinguishable by us only through the relation in which they stand to our body. By relation to the plane that is at right angles to our body we distinguish 'above' and 'below'; and similarly through the other two planes we determine what is 'right' and 'left,' 'in front' and 'behind.' Through these distinctions we are enabled to define differences which cannot be expressed in any other manner. All species of hops — so Kant maintains — wind themselves around their supports from left to right, whereas all species of beans take the opposite direction. All snail shells, with some three exceptions, turn, in descending from their apex downwards, from left to right. This determinate direction of movement, natural to each species, like the difference in spatial configuration between a right and a left hand, or between a right hand and its reflection in a mirror, involves in all cases a reference of the given object to the wider space within which it falls, and ultimately to space as a whole. Only so can its

determinate character be distinguished from its opposite counterpart. For as Kant points out, though the right and the left hand are *counterparts*, that is to say, objects which have a common definition so long as the arrangement of the parts of each is determined in respect to its central line of reference, they are none the less inwardly *incongruent*, since the one can never be made to occupy the space of the other. As he adds in the *Prolegomena*, the glove of one hand cannot be used for the other hand. This inner incongruence compels us to distinguish them as different, and this difference is only determinable by location of each in a single absolute space that constrains everything within it to conform to the conditions which it prescribes. In three-dimensional space everything must have a right and a left side, and must therefore exhibit such inner differences as those just noted. Spatial determinations are not, as Leibniz teaches, subsequent to, and dependent upon, the relations of bodies to one another; it is the former that determine the latter.

"The reason why that which in the shape of a body exclusively concerns its relation to pure space can be apprehended by us only through its relation to other bodies, is that absolute space is not an object of any outer sensation, but a fundamental conception which makes all such differences possible."

Kant enforces his point by arguing that if the first portion of creation were a human hand, it would have to be either a right or a left hand. Also, a different act of creation would be demanded according as it was the one or the other. But if the hand alone existed, and there were no pre-existing space, there would be no inward difference in the relations of its parts, and nothing outside it to differentiate it. It would therefore be entirely indeterminate in nature, *i.e.* would suit either side of the body, which is impossible.

This adoption of the Newtonian view of space in 1768 was an important step forward in the development of Kant's teaching, but could not, in view of the many metaphysical difficulties to which it leads, be permanently retained; and in the immediately following year — a year which, as he tells us, "gave great light" — he achieved the final synthesis which enabled him to combine all that he felt to be essential in the opposing views. Though space is an absolute and preconditioning source of differences which are not conceptually resolvable, it is a merely subjective form of our sensibility.

Now it is significant that when Kant expounds this view in the *Dissertation* of 1770, the argument from incongruous counterparts is no longer employed to establish the absolute and pre-conditioning character of space, but only to prove that it is a pure non-conceptual intuition.

"Which things in a given space lie towards one side, and which lie towards the other, cannot by any intellectual penetration be discursively described or reduced to intellectual marks. For in solids that are completely similar and equal, but incongruent, such as the right and the left hand (conceived solely in terms of their extension), or spherical triangles from two opposite hemispheres, there is a diversity which renders impossible the coincidence of their spatial boundaries. This holds true, even though they can be substituted for one another in all those respects which can be expressed in marks that are capable of being made intelligible to the mind through speech. It is therefore evident that the diversity, that is, the incongruity, can only be apprehended by some species of pure intuition."

There is no mention of this argument in the first edition of the *Critique*, and when it reappears in the *Prolegomena* it is interpreted in the light of an additional premiss, and is made to yield a very different conclusion from that drawn in the *Dissertation*, and a *directly opposite conclusion* from that drawn in 1768. Instead of being employed to establish either the intuitive character of space or its absolute existence, it is cited as evidence in proof of its subjectivity. As in 1768, it is spoken of as strange and paradoxical, and many of the previous illustrations are used. The paradox consists in the fact that bodies and spherical figures, conceptually considered, can be absolutely identical, and yet for intuition remain diverse. This paradox, Kant now maintains in opposition to his 1768 argument, proves that such bodies and the space within which they fall are not independent existences. For were they things in themselves, they would be adequately cognisable through the pure understanding, and could not therefore conflict with its demands. Being conceptually identical, they would necessarily be congruent in every respect. But if

space is merely the form of sensibility, the fact that in space the part is only possible through the whole will apply to everything in it, and so will generate a fundamental difference between conception and intuition. Things in themselves are, as such, unconditioned, and cannot, therefore, be dependent upon anything beyond themselves. The objects of intuition, in order to be possible, must be merely ideal.

Now the new premiss which differentiates this argument from that of 1768, and which brings Kant to so opposite a conclusion, is one which is entirely out of harmony with the teaching of the *Critique*. In this section of the *Prolegomena* Kant has unconsciously reverted to the dogmatic standpoint of the *Dissertation*, and is interpreting understanding in the illegitimate manner which he so explicitly denounces in the section on *Amphiboly*.

"The mistake ... lies in employing the understanding contrary to its vocation transcendentally [*i.e.* transcendently] and in making objects, *i.e.* possible intuitions, conform to concepts, not concepts to possible intuitions, on which alone their objective validity rests."

The question why no mention of this argument is made in the second edition of the *Critique* is therefore answered. Kant had meantime, in the interval between 1783 and 1787, become aware of the inconsistency of the position. So far from being a paradox, this assumed conflict rests upon a false view of the function of the understanding. The relevant facts may serve to confirm the view of space as an intuition in which the whole precedes the parts; but they can afford no evidence either of its absoluteness or of its ideality. In 1768 they seem to Kant to prove its absoluteness, only because the other alternative has not yet occurred to him. In 1783 they seem to him to prove its ideality, only because he has not yet completely succeeded in emancipating his thinking from the dogmatic rationalism of the *Dissertation*.

As already noted, Kant's reason for here asserting that space is intuitive in nature, namely, that in it the parts are conditioned by the whole, is also his reason for elsewhere describing it as an Idea of Reason. The further implication of the argument of the *Prolegomena*, that in the noumenal sphere the whole is made possible only by its unconditioned parts, raises questions the discussion of which must be deferred. The problem recurs in the *Dialectic* in connection with Kant's definition of the Idea of the unconditioned. In the Ideas of Reason Kant comes to recognise the existence of concepts which do not conform to the reflective type analysed by the traditional logic, and to perceive that these Ideas can yield a deeper insight than any possible to the discursive understanding. The above rationalistic assumption must not, therefore, pass unchallenged. It may be that in the noumenal sphere all partial realities are conditioned by an unconditioned whole.

Concluding Paragraph. — The wording of this paragraph is in keeping with the increased emphasis which in the *Introduction* to the second edition is given to the problem, how *a priori* synthetic judgments are possible. Kant characteristically fails to distinguish between the problems of pure and applied mathematics, with resulting inconsecutiveness in his argumentation.

THE TRANSCENDENTAL DOCTRINE OF ELEMENTS

PART II. THE TRANSCENDENTAL LOGIC

Introduction

I. Concerning Logic in General. — This *Introduction* which falls into four divisions, is extremely diffuse, and contributes little that is of more than merely architectonic value. It is a repetition of the last section of the general *Introduction*, and of the introductory paragraphs of the *Aesthetic*, but takes no account of the definitions given in either of those two places. It does not, therefore, seem likely that it could have been written in immediate sequence upon the *Aesthetic*. It is probably later than the main body of the *Analytic*. In any case it is externally tacked on to it; as Adickes has noted, it is completely ignored in the opening section of the *Analytic*.

In treating of intuition in the first sentence, Kant seems to have in view only empirical intuition. Yet he at once proceeds to state that intuition may be pure as well as empirical. Also, in asserting that "pure intuition contains only the form under which something is intuited," Kant would seem to be adopting the view that it does not yield its own manifold, a conclusion which he does not, however, himself draw.

In defining sensibility, Kant again ignores pure intuition. Sensuous intuition, it is stated, is the mode in which we are affected by objects. Understanding, in turn, is defined only in its opposition to sensibility, in the ordinary meaning of that term. Understanding is the faculty which yields thought of the object to which sense-affection is due. It is "the power of thinking the object of sensuous intuition"; and acts, it is implied, in and through pure concepts which it supplies out of itself.

"Without sensibility objects would not be given to us [*i.e.* the impressions, in themselves merely subjective contents, through which alone independent objects can be revealed to us, would be wanting]; without understanding they would not be thought by us [*i.e.* they would be apprehended only in the form in which they are given, viz. as subjective modes of our sensibility]."

Kant has not yet developed the thesis which the central argument of the *Analytic* is directed to prove, namely, that save through the combination of intuition and conception no consciousness whatsoever is possible. In these paragraphs he still implies that though concepts without intuition are empty they are not meaningless, and that though intuitions without concepts are blind they are not empty. Their union is necessary for genuine knowledge, but not for the existence of consciousness as such.

"It is just as necessary to make our concepts sensuous, *i.e.* to add to them their object in intuition, as to make our intuitions intelligible, *i.e.* to bring them under concepts."

Kant's final Critical teaching is very different from this. Concepts are not first given in their purity, nor is "their object" added in intuition. Only through concepts is apprehension of an object possible, and only in and through such apprehension do concepts come to consciousness. Nor are intuitions "made intelligible" by being "brought under concepts." Only as thus conceptually interpreted can they exist for consciousness. The co-operation of concept and intuition is necessary for consciousness in any and every form, even the simplest and most indefinite. Consciousness of the subjective is possible only in and through consciousness of the objective, and *vice versa*. The dualistic separation of sensibility from understanding persists, however, even in Kant's later utterances; and, as above stated, to this sharp opposition are due both the strength and the weakness of Kant's teaching. Intuition and conception must, he here insists, be carefully distinguished. *Aesthetic* is the "science of the rules of sensibility in general." *Logic* is the "science of the rules of understanding in general."

Kant's classification of the various kinds of logic may be exhibited as follows:

Logic–

general–

pure

applied

special

transcendental

Adickes criticises Kant’s classification as defective, owing to the omission of the intermediate concept ‘ordinary.’ Adickes therefore gives the following table:

Logic

transcendental
ordinary

special
general

pure
applied

General logic is a logic of elements, *i.e.* of the absolutely necessary laws of thought, in abstraction from all differences in the objects dealt with, *i.e.* from all content, whether empirical or transcendental. It is a canon of the understanding in its general discursive or analytic employment. When it is pure, it takes no account of the empirical psychological conditions under which the understanding has to act. When it is developed as an applied logic, it proceeds to formulate rules for the employment of understanding under these subjective conditions. It is then neither canon, nor organon, but simply a catharticon of the ordinary understanding. Special logic is the organon of this or that science, *i.e.* of the rules governing correct thinking in regard to a certain class of objects. Only pure general logic is a pure doctrine of reason. It alone is absolutely independent of sensibility, of everything empirical, and therefore of psychology. Such pure logic is a body of demonstrative teaching, completely *a priori*. It stands to applied logic in the same relation as pure to applied ethics.

“Some logicians, indeed, affirm that logic presupposes *psychological* principles. But it is just as inappropriate to bring principles of this kind into logic as to derive the science of morals from life. If we were to take the principles from psychology, that is, from observations on our understanding, we should merely see *how* thought takes place, and *how* it is affected by the manifold subjective hindrances and conditions; so that this would lead only to the knowledge of *contingent* laws. But in logic the question is not of *contingent*, but of *necessary* laws; not how we do think, but how we ought to think. The rules of logic, then, must not be derived from the *contingent*, but from the *necessary* use of the understanding which without any psychology a man finds in himself. In logic we do not want to know how the understanding is and thinks, and how it has hitherto proceeded in thinking, but how it ought to proceed in thinking. Its business is to teach us the correct use of reason, that is, the use which is consistent with

itself.”

By a canon Kant means a system of *a priori* principles for the correct employment of a certain faculty of knowledge. By an organon Kant means instruction as to how knowledge may be extended, how new knowledge may be acquired. A canon formulates positive principles through the application of which a faculty can be directed and disciplined. A canon is therefore a discipline based on positive principles of correct use. The term discipline is, however, reserved by Kant to signify a purely negative teaching, which seeks only to prevent error and to check the tendency to deviate from rules. When a faculty has no correct use (as, for instance, pure speculative reason), it is subject only to a discipline, not to a canon. A discipline is thus “a separate, negative code,” “a system of caution and self-examination.” It is further distinguished from a canon by its taking account of other than purely *a priori* conditions. It is related to a pure canon much as applied is related to general logic. As a canon supplies principles for the *directing* of a faculty, its distinction from an organon obviously cannot be made hard and fast. But here as elsewhere Kant, though rigorous and almost pedantic in the drawing of distinctions, is correspondingly careless in their application. He describes special logic as the organon of this or that science. We should expect from the definition given in the preceding sentence that it would rather be viewed as a canon. In A 46 = B 63 Kant speaks of the *Aesthetic* as an organon.

II. Concerning Transcendental Logic. — It is with the distinction between general and transcendental logic that Kant is chiefly concerned. It is a distinction which he has himself invented, and which is of fundamental importance for the purposes of the *Critique*. Transcendental logic is the new science which he seeks to expound in this second main division of the *Doctrine of Elements*. The distinction, from which all the differences between the two sciences follow, is that while general logic abstracts from all differences in the objects known, transcendental logic abstracts only from empirical content. On the supposition, not yet proved by Kant, but asserted in anticipation, that there exist pure *a priori* concepts which are valid of objects, there will exist a science distinct in nature and different in purpose from general logic. The two logics will agree in being *a priori*, but otherwise they will differ in all essential respects.

The reference in A 55 = B 79 to the forms of intuition is somewhat ambiguous. Kant might be taken as meaning that in transcendental logic abstraction is made not only from everything empirical but also from all intuition. That is not, however, Kant’s real view, or at least not his final view. In sections A 76-7 = B 102, A 130-1 = B 170, and A 135-6 = B 174-5, which are probably all of later origin, he states his position in the clearest terms. Transcendental logic, he there declares, differs from general logic in that it is not called upon to abstract from the pure *a priori* manifolds of intuition. This involves, it may be noted, the recognition, so much more pronounced in the later developments of Kant’s Critical teaching, of space and time as not merely forms for the apprehension of sensuous manifolds but as themselves presenting to the mind independent manifolds of *a priori* nature.

As the term *transcendental* indicates, the new logic will have as its central problems the origin, scope, conditions and possibility of valid *a priori* knowledge of objects. None of these problems are treated in general logic, which deals only with the understanding itself. The question which it raises is, as Kant says in his *Logic*, *How can the understanding know itself?* The question dealt with by transcendental logic we may formulate in a corresponding way: *How can the understanding possess pure a priori knowledge of objects?* It is a canon of pure understanding in so far as that faculty is capable of synthetic, objective knowledge *a priori*. General logic involves, it is true, the idea of reference to objects, but the possibility of such reference is not itself investigated. In general logic the understanding deals only with itself. It assumes indeed that all objects must conform to its laws, but this assumption plays no part in the science itself.

A further point, not here dwelt upon by Kant, calls for notice, namely, that the activities of understanding dealt with by general logic are its merely discursive activities, — those of discrimination

and comparison; whereas those dealt with by transcendental logic are the originative activities through which it produces *a priori* concepts from within itself, and through which it attains, independently of experience, to an *a priori* determination of objects. Otherwise stated, general logic deals only with analytic thinking, transcendental logic with the synthetic activities that are involved in the generation of the complex contents which form the subject matter of the analytic procedure.

III. Concerning the Division of General Logic into Analytic and Dialectic. — The following passage from Kant's *Logic* forms an excellent and sufficient comment upon the first four paragraphs of this section:

"An important perfection of knowledge, nay, the essential and inseparable condition of all its perfection, is truth. Truth is said to consist in the agreement of knowledge with the object. According to this merely verbal definition, then, my knowledge, in order to be true, must agree with the object. Now I can only compare the object with my knowledge by this means, namely *by having knowledge of it*. My knowledge, then, is to be verified by itself, which is far from being sufficient for truth. For as the object is external to me, I can only judge whether my knowledge of the object agrees with my knowledge of the object. Such a circle in explanation was called by the ancients Diallelos. And, indeed, the logicians were accused of this fallacy by the sceptics, who remarked that this account of truth was as if a man before a judicial tribunal should make a statement, and appeal in support of it to a witness whom no one knows, but who defends his own credibility by saying that the man who had called him as a witness is an honourable man. The charge was certainly well-founded. The solution of the problem referred to is, however, absolutely impossible for any man.

"The question is in fact this: whether and how far there is a certain, universal, and practically applicable criterion of truth. For this is the meaning of the question, What is truth?...

"A *universal material* criterion of truth is not possible; the phrase is indeed self-contradictory. For being *universal* it would necessarily abstract from all distinction of objects, and yet being a material criterion, it must be concerned with just this distinction in order to be able to determine whether a cognition agrees with the very object to which it refers, and not merely with some object or other, by which nothing would be said. But *material* truth must consist in this agreement of a cognition with the definite object to which it refers. For a cognition which is true in reference to one object may be false in reference to other objects. It is therefore absurd to demand a universal material criterion of truth, which is at once to abstract and not to abstract from all distinction of objects.

"But if we ask for a universal *formal* criterion of truth, it is very easy to decide that there may be such a criterion. For formal truth consists simply in the agreement of the cognition with itself when we abstract from all objects whatever, and from every distinction of objects. And hence the universal formal criteria of truth are nothing but universal logical marks of agreement of cognitions with themselves, or, what is the same thing, with the general laws of the understanding and the Reason. These formal universal criteria are certainly not sufficient for objective truth, but yet they are to be viewed as its *conditio sine qua non*. For before the question, whether the cognition agrees with the object, must come the question, whether it agrees with itself (as to form). And this is the business of logic."

The remaining paragraphs of Section III. may similarly be compared with the following passage from an earlier section of Kant's *Logic*:

"Analytic discovers, by means of analysis, all the activities of reason which we exercise in thought. It is therefore an analytic of the form of understanding and of Reason, and is justly called the logic of truth, since it contains the necessary rules of all (formal) truth, without which truth our knowledge is untrue in itself, even apart from its objects. It is therefore nothing more than a canon for deciding on the formal correctness of our knowledge.

"Should we desire to use this merely theoretical and general doctrine as a practical art, that is, as an organon, it would become a *dialectic*, *i.e. a logic of semblance* (*ars sophistica disputatoria*), arising out

of an abuse of the analytic, inasmuch as by the mere logical form there is contrived the semblance of true knowledge, the characters of which must, on the contrary, be derived from agreement with objects, and therefore from the *content*.

"In former times dialectic was studied with great diligence. This art presented false principles in the semblance of truth, and sought, in accordance with these, to maintain things in semblance. Amongst the Greeks the dialecticians were advocates and rhetoricians who could lead the populace wherever they chose, because the populace lets itself be deluded with semblance. Dialectic was therefore at that time the art of semblance. In logic, also, it was for a long time treated under the name of the *art of disputation*, and during that period all logic and philosophy was the cultivation by certain chatterboxes of the art of semblance. But nothing can be more unworthy of a philosopher than the cultivation of such an art. Dialectic in this form, therefore, must be altogether suppressed, and instead of it there must be introduced into logic a critical examination of this semblance.

"We should then have two parts of logic: the *analytic*, which will treat of the formal criteria of truth, and the *dialectic*, which will contain the marks and rules by which we can know that something does not agree with the formal criteria of truth, although it seems to agree with them. Dialectic in this form would have its use as a *cathartic* of the understanding."

Dialectic is thus interpreted in a merely negative sense. It is, Kant says, a catharticon. So far from being an organon, it is not even a canon. It is merely a discipline. By this manner of defining dialectic Kant causes some confusion. It does not do justice to the scope and purpose of that section of the *Critique* to which it gives its name.

IV. Concerning the Division of Transcendental Logic into Transcendental Analytic and Dialectic. — The term object is used throughout this section in two quite distinct senses. In the second and third sentences it is employed in its wider meaning as equivalent to content or matter. In the fourth sentence it is used in the narrower and stricter sense, more proper to the term, namely, as meaning 'thing.' Again, in the fifth sentence content (*Inhalt*) would seem to be identified with object in the narrower sense, while in the sixth sentence matter (*Materie*, a synonym for content) appears to be identified with object in the wider sense. *Transcendental Dialectic*, in accordance with the above account of its logical correlate, is defined in a manner which does justice only to the negative side of its teaching. Its function is viewed as merely that of protecting the pure understanding against sophistical illusions.

THE TRANSCENDENTAL LOGIC

Division I

THE TRANSCENDENTAL ANALYTIC

The chief point of this section lies in its insistence that, as the *Analytic* is concerned only with the pure understanding, the *a priori* concepts with which it deals must form a unity or system. Understanding is viewed as a separate faculty, and virtually hypostatised. As a separate faculty, it must, it is implied, be an independent unity, self-containing and complete. Its concepts are determined in number, constitution, and interrelation, by its inherent character. They originate independently of all differences in the material which they are employed to organise.

BOOK I

THE ANALYTIC OF CONCEPTS

Introductory Paragraph. — Kant’s view of the understanding as a separate faculty is in evidence again in this paragraph. The *Analytic* is a “dissection of the faculty of the understanding.” *A priori* concepts are to be sought nowhere but in the understanding itself, as their birthplace. There “they lie ready till at last, on the occasion of experience, they become developed.” But such statements fail to do justice to Kant’s real teaching. They would seem to reveal the persisting influence of the pre-Critical standpoint of the *Dissertation*.

CHAPTER I

THE CLUE TO THE DISCOVERY OF ALL PURE CONCEPTS OF THE UNDERSTANDING

That the understanding is "an absolute unity" is repeated. From this assertion, thus dogmatically made, without even an attempt at argument, Kant deduces the important conclusion that the pure concepts, originating from such a source, "must be connected with each other according to *one* concept or idea (*Begriff oder Idee*)." And he adds the equally unproved assertion:

"But such a connection supplies a rule by which we are enabled to assign its proper place to each pure concept of the understanding and by which we can determine in an *a priori* manner their systematic completeness. Otherwise we should be dependent in these matters on our own discretionary judgment or merely on chance."

In the next section he sets himself to discover from an examination of analytic thinking what this rule or principle actually is, and in so doing he for the first time discloses, in any degree at all adequate, the real nature of the position which he is seeking to develop. He connects the required principle with the nature of the act of judging, considered as a function of unity.

Section I. The Logical Use of the Understanding. — This section, viewed as introductory to the metaphysical deduction of the categories, is extremely unsatisfactory. It directs attention to the wrong points, and conceals rather than defines Kant's real position. Its argumentation is also contorted and confused, and only by the most patient analysis can it be straightened out. The commentator has presented to him a twofold task from which there is no escape. He must render the argument consistent by such modification as will harmonise it with Kant's later and more deliberate positions, and he must explain why Kant has presented it in this misleading manner.

The title of the section would seem to imply that only the discursive activities of understanding are to be dealt with. That is, indeed, in the main true. Confusion results, however, from the clashing of this avowed intention with the ultimate purpose in view of which the argument is propounded. Kant is seeking to prove that we can derive from the more accessible procedure of the discursive understanding a clue sufficient for determining those pre-logical activities which have to be postulated in terms of his new Copernican hypothesis. But though that is the real intention of this section, it has, unfortunately, not been explicitly recognised, and can be divined by the reader only after he has mastered the later portions of the *Analytic*. Kant's argument has also the further defect that no sufficient statement is given either of the nature of the discursive concept or of its relation to judgment. These lacunae we must fill out as best we can from his utterances elsewhere. I shall first state Kant's view of the distinction between discursive and synthetic thinking, and then examine his treatment of the nature of the concept and of its relation to judgment.

As already noted, the distinction between transcendental and general logic marks for Kant all-important differences in the use of the understanding. In the one employment the understanding, by creative synthetic activities, generates from the given manifold the complex objects of sense-experience. In so doing it interprets and organises the manifold through concepts which originate *from within itself*. By the other it discriminates and compares, and thereby derives *from the content of sense-experience* the generic concepts of the traditional logic. Now Kant would seem to argue in this section that if the difference in the origin of the concepts in those two cases be left out of account, and if we attend only to the quite general character of their respective activities, they will be found to agree in one fundamental feature, namely, that they express functions of unity. Each is based on the spontaneity of thought — on the spontaneity of

synthetic interpretation on the one hand, of discrimination and comparison on the other. This feature common to the two types of activity can be further defined as being the unity of the act whereby a multiplicity is comprehended under a single representation. In the judgment "every metal is a body" the variety of metals is reduced to unity through the concept body. In an analogous manner the synthetic understanding organises a manifold of intuition through some such form of unity as that of substance and attribute. That is the category which underlies the above proposition, and which renders possible the specific unity of the total judgment. To quote the sentence with which in a later section Kant introduces his table of categories:

"The same understanding, and by the same operations by which in concepts, by means of analytic unity, it has produced the logical form of a judgment, introduces, by means of the synthetic unity of the manifold in intuition in general, a transcendental element into its representations...."

Now Kant's exposition is extremely misleading. As his later utterances show, his real argument is by no means that which is here given. We shall have occasion to observe that Kant is unable to prove, and does not ultimately profess to prove, that it is "the same understanding," and still less that it is "the same operations," which are exercised in discursive and in creative thinking. But this is a criticism which it would be premature to introduce at this stage. We must proceed to it by way of preliminary analysis of the above exposition. Kant's argument does not rest upon any such analogy as that just drawn, between the concepts formed by consciously comparing contents and the concepts which originate from within the understanding itself. Both, it is true, are functions of unity, but otherwise there is, according to Kant's own teaching, not the least resemblance between them. A generic or abstract concept expresses common qualities found in each of a number of complex contents. It is itself a content. A category, on the other hand, is always a function of unity whereby contents are interpreted. It is not a content, but a form for the organisation of content. It can gain expression only in the total act of judging, not in any one element such as the discursive concept. But though the analogy drawn by Kant thus breaks down, his argument is continued in a new and very different form. It is no longer made to rest on any supposed resemblance between discursive and creative thinking, regarded as co-ordinate and independent activities. It now consists in the proof that the former presupposes and is conditioned by the latter. Through study of the understanding in its more accessible discursive procedure, we may hope to discover the synthetic forms according to which it has proceeded in its pre-logical activities. When we determine the various forms of analytic judgment, the categories which are involved in synthetic thinking reveal themselves to consciousness.

Thus in spite of Kant's insistence upon the conceptual predicate, and upon the unity to which it gives expression, immediately he proceeds to the deduction of the categories, the emphasis is shifted to the unity which underlies the judgment as a whole. What constitutes such propositions as "all bodies are divisible," "every metal is a body," a unique and separate type of judgment is not the character of the predicate, but the category of substance and attribute whereby the predicate is related to the subject. To that category they owe their specific form; and it is a function of unity for which the discursive understanding can never account. As Kant states in the *Prolegomena*, if genuine judgments, that is, judgments that are "objectively valid," are analysed,

"...it will be found that they never consist of mere intuitions connected only (as is commonly believed) by comparison in a judgment. They would be impossible were not a pure concept of the understanding superadded to the concepts abstracted from intuition. The abstract concepts are subsumed under a pure concept, and in this manner only can they be connected in an objectively valid judgment."

Thus the analogy between discursive and *a priori* concepts is no sooner drawn than it is set aside as irrelevant. Though generic concepts rest upon functions of unity, and though (as we shall see immediately) they exist only as factors in the total act of judging, there is otherwise not the least resemblance between them and the categories. The clue to the categories is not to be found in the inherent characteristics of

analytic thinking, or of its specific products (namely, concepts), but solely in what, after all abstraction, it must still retain from the products which synthetic thinking creates. Each type of analytic judgment will be found on examination to involve some specific function whereby the conceptual factors are related to, and unified with, the other elements in the judgment. This function of unity is in each case an *a priori* category of the understanding. That is the thesis which underlies the concluding sentence of this section.

"The functions of the understanding [*i.e.* the *a priori* concepts of understanding] can be discovered in their completeness, if it is possible to state exhaustively the functions of unity [*i.e.* the forms of relation] in judgments."

The adoption of such a position involves, it may be noted, the giving up of the assertion, which is so emphatically made in the passage above quoted, that it is *by the same activities* that the understanding discursively forms abstract concepts and creatively organises the manifold of sense. That is in no respect true. There is no real identity — there is not even analogy — between the processes of comparison and abstraction on the one hand and those of synthetic interpretation on the other. The former are merely reflective: the latter are genuinely creative. Discursive activities are conscious processes, and are under our control: the synthetic processes, are non-conscious; only their finished products appear within the conscious field. This, however, is to anticipate a conclusion which was among the last to be realised by Kant himself, namely that there is no proof that these two types of activity are ascribable to one and the same source. The synthetic activities — as he himself finally came to hold — are due to a faculty of imagination.

"Synthesis in general ... is the mere result of the power of imagination, a blind but indispensable function of the soul, without which we should have no knowledge whatsoever, but of which we are scarcely ever conscious."

This sentence occurs in a passage which is undoubtedly a later interpolation. The "scarcely ever" (*selten nur einmal*) indicates Kant's lingering reluctance to recognise this fundamental fact, destructive of so much in his earlier views, even though it completes and reinforces his chief ultimate conclusions. With this admission Kant also gives up his sole remaining ground for the contention that there must be a complete parallelism between discursive and creative thinking. If they arise from such different sources, we have no right to assume, without specific proof, that they must coincide in the forms of their activity. This is a point to which we shall return in discussing Kant's formulation of the principle which is supposed to guarantee the completeness of the table of categories.

This unavowed change in point of view is the main cause of confusion in this section. Its other defects are chiefly those of omission. Kant fails to develop in sufficient detail his view of the nature of the discursive concept, or to make sufficiently clear the grounds for his assertion that conception as an activity of the understanding is identical with judgment. To take the former point first. Kant's mode of viewing the discursive concept finds expression in the following passage in the *Introduction* to his *Logic*:

"Human knowledge is on the side of the understanding *discursive*; that is, it takes place by means of ideas which make what is common to many things the ground of knowledge: and hence by means of attributes as such. We therefore cognise things only by means of attributes. An attribute is that in a thing which constitutes part of our cognition of it; or, what is the same, a partial conception so far as it is considered as a ground of cognition of the whole conception. *All our concepts, therefore, are attributes, and all thought is nothing but conception by means of attributes*."

The limitations of Kant's view of the concept could hardly find more definite expression. The only type of judgment which receives recognition is the categorical, interpreted in the traditional manner.

"To compare something as a mark with a thing, is called 'to judge.' The thing itself is the subject, the mark [or attribute] is the predicate. The comparison is expressed by the word 'is,' ... which when used without qualification indicates that the predicate is a mark [or attribute] of the subject, but when combined with the sign of negation states that the predicate is a mark opposed to the subject."

Kant's view of analytic thinking is entirely dominated by the substance-attribute teaching of the traditional logic. A concept must, in its connotation, be an abstracted attribute, and in its denotation represent a class. Relational thinking, and the concepts of relation, are ignored. Thus, in the *Aesthetic*, as we have already noted, Kant maintains that since space and time are not generic class concepts they must be intuitions. This argument, honestly employed by Kant, shows how completely unconscious he was of the revolutionary consequences of his new standpoint. Even in the very act of insisting upon the relational character of the categories, he still continues to speak of the concept as if it must necessarily conform to the generic type. In this, as in so many other respects, transcendental logic is not, as he would profess, supplementary to general logic; it is its tacit recantation. Modern logic, as developed by Lotze, Sigwart, Bradley, and Bosanquet, is, in large part, the recasting of general logic in terms of the results reached by Kant's transcendental enquiries. Meantime, sufficient has been said to indicate the strangely limited character of Kant's doctrine of the logical concept.

But on one fundamental point Kant breaks entirely free from the traditional logic. The following passage occurs in the above-quoted pamphlet on *The Mistaken Subtlety of the Four Syllogistic Figures*:

"It is clear that in the ordinary treatment of logic there is a serious error in that distinct and complete concepts are treated before judgments and ratiocinations, although the former are only possible by means of the latter." "I say, then, first, that a *distinct* concept is possible only by means of a *judgment*, a *complete* concept only by means of a *ratiocination*. In fact, in order that a concept should be distinct, I must clearly recognise something as an attribute of a thing, and this is a judgment. In order to have a distinct concept of body, I clearly represent to myself impenetrability as an attribute of it. Now this representation is nothing but the thought, 'a body is impenetrable.' Here it is to be observed that this judgment is not the distinct concept itself, but is the act by which it is realised; for the idea of the thing which arises after this act is distinct. It is easy to show that a complete concept is only possible by means of a ratiocination: for this it is sufficient to refer to the first section of this essay. We might say, therefore, that a distinct concept is one which is made clear by a judgment, and a complete concept one which is made distinct by a ratiocination. If the completeness is of the first degree, the ratiocination is simple; if of the second or third degree, it is only possible by means of a chain of reasoning which the understanding abridges in the manner of a sorites.... Secondly, as it is quite evident that the completeness of a concept and its distinctness do not require different faculties of the mind (since the same capacity which recognises something immediately as an attribute in a thing is also employed to recognise in this attribute another attribute, and thus to conceive the thing by means of a remote attribute), so also it is evident that understanding and reason, that is, the power of cognising distinctly and the power of forming ratiocinations, are not different faculties. Both consist in the power of judging, but when we judge mediately we reason."

In the section before us this same standpoint is maintained, but is expressed in a much less satisfactory manner. Concepts are no longer spoken of as complete judgments. In the above passages Kant always speaks of the concept as the subject of the proposition; it is now treated only as a predicate. This difference is significant. The concept as subject can represent the judgment as a whole (or at least it does so from the traditional standpoint to which Kant holds); the concept as predicate is merely one element, even though it be a unifying element, in the total act of judging. This falling away from his own maturer standpoint would seem to be due to Kant's lack of clearness as to the nature of the analogy which he is here drawing between analytic and synthetic thinking. It is connected with his mistaken, and merely temporary, comparison of *a priori* with discursive concepts. His position in 1762 alone harmonises with his essential teaching. Now, as then, he is prepared to view judgment as the sole ultimate activity of the understanding, and therefore to define understanding as the faculty of judging.

But the new Critical standpoint compels Kant to reinterpret this definition in a manner which involves a still more radical transformation of the traditional doctrine. The categories constitute a unique type of

concept, and condition the processes of discursive thought. They are embodied in the complex contents from which analytic thinking starts; and however far the processes of discursive comparison and abstraction be carried, one or other of these categories must still persist, determining the form which the analytic judgment is to take. The categorical judgment can formulate itself only by means of the *a priori* concept of subject and attribute, the hypothetical only by means of the pure concept of ground and consequence, and so with the others. And there are in consequence just as many categories as there are forms of the analytic judgment. This is how the principle of the metaphysical deduction must be interpreted when the later and deeper results of the transcendental deduction are properly taken into account. In deducing the forms of the understanding from the modes of discursive judgment Kant is virtually maintaining that analytic judgment involves the same problems as does judgment of the synthetic type. The categories can be derived from the forms of discursive judgment only because they are the conditions in and through which it becomes possible.

But though Kant, both here and in the central portions of the *Analytic,* seems to be on the very brink of this conclusion, it is never explicitly drawn. As we shall see, it would have involved the further admission that there is no absolute guarantee of the completeness of the table of categories, and no satisfactory method of determining their interrelations. To the very last general logic is isolated from transcendental logic. The Critical enquiry is formulated as if it concerned only such judgments as are explicitly synthetic. The principle of the metaphysical deduction is not, therefore, stated by Kant himself in the above manner; and we have still to decide the difficult question as to what the principle employed by Kant in the deduction actually is.

Kant makes a twofold demand upon the principle. It must enable us to discover the categories, and it must also in so doing enable us to view them as together forming a systematic whole, and so as having their completeness guaranteed by other than merely empirical considerations. The principle is stated sometimes in a broader and sometimes in a more specific form; for on this point also Kant speaks with no very certain voice. The broader formulation of the principle is that all acts of understanding are judgments, and that therefore the possible ultimate *a priori* forms of understanding are identical with the possible ultimate forms of the judgment. The more specific and correct formulation is that to every form of analytic judgment there corresponds a pure concept of understanding. The first statement of the principle is obviously inadequate. It merely reformulates the problem as being a problem not of conception but of judgment. If a principle is required to guarantee the completeness of our list of *a priori* concepts, it will equally be required to guarantee the completeness of our list of judgments. Even if the above principle be more explicitly formulated, as in the *Prolegomena*, where judging is defined as the act of understanding which comprises all its other acts, it will not enable us to guarantee the completeness of any list of the forms of judgment or to determine their systematic interrelation. We are therefore thrown back upon the second view. This, however, only brings us face to face with the further question, what principle guarantees the completeness of the table of analytic judgments. And to that query Kant has absolutely no answer. The reader's questionings break vainly upon his invincible belief in the adequacy and finality of the classification yielded by the traditional logic.

The *fons et origo* of all the confusions and obscurities of this section are thus traceable to Kant's attitude towards formal logic. He might criticise it for ignoring the interdependence of conception, judgment, and reasoning; he might reject the second, third, and fourth syllogistic figures; and he might even admit that its classification of the forms of judgment is not as explicit as might be desired; but however many provisos he made and defects he acknowledged, they were to him merely minor matters, and he accepted its teaching as complete and final. This unwavering faith in the fundamental distinctions of the traditional logic was indeed, as we shall have constant occasion to observe, an ever present influence in determining alike the general framework and much of the detail of Kant's Critical teaching. The defects of the traditional logic were very clearly indicated in his own transcendental logic. He

showed that synthetic thinking is fundamental; that by its distinctions the forms and activities of analytic thought are predetermined; that judgment in its various forms can be understood only by a regress upon the synthetic concepts to which these forms are due; that notions are not merely of the generic type, but that there are also categories of relation. None the less, to the very last, Kant persisted in regarding general logic as a separate discipline, and as quite adequate in its current form. He continued to ignore the fact that the analytic judgment, no less than the synthetic judgment, demands a transcendental justification.

The resulting situation is strangely perverse. In the very act of revolutionising the traditional logic, Kant relies upon its prestige and upon the assumed finality of its results to make good the shortcomings of the logic which is to displace it. By Kant's own admission transcendental logic is incapable of guaranteeing that completeness upon which, throughout the whole *Critique*, so great an emphasis is laid. General logic is allowed an independent status, sufficient to justify its authority being appealed to; and the principle which is supposed to guarantee the completeness of the table of categories is so formulated as to contain no suggestion of the dependence of discursive upon synthetic thinking. Formal logic, Kant would seem to hold, can supply a criterion for the classification of the ultimate forms of judgment just because its task is relatively simple, and is independent of all epistemological views as to the nature, scope, and conditions of the thought process. Since formal logic is a completed and perfectly *a priori* science, which has stood the test of 2000 years, and remains practically unchanged to the present day, its results can be accepted as final, and can be employed without question in all further enquiries. Analytic thinking is scientifically treated in general logic; the *Critique* is concerned only with the possibility and conditions of synthetic judgment. The table of analytic judgments therefore supplies a complete and absolutely guaranteed list of the possible categories of the understanding. But the perverseness of this whole procedure is shown by the manner in which, as we shall find, Kant recasts, extends, or alters, to suit his own purposes, the actual teaching of the traditional logic.

As noted above, the asserted parallelism of analytic and synthetic judgment rests upon the further assumption that discursive thinking and synthetic interpretation are the outcome of one and the same faculty of understanding. It is implied, in accordance with the attitude of the pre-Critical *Dissertation*, that understanding, viewed as the faculty to which all thought processes are due, has certain laws in accordance with which it necessarily acts in all its operations, and that these must therefore be discoverable from analytic no less than from synthetic thinking. The mingling of truth and falsity in this assumption has already been indicated. Such truth as it contains is due to the fact that analytic thinking is not co-ordinate with, but is dependent upon, and determined by, the forms of synthetic thinking. Its falsity consists in its ignoring of what thus gives it partial truth. The results of the transcendental deduction call for a complete recasting of the entire argument of the metaphysical deduction. And when this is done, there is no longer any ground for the contention that the number of the categories is determinable on *a priori* grounds. On Kant's own fundamental doctrine of the synthetic, and therefore merely *de facto*, character of all *a priori* principles, the necessity of the categories is only demonstrable by reference to the contingent fact of actual experience. The possible conceptual forms are relative to actual and ultimate differences in the contingent sensuous material; and being thus relative, they cannot possibly be systematised on purely *a priori* grounds. This Kant has himself admitted in a passage added in the second edition, though apparently without full consciousness of the important consequences which must follow.

"This peculiarity of our understanding that it can produce *a priori* unity of apperception solely by means of the categories, and only by such and so many, is as little capable of further explanation as why we have just these and no other functions of judgment, or why space and time are the only forms of our possible intuition."

THE DEVELOPMENT OF KANT'S METAPHYSICAL DEDUCTION

The character of the metaphysical deduction will be placed in a clearer light if we briefly trace the stages, so far as they can be reconstructed, through which it passed in Kant's mind. We may start from the *Dissertation* of 1770. Kant there modifies his earlier Wolffian standpoint, developing it, probably under the direct influence of the recently published *Nouveaux Essais*, on more genuinely Leibnizian lines.

"The use of the intellect ... is twofold. By the one use concepts, both of things and of relations, are themselves *given*. This is the *real use*. By the other use concepts, whencesoever given, are merely *subordinated* to each other, the lower to the higher (the common attributes), and compared with one another according to the principle of contradiction. This is called the *logical use*.... Empirical concepts, therefore, do not become intellectual in the *real sense* by reduction to greater universality, and do not pass beyond the type of sensuous cognition. However high the abstraction be carried, they must always remain sensuous. But in dealing with things *strictly intellectual*, in regard to which the *use of the intellect* is *real*, intellectual concepts (of objects as well as of relations), are given by the very nature of the intellect. They are not abstracted from any use of the senses, and do not contain any form of sensuous knowledge as such. We must here note the extreme ambiguity of the word *abstract*.... An intellectual concept *abstracts* from everything sensuous; it is not *abstracted* from things sensuous. It would perhaps be more correctly named *abstracting* than *abstract*. It is therefore preferable to call the intellectual concepts *pure ideas*, and those which are given only empirically *abstract ideas*." "I fear, however, that Wolff, by this distinction between the sensuous and the intellectual, which for him is merely logical, has checked, perhaps wholly (to the great detriment of philosophy), that noblest enterprise of antiquity, the investigation of *the nature of phenomena and noumena*, turning men's minds from such enquiries to what are very frequently only logical subtleties. Philosophy, in so far as it contains the *first principles* of the use of the *pure intellect*, is *metaphysics*.... As empirical principles are not to be found in metaphysics, the concepts to be met with in it are not to be sought in the senses but in the very nature of the pure intellect. They are not *connate* concepts, but are *abstracted* from laws inherent in the mind (*legibus menti insitis*), and are therefore *acquired*. Such are the concepts of possibility, existence, necessity, substance, cause, etc. with their opposites or correlates. They never enter as parts into any sensuous representation, and therefore cannot in any fashion be abstracted from such representations."

The *etcetera*, with which in that last passage Kant concludes his list of pure intellectual concepts, indicates a problem that must very soon have made itself felt. That it did so, appears from his letter to Herz (February 21, 1772). He there informs his correspondent, that, in developing his *Transcendentalphilosophie* (the first occurrence of that title in Kant's writings), he has

"...sought to reduce all concepts of completely pure reason to a fixed number of categories [this term also appearing for the first time], not in the manner of Aristotle, who in his ten predicaments merely set them side by side in a sort of order, just as he might happen upon them, but as they distribute themselves of themselves according to *some few principles* of the understanding."

Though in this same letter Kant professes to have solved his problems, and to be in a position to publish his *Critique of Pure Reason* (this title is already employed) "within some three months," the phrase "some few principles" clearly shows that he has not yet developed the teaching embodied in the metaphysical deduction. For its keynote is insistence upon the necessity of a *single* principle, sufficient to reduce them not merely to classes but to system. The difficulty of discovering such a principle must have been one of the causes which delayed completion of the *Critique*. The only data at our disposal for reconstructing the various stages through which Kant's views may have passed in the period between February 1772 and 1781 are the *Reflexionen*, but they are sufficiently ample to allow of our doing so with considerable definiteness.

In the *Dissertation* Kant had traced the concepts of space and time, no less than the concepts of understanding, to mental activities.

"Both concepts [space and time] are undoubtedly acquired. They are not, however, abstracted from the

sensing of objects (for sensation gives the matter, not the form of human cognition). As immutable types they are intuitively apprehended from the activity whereby the mind co-ordinates its sensuous data in accordance with perpetual laws."

Now the *Dissertation* is quite vague as to how the "mind" (*animus*), active in accordance with laws generative of the intuitions space and time, differs from "understanding" (*intellectus*), active in accordance with laws generative of pure concepts. Kant's reasons, apart from the intuitive character of space and time, for contrasting the former with the latter, as the sensuous with the intellectual, were the existence of the antinomies and his belief that through pure concepts the absolutely real can be known. When, however, that belief was questioned by him, and he had come to regard the categories as no less subjective than the intuitional forms, the antinomies ceased to afford any ground for thus distinguishing between them. The intuitional nature of space and time, while certainly peculiar to them, is in itself no proof that they belong to the sensuous side of the mind.

A difficulty which immediately faced Kant, from the new Critical standpoint, was that of distinguishing between space and time, on the one hand, and the categories on the other. This is borne out by the *Reflexionen* and by the following passage in the *Prolegomena*.

"Only after long reflection, expended in the investigation of the pure non-empirical elements of human knowledge, did I at last succeed in distinguishing and separating with certainty the pure elementary concepts of sensibility (space and time) from those of the understanding."

The first stage in the development of the metaphysical deduction would seem to have consisted in the attempt to view the categories as acquired by reflection upon the activities of the understanding in "comparing, combining, or separating"; and among the *notiones rationales*, *notiones intellectus puri*, thus gained, the idea of space is specially noted. The following list is also given:

"The concepts of existence (reality), possibility, necessity, ground, unity and plurality, parts, all, none, composite and simple, space, time, change, motion, substance and accident, power and action, and everything that belongs to ontology proper."

In *Reflexionen*, ii. 507 and 509, the fundamental feature of such rational concepts is found in their *relational* character. They all agree in being concepts of form.

Quite early, however, Kant seems to have developed the view, which has created so many more difficulties than it resolves, that space and time are given to consciousness through outer and inner sense. Though still frequently spoken of as concepts, they are definitely referred to the receptive, non-spontaneous, side of the mind. This is at once a return to the *Dissertation* standpoint, and a decided modification of its teaching. It holds to the point of view of the *Dissertation* in so far as it regards them as sensuous, and departs from it in tracing them to receptivity.

The passage quoted from the letter of 1772 to Herz may perhaps be connected with the stage revealed in the *Reflexionen* already cited. "Comparing, combining, and separating" may be the "some few principles of the understanding" there referred to. That, however, is doubtful, for the next stage in the development likewise resulted in a threefold division. This second stage finds varied expression in *Reflexionen*, ii. 483, 522, 528, 556-63. These, in so far as they agree, distinguish three classes of categories — of thesis, of analysis, and of synthesis. The first covers the categories of quality and modality, the second those of quantity, the third those of relation.

Reflexionen, ii. 528 is as follows:

[Thesis =]

"The metaphysical concepts are, first, absolute: possibility and existence; secondly, relative:

(*a*) Unity and plurality: *omnitudo* and *particularitas*.

[Analysis =]

(*b*) Limits: the first, the last: *infinitum, finitum*.
[Anticipates the later category of limitation.]

(*c*) Connection: co-ordination: whole and part

[Synthesis =]

[anticipates the later category of reciprocity],
simple and compound; subordination:

(1) Subject and predicate.

(2) Ground and consequence.

This, and the connected *Reflexionen* enumerated above, are of interest as proving that Kant's table of categories was in all essentials complete before the idea had occurred to him of further systematising it or of guaranteeing its completeness by reference to the logical classification of the forms of judgment. They also justify us in the belief that when Kant set himself to discover such a unifying principle the above list of categories and the existing logical classifications must have mutually influenced one another, each undergoing such modification as seemed necessary to render the parallelism complete. This, as we shall find, is what actually happened. The logical table, for instance, induced Kant to distinguish the categories of quality from those of modality, while numerous changes were made in the logical table itself in order that it might yield the categories required.

But the most important alteration, the introduction of the threefold division of each sub-heading, is not thus explicable, as exclusively due to one or other of the two factors. The adoption of this threefold arrangement in place of the dichotomous divisions of the logical classification and of the haphazard enumerations of Kant's own previous lists, seems to be due to the twofold circumstance that he had already distinguished three categories of synthesis or relation (always the most important for Kant), and that this sufficiently harmonised with the logical distinction between categorical, hypothetical, and disjunctive judgments. He then sought to modify the logical divisions by addition in each case of a third, and finding that this helped him to obtain the categories required, the threefold division became for him (as it remained for Hegel) an almost mystical dogma of transcendental philosophy. In so far as it involved recognition that the hard and fast opposites of the traditional logic (such as the universal and the particular, the affirmative and the negative) are really aspects inseparably involved in every judgment and in all existence, it constituted an advance in the direction both of a deeper rationalism and of a more genuine empiricism. But in so far as it was due to the desire to guarantee completeness on *a priori* grounds, and so was inspired by a persistent overestimate of our *a priori* powers, it has been decidedly harmful. Much of the useless "architectonic" of the *Critique* is due to this scholastic prejudice.

This fundamental alteration in the table of logical judgments is introduced with the naive assertion that "varieties of thought in judgments," unimportant in general logic, "may be of importance in the field of its pure *a priori* knowledge." In the *Critique of Judgment* we find the following passage:

"It has been made a difficulty that my divisions in pure philosophy have almost always been threefold.

But this lies in the nature of the case. If an *a priori* division is to be made, it must be either analytic, according to the principle of contradiction, and then it is always twofold (*quodlibet ens est aut A aut non A*); or else synthetic. And if in this latter case it is derived from *a priori* concepts (not as in mathematics from the *a priori* intuition corresponding to the concept) the division must necessarily be a trichotomy. For according to what is requisite for synthetic unity in general, there must be (1) a condition, (2) a conditioned, and (3) the concept which arises from the union of these two."

The last stage, as expressed in the *Critique*, was, as we have already noted, merely an application of his earlier position that all thinking is judging. This appreciation of the inseparable connection of the categories with the act of judging is sound in principle, and is pregnant with many of the most valuable results of the Critical teaching. But these fruitful consequences follow only upon the lines developed in the *transcendental* deduction. They are bound up with Kant's fundamental Copernican discovery that the categories are forms of *synthesis*, and accordingly express *functions* or *relations*. The categories can no longer be viewed, in the manner of the *Dissertation*, as yielding concepts of *objects*. The view of the concept which we find in the *Dissertation* is, indeed, applied in the *Critique* to space and time — they are taken as in themselves intuitions, not as merely *forms* of intuition — but the categories are recognised as being of an altogether relational character. Though *a priori*, they are not, in and by themselves, complete objects of consciousness, and accordingly can reveal no object. They are *functions*, not *contents*. That, however, is to anticipate. We must first discharge, as briefly as possible, the ungrateful task of dwelling further upon the laboured, arbitrary, and self-contradictory character of the detailed working out of the metaphysical deduction. The deduction is given in Sections II. and III.

Section II. The Logical Function of the Understanding in Judgment. — Kant's introductory statement may here be noted. If, he says, we leave out of consideration the content of any judgment, and attend only to the mere form, we "find" that the function of thought in a judgment "can" be brought under four heads, each with three subdivisions. But Kant himself, in this same section, recognises in the frankest and most explicit manner, that the necessary distinctions are only to be obtained by taking account of the matter as well as of the form of judgments. And even after this contradiction is discounted, the term "find" may be allowed as legitimate only if the word "can" is correspondingly emphasised. The distinctions were not derived from any existing logic. They were reached only by the freest possible handling of the classifications currently employed. Examination of the table of judgments, and comparison of it with the table of categories, supply conclusive evidence that the former has been rearranged, in highly artificial fashion, so as to yield a more or less predetermined list of required categories.

1. Quantity. — Kant here frankly departs from the classification of judgments followed in formal logic; and the reason which he gives for so doing is in direct contradiction to his demand that only the form of judgment must be taken into account. The "quantity of knowledge" here referred to is determinable, not from the form, but only from the content of the judgment. Also, the statement that the singular judgment stands to the universal as unity to infinity (*Unendlichkeit*) is decidedly open to question. The universal is itself a form of unity, as Kant virtually admits in deriving, as he does, the category of unity from the universal judgment.

2. Quality. — Kant makes a similar modification in the logical treatment of quality, by distinguishing between affirmative and infinite judgments. The proposition, A is not-B, is to be viewed as neither affirmative nor negative. As the *content* of the predicate includes the infinite number of things that are not-B, the judgment is infinite. Kant, in a very artificial and somewhat arbitrary manner, contrives to define it as limitative in character, and so as sharing simultaneously in the nature both of affirmation and of negation. The way is thus prepared for the "discovery" of the category of limitation.

3. Relation. — Wolff, Baumgarten, Meier, Baumeister, Reimarus, and Lambert, with very minor differences, agree in the following division:

Judgments–

Simple = Categorical

Complex–
Copulative (*i.e.* categorical with more than one subject or more than one predicate).

Hypothetical.

Disjunctive.

Kant omits the copulative judgment, and by ignoring the distinction between simple and complex judgments (which in Reimarus, and also less definitely in Wolff, is connected with the distinction between conditional and unconditional judgments) contrives to bring the remaining three types of judgment under the new heading of "relation." They had never before been thus co-ordinated, and had never before been subsumed under this particular title. It is by no means clear why such distinctions as those between simple and complex, conditioned and unconditioned, should be ignored, and why the copulative judgment should not be recognised as well as the hypothetical. Kant's criterion of importance and unimportance in the distinctions employed by the logicians of his day was wholly personal to himself; and, though hard to define, was certainly not dictated by any logic that is traceable to Aristotelian sources. His exposition is throughout controlled by foreknowledge of the particular categories which he desires to "discover."

4. Modality. — Neither Wolff nor Reimarus gives any account of modality. Baumgarten classifies judgments as pure or modal (existing in *four* forms, necessity, contingency, possibility, impossibility). Baumeister and Thomasius also recognise four forms of modality. Meier distinguishes between pure judgment (*judicium purum*) and impure judgment (*judicium modale*, *modificatum*, *complexum qua copula*), but does not classify the forms of modality. Lambert alone classifies judgments as "possible, actual (*wirklich*), necessary, and their opposite." But when Kant adopts this threefold division, the inclusion of actuality renders the general title "modality" inapplicable in its traditional sense. The expression of actuality in the assertoric judgment involves no adverbial modification of the predicate. Also, in its "affirmative" and "categorical" forms it has already been made to yield two other categories.

Kant speaks of the problematic, the assertoric, and the apodictic forms of judgment as representing the stages through which knowledge passes in the process of its development.

"These three functions of modality are so many momenta of thought in general."

This statement has been eulogised by Caird, as being an anticipation of the Hegelian dialectic. As a matter of fact, Kant's remark is irrelevant and misleading. The advance from consciousness of the problematic, through determination of it as actual to its explanation as necessary, represents only a psychological order in the mind of the individual. Logically, knowledge of the possible rests on and implies prior knowledge of the actual and of the necessities that constitute the actual.

Section III. The Categories or Pure Concepts of the Understanding. — The first three pages of this section, beginning "General logic abstracts," and concluding with the word "rest on the understanding," would seem to be a later interpolation. Embodying, as they do, some of the fundamental ideas of the transcendental deduction, they express Kant's final method of distinguishing between general and transcendental logic. But they are none the less out of harmony with the other sections of the metaphysical deduction. They are of the nature of an after-thought, even though that afterthought represents a more mature and adequate standpoint. In A 55-7, where Kant defines the distinction between general and

transcendental logic, the latter is formulated in entire independence of all reference to pure intuition. Kant, indeed, argues that just as there are both pure and empirical intuitions, so there are both pure and empirical concepts. But there is no indication that he has yet realised the close interdependence of the two types of *a priori* elements. Even when he proceeds in A 62 to remark that the empirical employment of pure concepts is conditioned by the fact that objects are given in intuition, no special reference is made to "the manifold of pure *a priori* intuition." Now, however, Kant emphasises, as the fundamental characteristic of transcendental logic, its possession of a pure manifold through reference to which its pure concepts gain meaning. Thus not only does transcendental logic not abstract from the pure *a priori* concepts, it likewise possesses an *a priori* material. It is in this twofold manner that it is now regarded as differing from formal logic.

The accounts given of the metaphysical deduction by Cohen, Caird, Riehl, and Watson are vitiated by failure to remark that this latter standpoint is a late development, and is out of keeping with the rest of the deduction. Riehl's exposition has, however, the merit of comparative consistency. He explicitly recognises the important consequence which at once follows from acceptance of this later view, namely, that it is by their implying space and time that the categories differ from the notions which determine the forms of judgment; in other words, that the *categories are actualised only as schemata*. The category of substance, for instance, differs from the merely logical notion of a propositional subject, in being the concept of that which is *always* a subject, and *never* a predicate; and such a conception has specific meaning for us only as the *permanent in time*. Logical subjects and predicates, quantitative relations apart, are interchangeable. The relation between them is the analytic relation of identity. The concept of subject, on the other hand, transcendentally viewed, that is, as a *category*, is the apprehension of what is *permanent*, in synthetic distinction from, and relation to, its changing attributes. In other words, the transcendental distinction between *substance* and *accidents* is substituted for that of *subject* and *predicate*. Similarly the logical relation of *ground* and *consequence*, conceived as expressive of logical identity, gives way to the synthetic temporal relation of *cause* and *effect*. And so with all the other pure forms. As categories, they are schemata. Kant has *virtually* recognised this by the names which he gives to the categories of relation. But the proper recognition of the necessary interdependence of the intuitional and conceptual forms came too late to prevent him from distinguishing between categories and schemata, and so from creating for himself the artificial difficulties of the section on schematism.

In A 82 Kant states that he intentionally omits definitions of the categories. He had good reason for so doing. The attempt would have landed him in manifold difficulties, since his views were not yet sufficiently ripe to allow of his perceiving the way of escape. In A 241 (omitted in second edition) Kant makes, however, the directly counter statement that definition of the categories is not possible, giving as his reason that, in isolation from the conditions of sensibility, they are merely logical functions, "without the slightest indication as to how they can possess meaning and objective validity."

It cannot be too often repeated that the *Critique* is not a unitary work, but the patchwork record of twelve years of continuous development. Certain portions of the transcendental deduction, of which A 76-9 is one, represent the latest of all the many stages; and their teaching, when accepted, calls for a radical recasting of the metaphysical deduction. The bringing of the entire *Critique* into line with its maturest parts would have been an Herculean task; and it was one to which Kant, then fifty-seven years of age, was very rightly unwilling to sacrifice the time urgently needed for the writing of his other *Critiques*. The passage before us is one of the many interpolations by which Kant endeavoured to give an external unity to what, on close study, is found to be the plain record of successive and conflicting views. Meantime, in dealing with this passage, we are concerned only to note that if this later mode of defining transcendental logic be accepted, far-reaching modifications in Kant's Critical teaching have to be made. The other points developed in A 76-9 we discuss below in their proper connection.

The same Function, etc. — This passage has already been sufficiently commented upon. Kant here expresses in quite inadequate fashion the standpoint of the transcendental deduction. The implication is that analytic and synthetic thinking are co-ordinate, one and the same faculty exercising, on these two levels, the same operations. The true Critical teaching is that synthetic thinking is alone fundamental, and that only by a regress upon it can judgments be adequately accounted for. This passage, like the preceding, may be of later origin than the main sections of the metaphysical deduction.

Term "Categories" borrowed from Aristotle. — Cf. below, .

Table of Categories. Quantity. — Kant derives the category of unity from the universal, and that of totality (*Allheit*) from the singular. These derivations are extremely artificial. In *Reflexionen*, ii. 563, Kant takes the more natural line of identifying totality with the universal, and unity with the singular. Probably the reason of Kant's change of view is the necessity of obtaining totality by combining unity with multiplicity. That can only be done if universality is thus equated with unity. Watson's explanation, that Kant has reversed the order of the categories, seems to be erroneous.

Quality. — Cf. above, .

Relation. — The correlation of the categorical judgment with the conception of substance and attribute is only possible owing to Kant's neglect of the relational judgment and to the dominance in his logical teaching of the Aristotelian substance-attribute view of predication. The correlation is also open to question in that the relation of subject and predicate terms in a logical judgment is a reversible one. It is a long step from the merely grammatical subject to the conception of that which is always a subject and never a predicate.

Kant's identification of the category of community or reciprocity with the disjunctive judgment, though at first sight the most arbitrary of all, is not more so than many of the others. Its essential correctness has been insisted upon in recent logic by Sigwart, Bradley, and Bosanquet. In Kant's own personal view co-ordination in the form of co-existence is only possible through reciprocal interaction. The relation of whole and part (the parts in their relations of reciprocal exclusion exhausting and constituting a genuine whole) thus becomes, in its application to actual existences, that of reciprocal causation. The reverse likewise holds; interaction is only possible between existences which together constitute a unity. Kant returns to this point in *Note* 3, added in the second edition. The objection which Kant there considers has been very pointedly stated by Schopenhauer.

"What real analogy is there between the problematical determination of a concept by disjunctive predicates and the thought of reciprocity? The two are indeed absolutely opposed, for in the disjunctive judgment the actual affirmation of one of the two alternative propositions is also necessarily the negation of the other; if, on the other hand, we think of two things in the relation of reciprocity, the affirmation of one is also necessarily the affirmation of the other, and *vice versa*."

The answer to this criticism is on the lines suggested by Kant. The various judgments which constitute a disjunction do not, *when viewed as parts of the disjunction*, merely negate one another; they mutually presuppose one another in the total complex. Schopenhauer also fails to observe that in locating the part of a real whole in one part of space, we exclude it from all the others.

Modality. — The existence of separate categories of modality seems highly doubtful. The concepts of the possible and of the probable may be viewed as derivative; the notion of existence does not seem to differ from that of reality; and necessity seems in ultimate analysis to reduce to the concept of ground and consequence. These are points which will be discussed later.

Aristotle's ten categories are enumerated by Kant in *Reflexionen*, ii. 522, as: (1) *substantia*, *accidens*, (2) *qualitas*, (3) *quantitas*, (4) *relatio*, (5) *actio*, (6) *passio*, (7) *quando*, (8) *ubi*, (9) *situs*, (10) *habitus*; and the five post-predicaments as: *oppositum*, *prius*, *simul*, *motus*, *habere*. Eliminating *quando*, *ubi*, *situs*, *prius*, and *simul* as being modes of sensibility; *actio* and *passio* as being complex and derivative; and also omitting *habitus* (condition) and *habere*, as being too general and indefinite in meaning to

constitute separate categories; we are then left with *substantia*, *qualitas*, *quantitas*, *relatio*, and *oppositum*. The most serious defect in this reduced list, from the Kantian point of view, is its omission of causality. It is, however, a curious coincidence that when substance is taken as a form of *relatio*, and *oppositum* as a form of quality, we are left with the three groups, quality, quantity, relation. Only modality is lacking to complete Kant's own fourfold grouping. None the less, as the study of Kant's *Reflexionen* sufficiently proves, it was by an entirely different route that Kant travelled to his metaphysical deduction. Watson does not seem to have any ground for his contention that the above modified list of Aristotle's categories "gave Kant his starting-point." It was there indeed, as the reference to Aristotle in his letter of 1772 to Herz shows, that he first looked for assistance, only, however, to be disappointed in his expectations.

Derivative concepts. — Cf. above, p, 71-2.

I reserve this task for another occasion. — Cf. A 204 = B 249; A 13; above, ff., and below, p-80.

Definitions of categories omitted. — Cf. above, p-6, and A 241 there cited; also below, p-42, 404-5.

Note 1. — On this distinction between mathematical and dynamical categories cf. below, p-7, 510-11.

Note 2. — This remark is inserted to meet a criticism which had been made by Johann Schulze, and to which Kant in February 1784 had replied in terms almost identical with those of the present passage.

"The third category certainly springs from the connection of the first and second, not, indeed, from their mere combination, but from a connection the possibility of which constitutes a concept that is a special category. For this reason the third category may not be applicable in instances in which the other two apply: *e.g. one* year, *many* years of future time, are real concepts, but the *totality* of future years, that is, the collective unity of a future eternity, conceived as entire (so to say, as completed), is something that cannot be thought. But even in those cases in which the third category is applicable, it always contains something more than the first and the second taken separately and together, namely the *derivation* of the second from the first, a process which is not always practicable. Necessity, for example, is nothing else than existence, *in so far as* it can be inferred from possibility. Community is the reciprocal *causality* of *substances* in respect of their determinations. But that determinations of one substance can be produced by another substance, is something that we may not simply assume; it is one of those connections without which there could be no reciprocal relation of things in space, and therefore no outer experience. In a word, I find that just as the conclusion of a syllogism indicates, in addition to the operations of understanding and judgment in the premisses, *a special operation peculiar to reason* ..., so also the third category is a special, and in part original, concept. For instance, the concepts, *quantum*, *compositum*, *totum*, come under the categories unity, plurality, totality, but a *quantum* thought as *compositum* would not yield the concept of totality unless the concept of the *quantum* is thought as determinable through the *composition*, and in certain *quanta*, such as infinite space, that cannot be done."

Kant's assertion that in certain cases the third category is not applicable is misleading. His proof of the validity of the category of reciprocity in the third *Analogy* really consists in showing that it is necessary to the apprehension of spatial co-existence; and if, as Kant maintains, consciousness of space is necessary to consciousness of time, it is thereby proved to be involved in each and every act of consciousness. It is presupposed in the apprehension even of substantial existence and of causal sequence. His proof that it is a unique category, distinct from the mere combination of the categories of substance and causality, does not, therefore, assume what his words in the above letter would seem to imply, that it is only occasionally employed. The same remark holds in regard to totality; it is presupposed even in the apprehension of a single year. Kant's references, both here and in other parts of the *Critique*, to totality in its bearing upon the conception of infinitude, reveal considerable lack of clearness as to the relation in which it stands to the Idea of the unconditioned. Sometimes, as in this letter, he would seem to be identifying them; elsewhere this confusion is avoided. In B 111 totality is defined as multiplicity regarded as unity, and in A 142-3 = B 182 its schema is defined as number. (The identification of totality with number has led Kant to

say in B 111 that number is not applicable in the representation of the infinite, a much more questionable assertion than that of the letter above quoted.) The statement that necessity is existence in so far as it can be inferred from possibility, or that it is existence given through possibility, is similarly misleading. Kant's true position is that all three are necessary to the conception of any one of the three.

Thus Kant's reply to Schulze, alike in his letter and in *Note 2*, fails to indicate with any real adequacy the true bearing of Critical teaching in this matter; and consequently fails to reveal the full force of his position. Only in terms of totality can unity and plurality be apprehended; only through the reciprocal relations which determine co-existence can we acquire consciousness of either permanence or sequence; only in terms of necessity can either existence or possibility be defined. The third category is not derived from a prior knowledge of the subordinate categories. It represents in each case a higher complex within which alone the simpler relations defined by the simpler concepts can exist or have meaning.

B 113-16, § 12. — This section, of no intrinsic importance, is an example of Kant's loving devotion to this "architectonic." His reasoning is extremely artificial, especially in its attempt to connect "unity, truth, and perfection" with the three categories of quantity. The *Reflexionen* show how greatly Kant was preoccupied with these three concepts, seeking either to base a table of categories upon them (B. Erdmann's interpretation), or to reduce them to categories (Adickes' interpretation). For some time Kant himself ranked with those who "incautiously made these criteria of thought to be properties of the things in themselves." In *Reflexionen*, ii. 903, we find the following statement: "Unity (connection, agreement), truth (quality), completeness (quantity)." In ii. 916 Kant makes trial to connect them, as conceptions of possibility, with the categories of relation. In ii. 911 and 912 the later view, that they are logical in character and function, appears, but leads to their being set in relation to the three faculties of understanding, judgment, and reason. This is conjectured by B. Erdmann to have been Kant's view at the time of the first edition. ii. 915, 919, 920 present the view expounded in the section before us. Erdmann remarks that in this section Kant "is settling accounts with certain thoughts which in the 'seventies had yielded suggestions for the transformation of ontology into the transcendental analytic."

CHAPTER II

DEDUCTION OF THE PURE CONCEPTS OF THE UNDERSTANDING

First edition Subjective and Objective Deductions. — In dealing with the transcendental deduction, as given in the first edition, we can make use of the masterly and convincing analysis which Vaihinger (building upon Adickes' previous results, but developing an independent and quite original interpretation) has given of its inconsecutive and strangely bewildering argumentation. Vaihinger's analysis is an excellent example of detective genius in the field of scholarship. From internal evidence, circumstantially supported by the *Reflexionen* and *Lose Blätter*, he is able to prove that the deduction is composed of manuscripts, externally pieced together, and representing no less than four distinct stages in the slow and gradual development of Kant's views. Like geological deposits, they remain to record the processes by which the final result has come to be. Though they do not in their present setting represent the correct chronological order, that may be determined once the proper clues to their disentanglement have been duly discovered. That discovery is itself, however, no easy task; for the unexpected, while lending colour and incident to the commentator's enterprise, baffles his natural expectations at every turn. The first stage is one in which Kant *dispenses* with the categories, and in which, when they are referred to, they are taken as applying *to things in themselves*. The last stage, worked out, as there is ground for believing, in the haste and excitement of the final revision, is not represented in the *Prolegomena* or in the second edition of the *Critique*, the author retracing his steps and resuming the standpoint of the stage which preceded it. The fortunate accident of Kant's having jotted down upon the back of a dated paper the record of his passing thought (one of the few *Lose Blätter* that are thus datable) is the culminating incident in this philosophical drama. It felicitously serves as a keystone in the body of evidence supported by general reasoning.

Before becoming acquainted with Vaihinger's analysis I had observed Kant's ascription to empirical concepts of the functions elsewhere allotted to the categories, but had been hopelessly puzzled as to how such teaching could be fitted into his general system. Vaihinger's view of it as a pre-Critical survival would seem to be the only possible satisfactory solution. For the view which I have taken of Kant's doctrine of the transcendental object as also pre-Critical, and for its employment as a clue to the dating of passages, I am myself alone responsible.

The order of my exposition will be as follows:

I. Enumeration, in chronological order, of the four stages which compose the deduction of the first edition, and citation of the passages which represent each separate stage.

II. Detailed analysis, again in chronological order, of each successive stage, with exposition of the views which it embodies.

III. Examination of the evidence yielded by the *Reflexionen* and *Lose Blätter* in support of the above analysis.

IV. Connected statement and discussion of the total argument of the deduction.

I. Enumeration of the Four Stages

(1) First Stage: That of the Transcendental Object, without Co-operation of the Categories. — This stage is represented by: (*a*) II. 3 (from beginning of the third paragraph to end of 3) = A 104-10; (*b*) I. § 13 (the entire section) = A 84-92 (retained in second edition as B 116-24). *a* discusses the problem of the reference of sensations to an object, *b* that of the objective validity of the categories. *b* is therefore transitional to the second stage.

(2) Second Stage: That of the Categories, without Co-operation of the Productive Imagination. — This

stage is represented by: (*a*) I. [§ 14] (with the exception of its concluding paragraph) = A 92-4 (retained in second edition as B 124-7); (*b*) II. (the first four paragraphs) = A 95-7; (*c*) II. 4 (the entire section) = A 110-14.

(3) Third Stage: That of the Productive Imagination, without Mention of the Threefold Transcendental Synthesis. — This stage is represented by (*a*) III.β (from beginning of seventh paragraph to end of twelfth) = A 119-23; (*b*) III. α (from beginning of third paragraph to end of sixth) = A 116-19; (*c*) I. § 14 (Concluding paragraph) = A 94-5; (*d*) III.δ (from beginning of sixteenth paragraph to end of section preceding summary) = A 126-8; (*e*) S(ummary) (in conclusion to III.) = A 128-30; (*f*) III.γ (from beginning of thirteenth paragraph to end of fifteenth) = A 123-6; (*g*) I(ntroduction) (from beginning of section to end of second paragraph) = A 115-16; (*h*) § 10 T(ransitional to the fourth stage) = A 76-9 (retained as B 102-4).

(4) Fourth Stage: That of the Threefold Transcendental Synthesis. — This stage is represented by: (*a*) II. 1-3 (from opening of 1 to end of second paragraph in 3) = A 98-104; (*b*) II. (the two paragraphs immediately preceding *a*) = A 97-8.

II. Detailed Analysis of the Four Stages

First Stage. — A 104-10; A 84-92 (B 116-24).

A 104-10; II. § 3. — This is the one passage in the *Critique* in which Kant explicitly defines his doctrine of the "transcendental object"; and careful examination of the text shows that by it he means the *thing in itself*, conceived as being the object of our representations. Such teaching is, of course, thoroughly un-Critical; and as I shall try to show, this was very early realised by Kant himself. The passages in which the phrase "transcendental object" occurs are, like the section before us, in every instance of early origin. It is significant that the transcendental object is not again referred to in the deduction of the first edition. Though it reappears in the chapter on phenomena and noumena, it does so in a passage which Kant excised in the second edition. The paragraphs which he then substituted make no mention of it. The doctrine is of frequent occurrence in the *Dialectic*, and combines with other independent evidence to show that the larger part of the *Dialectic* is of early origin. That the doctrine of the transcendental object is thus a pre-Critical or semi-Critical survival has, so far as I am aware, not hitherto been observed by any writer upon Kant. It has invariably been interpreted in the light of the sections in which it does not occur, and, as thus toned down and tempered to something altogether different from what it really stands for, has been taken as an essential and characteristic tenet of the Critical philosophy. It was in the course of an attempt to interpret Kant's entire argument in the light of his doctrine of the transcendental object that I first came to detect its absence from all his later utterances. But it is important to recognise that the difficulties which would result from its retention are quite insuperable, and would by themselves, even in the absence of all external evidence of Kant's rejection of it, compel us to regard it as a survival of pre-Critical thinking. As Vaihinger does not seem to have detected the un-Critical character of this doctrine, it is the more significant that he should, on other grounds, have felt constrained to regard the passage in which it is expounded as embodying the earliest stage in the development of the deduction. He would seem to continue in the orthodox view so far as to hold that though the doctrine of the transcendental object is here stated in pre-Critical terms, it was permanently retained by Kant in altered form.

The doctrine of the transcendental object, as here expounded, is as follows:

"Appearances are themselves nothing but sensuous representations which must not be taken as capable of existing in themselves (*an sich*) with exactly the same character (*in ebenderselben Art*) outside our power of representation."

These sense-representations are our only possible representations, and when we speak of an object corresponding to them, we must be conceiving an object in general, equal to *x*.

"They have their object, but an object which can never be intuited by us, and which may therefore be

named the non-empirical, *i.e.* transcendental object = *x*."

This object is conceived as being that which prevents our representations from occurring at haphazard, necessitating their order in such manner that, manifold and varied as they may be, they can yet be self-consistent in their several groupings, and so possess that unity which is essential to the concept of an object.

"The pure concept of this transcendental object, which in fact throughout all our knowledge is always one and the same, is that which can alone confer upon all our empirical concepts relation in general to an object, *i.e.* objective reality."

What renders this doctrine impossible of permanent retention was that it allowed of no objective existence mediate between the merely subjective and the thing in itself. On such teaching there is no room for the empirical object; and immediately upon the recognition of that latter phenomenal form of existence in space, Kant was constrained to recognise that it is in the empirical object, not in the thing in itself, that the contents of our representations are grounded and unified. Any other view must involve the application of the categories, especially those of substance and causality, to the thing in itself. The entire empirical world has still to be conceived as grounded in the non-empirical, but that is a very different contention from the thesis that the thing in itself is the object and the sole object of our representations. The doctrine of the transcendental object has thus a twofold defect: it advocates an extreme subjectivism, and yet at the same time applies the categories to the thing in itself.

But the latter consequence is one which could not, at the stage represented by this section, be appreciated by Kant. For, as we shall find, he is endeavouring to solve the problem of the reference of sense-representation to an object without assumption of *a priori* categories. It is in *empirical* concepts, conditioned only by a transcendental apperception, that he professes to discover the grounds and conditions of this objective reference. Let us follow Kant's argument in detail. The section opens with what may be a reference to the *Aesthetic*, and proceeds to deal with the first of the two problems cited in the 1772 letter to Herz — how *sense*-representations stand related to their object. The exact terms in which this question was there formulated should be noted.

"I propounded to myself this question: on what ground rests the relation of that in us which we name representation (*Vorstellung*) to the object. If the representation contains only the mode in which the subject is affected by the object, it is easily understood how it should accord (*gemäss sei*) with that object as an effect with its cause, and how [therefore] this determination of our mind should be able to *represent* something, *i.e.* have an object. The passive or sensuous representations have thus a comprehensible (*begreifliche*) relation to objects, and the principles, which are borrowed from the nature of our soul, have a comprehensible validity for all things in so far as they are to be objects of the senses."

Thus in 1772 there was here no real problem for Kant. The assumed fact, that our representations are generated in us by the action of independent existences, is taken as sufficient explanation of their being referred to objects.

The section of the *Critique* under consideration shows that Kant had come to realise the inadequacy of this explanation quite early, indeed prior to his solution of the second and further question which in that same letter is spoken of as "the key to the whole secret" of metaphysics. On what grounds, he now asks, is a subjective idea, *even though it be a sense impression*, capable of yielding consciousness of an object? In the letter to Herz the use of the term representation (*Vorstellung*) undoubtedly helped to conceal this problem. It is now emphasised that appearances are nothing but sense representations, and must never be regarded as objects capable of existing in themselves, with exactly the same character, outside our power of representation. Now also Kant employs, in place of the phrase "in accord with," the much more definite term "corresponding to." He points out that when we speak of an object *corresponding* to our knowledge, we imply that it is distinct from that knowledge. Consciousness of such an object must

therefore be acquired from some other source than the given impressions. In other words, Kant is now prepared to withdraw his statement that "the passive or sensuous representations have an [easily] comprehensible relation to objects." In and by themselves they are purely subjective, and can involve no such concept. The latter is a thought (*Gedanke*), a concept (*Begriff*), additional to, and distinct from, the given impressions. Its possibility, as regards both origin and validity, must be "deduced."

There then results this first and very peculiar form of the transcendental deduction. That part of it which persists in the successive stages rests upon an explicitly developed distinction between empirical and transcendental apperception. Kant teaches, in agreement with Hume, though, as we may believe, independently of his direct influence, that there is no single empirical state of the self which is constant throughout experience.

"The consciousness of the self, according to the determinations of our state in inner perception, is merely empirical, and always in process of change.... That which has to be represented as of necessity numerically identical cannot be thought as such through empirical data. There must be a condition which precedes all experience, and renders experience itself possible, if a transcendental pre-supposition of this kind is to be rendered valid.... This pure, original, unchangeable consciousness I shall name transcendental apperception."

Kant would seem to have first developed this view in a quite crude form. The consciousness of the self, he seems to have held, consists in its awareness of its own unceasing activities. As consciousness of *activity*, it is entirely distinct in nature and in origin from all apprehension of sense impressions. This teaching is a natural extension of the doctrine of the *Dissertation*, that such pure notions as those of possibility, existence, necessity, substance, cause, are "acquired by attending to the actions of the mind on the occasion of experience." Kant would very naturally hold that consciousness of the identity and unity of the self is obtained in a similar manner. Such, indeed, is the teaching of the section before us.

"No knowledge can take place in us ... without that unity of consciousness which precedes all data of intuitions, and in relation to which all representation of objects is alone possible." "It is precisely this transcendental apperception that constructs out of (*macht aus*) all possible appearances, which are capable of coexisting in one experience, a connection of all these representations according to laws. For this unity of consciousness would be impossible if the mind could not become conscious, in the knowledge of the manifold, of the identity of the function whereby it combines it synthetically in one knowledge. Thus the mind's original and necessary consciousness of the identity of itself is at the same time a consciousness of an equally necessary unity of the synthesis of all appearances according to concepts, *i.e.* according to rules.... For the mind could not possibly think the identity of itself in the manifold of its representations, and indeed *a priori*, if it did not have before its eyes the identity of its action...."

That is to say, the self is the sole source of all unity. As a pure and original unity it precedes experience; to its synthetic activities all conceptual unity is due; and by reflection upon the constancy of these activities it comes to consciousness of its own identity.

"...even the purest objective unity, namely that of the *a priori* concepts (space and time), is possible only through relation of the intuitions to [transcendental apperception]. The numerical unity of this apperception is therefore the *a priori* condition of all concepts, just as the manifoldness of space and of time is of the intuitions of sensibility."

To this consciousness of the abiding unity of the self Kant also traces the notion of the transcendental object. The latter, he would seem to argue, is formed by analogy from the former.

"This object is nothing else than the subjective representation (of the subject) itself, but made general, for I am the original of all objects." "The mind, through its original and underived thinking, is itself the pattern (*Urbild*) of such a synthesis." "I would not represent anything as outside me, and so make [subjective] appearances into objective experience if the representations were not related to something

which is parallel to my ego, and so in that way referred by me to another subject."

These quotations from the *Lose Blätter* would seem to contain the key to Kant's extremely enigmatic statement in A 105, that "the unity which the object makes necessary can be nothing else than the formal unity of consciousness in its synthesis of the manifold of its representations," and again in A 109, that "this relation [of representations to an object] is nothing else than the necessary unity of consciousness."

But this does not complete the sum-total of the functions which Kant is at this stage prepared to assign to apperception. It mediates our consciousness of the transcendental object in still another manner, namely, by rendering possible the formation of the *empirical* concepts which unify and direct its synthetic activities. This is, indeed, the feature in which this form of the deduction diverges most radically from all later positions. Space and time are, it would seem, regarded as being the sole *a priori* concepts. The instruments through which the unity of apperception acts, and through which the thought of an object becomes possible, are *empirical* concepts. Such general concepts as "body" or "triangle" serve as rules constraining the synthetic processes of apprehension and reproduction to take place in such unitary fashion as is required for unitary consciousness. The notion of objectivity is specified in terms of the necessities which these empirical concepts thus impose.

"We think a triangle as object in so far as we are conscious of the combination of three straight lines according to a rule by which such an intuition can at all times be generated. This unity of rule determines the whole manifold and limits it to conditions which make the unity of apperception possible; and the concept of this unity [of rule] is the representation of the object.... All knowledge demands a concept, ... and a concept is always, as regards its form, something general, something that serves as a rule. Thus the concept of body serves as a rule to our knowledge of outer appearances, in accordance with the unity of the manifold which is thought through it.... The concept of body necessitates ... the representation of extension, and therewith of impenetrability, shape, etc."

Such is the manner in which Kant accounts for our concept of the transcendental object. It consists of two main elements: first, the notion of an unknown *x*, to which representations may be referred; and secondly, the consciousness of this *x* as exercising compulsion upon the order of our thinking. The former notion is framed on the pattern of the transcendental subject; it is conceived as another but unknown subject. The consciousness of it as a source of external necessity is mediated by the empirical concepts which transcendental apperception also makes possible. And from this explanation of the *origin* of the concept of the transcendental object Kant derives the proof of its *validity*. It is indispensable for the realisation by the unitary self of a unitary consciousness.

"This relation [of representations to an object] is nothing else than the necessary unity of consciousness, and therefore also of the synthesis of the manifold, by a common (*gemeinschaftlich*) functioning of the mind, which unites it in one representation."

Through instruments empirical in origin, and subjectively necessary, the notion of an objective necessity is rendered possible to the mind.

It is not surprising that Kant did not permanently hold to this view of the empirical concept. The objections are obvious. Such a view of the function of general concepts renders unintelligible their own first formation. For as they are empirical, they can only be acquired by conscious processes that do not involve them. That is to say, consciousness of objects follows upon a prior consciousness in and through which concepts, such as that of body, are discovered and formed. Yet, as the argument claims, general concepts are the indispensable conditions of unitary consciousness. How through a consciousness that is not yet unified can general concepts be formed? Also it is difficult to see how empirical concepts can be viewed as directly conditioned by, and as immediately due to, anything so general as pure apperception. These objections Kant must have come very quickly to recognise. This was the first part of his teaching to be modified. In the immediately succeeding stage, so far as the stages can be reconstructed from the survivals in the *Critique*, the empirical concepts are displaced once and for all by the *a priori* categories.

The only sentences which can be regarded as possibly conflicting with the above interpretation are those two (in the second last and in the last paragraphs) in which the phrase "rules *a priori*" occurs. Even granting (what is at least questionable as regards the first) that the words are meant to be taken together, it does not follow that Kant is here speaking of categories. For contrary to his usual teaching he speaks of the concept of body as a source of necessity. If so, it may well, with equal looseness, be spoken of as *a priori*. That is indeed done, by implication, in the second and third paragraphs, where he speaks of a rule (referring to "body and triangle") as making the synthesis of reproduction "*a priori* necessary." Such assertions are completely inconsistent with Kant's Critical teaching, but so is the entire section.

The setting in which the passage before us occurs has its own special interest. When Kant, as it would seem, on the very eve of the publication of the *Critique,* developed the doctrine of a threefold synthesis culminating in a "synthesis of recognition in the concept," he must have bethought himself of this earlier position, and have completed his subjective deduction by incorporation, probably with occasional alterations of phrasing, of the older manuscript. This procedure has bewildered even the most discerning among Kant's readers; but now, thanks to Vaihinger's convincing analysis, it may be welcomed as of illuminating interest in the historical study of Kant's development.

I may here draw attention to the two important respects in which the positions revealed in this section continued to influence Kant's later teaching: namely, in the emphasis laid upon the transcendental unity of apperception, and in the view of objectivity as involving the thought of the thing in itself.

The excessive emphasis which in this first stage is laid upon the transcendental unity of apperception persists throughout the later forms of the deduction, and, as I shall try to show, does so to the detriment of the argument. Though its functions are considerably diminished, they are still exaggerated; this is perhaps in part due to its having been in this early stage regarded as in and by itself the sole ultimate ground of unitary experience. There were, however, two other influences at work. Kant continued to employ the terminology of his earlier view, and in his less watchful moments was betrayed thereby into conflict with his considered teaching. But even more important was the influence of his personal convictions. He was irrevocably committed in his own private thinking to a belief in the spiritual and abiding character of the self; and this belief frequently colours, in illegitimate ways, the expression of his views. This is especially evident in some of the alterations of the second edition, written as they were at a time when he was chiefly preoccupied with moral problems.

As regards the other factor, the view adopted in regard to the nature of objectivity, there is ample evidence that even after the empirical concepts had been displaced by the categories Kant still continued for some time (possibly for several years in the earlier and middle 'seventies) to hold to his doctrine of the transcendental object. Passages which expound it in this later form occur in the *Note on Amphiboly* and throughout the *Dialectic*. That this may not be taken for his final teaching is equally certain. The entire first layer of the deduction of the first edition, all the relevant passages in the chapter on phenomena and noumena, and some of those in the *Dialectic,* were omitted in the second edition; and nowhere, either in the other portions of the deduction of the first edition, or in the deduction of the second edition, or in any passages added elsewhere in the second edition, is such teaching to be found.

A brief statement of Kant's doctrine of the transcendental object *in its later form* seems advisable at this point; it is required in order to complete and to confirm the interpretation which I have given of the earlier exposition. At the same time I shall endeavour to show that the sections in which the doctrine occurs, though later than the first layer of the deduction of the first edition, are all of comparatively early origin, and that they reveal not the least trace of Kant's more mature, phenomenalist view of the empirical world in space.

We may begin with the passages in the chapter on phenomena and noumena. The meaning in which the term transcendental is employed is there made sufficiently clear.

"The transcendental employment of a concept in any principle consists in its being referred to things *in*

general and in themselves."

That is to say, the term transcendental, as used in the phrase transcendental object, is not employed in any sense which would oppose it to the transcendent. In so far as the thought of the thing in itself is a necessary ingredient in the concept of objectivity, it is a condition of apperception, and therefore of possible experience; in other words, *the thought of a transcendent object is one of the transcendental conditions of our experience*. As Kant is constantly interchanging the terms transcendent and transcendental, such an explanation of the phrase is perhaps superfluous; but if any is called for, the above would seem to suffice. As we shall have occasion to observe, other factors besides the *a priori* must be reckoned among the conditions of experience; and to both types of conditions Kant applies the epithet transcendental.

In the chapter on phenomena and noumena Kant enquires at considerable length whether the categories (meaning, of course, the pure forms of understanding, not their schematised correlates) allow of transcendental (*i.e.* transcendent) employment. The passages in which this discussion occurs would seem, however, to be highly composite; many paragraphs, or portions of paragraphs, are of much later date than others. We may therefore limit our attention to those in which the phrase transcendental object is actually employed, *i.e.* to those which appear only in the first edition.

"All our representations are referred by the understanding to some object; and since appearances are merely representations, the understanding refers them to a *something* as the object of sensuous intuition. But this something, thus conceived (*in so fern*), is only the transcendental object; and by that is meant a something = x, of which we know, and with the present constitution of our understanding can know, nothing whatsoever, but which, as a correlate of the unity of apperception, can serve only for the unity of the manifold in sensuous intuition. By means of this unity the understanding combines the manifold into the concept of an object. This transcendental object cannot be separated from the sense data, for nothing then remains over through which it might be thought. Consequently it is not in itself an object of knowledge, but only the representation of appearances under the concept of an object in general which is determinable through the manifold of those appearances. Precisely for this reason also the categories do not represent a special object given to the understanding alone, but only serve to specify the transcendental object (the concept of something in general) through that which is given in sensibility, in order thereby to know appearances empirically under concepts of objects." "The object to which I relate appearance in general is the transcendental object, *i.e.* the completely indeterminate thought of *something* in general. This cannot be entitled the *noumenon* [*i.e.* the thing in itself more specifically determined as being the object of a purely intelligible intuition]; for I know nothing of what it is in itself, and have no concept of it save as the object of a sensuous intuition in general, and so as being one and the same for all appearances."

Otherwise stated, Kant's teaching is as follows. The thought of the thing in itself remains altogether indeterminate; it does not *specify* its object, and therefore yields no knowledge of it; none the less it is a necessary ingredient in the concept of objectivity as such. The object as specified in terms of sense is *mere representation*; the object as genuinely objective can only be thought. The correlate of the unity of apperception is the thought of the thing in itself. This is what Kant is really asserting, though in a hesitating manner which would seem to indicate that he is himself already more or less conscious of its unsatisfactory and un-Critical character.

The phrase transcendental object occurs once in the second *Analogy* and twice in the *Note on Amphiboly*. The passage in the second *Analogy* may very well, in view of the kind of subjectivism which it expounds, be of early date of writing. By transcendental object Kant there quite obviously means the thing in itself. From the first reference in the *Note on Amphiboly* no definite conclusions can be drawn. The argument is too closely bound up with his criticism of Leibniz to allow of his own independent standpoint being properly developed. There is, however, nothing in it which compels us to regard it as of late origin; and quite evidently Kant here means by the transcendental object the thing in itself. The phrase

substantia phaenomenon is not, as might at first sight seem, equivalent to the empirical object of Kant's phenomenalist teaching. It is an adaptation of Leibnizian phraseology. The second reference in the *Note on Amphiboly* occurs in a passage which may perhaps be of later origin; but the transcendental object is there mentioned only in order to afford opportunity for the statements that it cannot be thought through any of the categories, that we are completely ignorant whether it is within or without us, and whether if sensibility were removed it would vanish or remain, and that it can therefore serve only as a limiting concept. We here observe it in the very process of being eliminated. As we shall find, Kant's teaching is ill-expressed in the sections on *Amphiboly*; so much so that they could not be recast without seriously disturbing the balance of his architectonic. They were therefore allowed to remain unaltered in the second edition.

We may now pass to the *Dialectic*. The subjectivist doctrine of the transcendental object is there expressed in a much more uncompromising manner. Let us first consider the references to the transcendental object in the *Paralogisms* and in the subsequent *Reflection*. The phrase transcendental object occurs twice in the second *Paralogism*, once in the third, twice in the fourth, and three times in the *Reflection*; and in all these cases there is not the least uncertainty as to its denotation. It is taken as equivalent to the thing in itself, and is expounded as a necessary ingredient in the consciousness of our subjective representations as noumenally grounded.

"What matter may be as a thing in itself (transcendental object) is completely unknown to us, though, owing to its being represented as something external, its permanence as appearance can indeed be observed." "We can indeed admit that something, which may be (in the transcendental sense) 'outside us,' is the cause of our outer intuitions, but this is not the object of which we are thinking in the representations of matter and of corporeal things, for these are merely appearances, *i.e.* mere kinds of representation which are never to be met with save in us, and whose actuality depends on immediate consciousness just as does the consciousness of my own thoughts. The transcendental object is equally unknown in respect to inner and to outer intuition."

Here Kant at one and the same time distinguishes between, and confounds together, representation and its empirical object. What is alone clear is that by the transcendental object he means simply the thing in itself viewed as the cause of our sensations. In A 358 it is used in a wider sense as also comprehending the noumenal conditions which underlie the conscious subject.

"...this something which underlies the outer appearances and which so affects our sense that it obtains the representations of space, matter, shape, etc., this something viewed as noumenon (or better as transcendental object) might also at the same time be the subject that does our thinking...."

Similarly in A 379-80:

"Though the I, as represented through inner sense in time, and objects in space outside me, are specifically quite distinct appearances, they are not for that reason thought as being different things. Neither the transcendental object which underlies outer appearances, nor that which underlies inner intuition, is in itself either matter or a thinking being, but is a ground (to us unknown) of the appearances which supply to us the empirical concepts of the former as well as of the latter kind."

The references in the *Reflection on the Paralogisms* are of the same general character and are equally definite. A 390-1 has special interest in that it explicitly states that to appearances, taken as Kant invariably takes them throughout the *Paralogisms* in the first edition as mere subjective representations, the category of causality, and therefore by implication the category of substance, is inapplicable.

"No one could dream of asserting that that which he has once come to recognise as mere representation is an outer cause."

We may now turn to the passages in the chapter on the *Antinomies*.

"The non-sensuous cause of our representations is completely unknown to us, and therefore we cannot

intuit it as object.... We may, however, entitle the purely intelligible cause of appearances in general the transcendental object.... To this transcendental object we can ascribe the whole extent and connection of our possible perceptions....”

Appearances can be regarded as real only to the extent to which they are actually experienced. Otherwise they exist only in some unknown noumenal form of which we can acquire no definite concept, and which is therefore really nothing to us. This, Kant declares, is true even of that immemorial past of which we are ourselves the product.

“...all the events which have taken place in the immense periods that have preceded my own existence mean really nothing but the possibility of extending the chain of experience from the present perception back to the conditions which determine it in time.”

In other words, we may not claim that such events, empirically conceived, have ever actually existed in any such empirical form. A similar interpretation is given to the assertion of the present reality of what has never been actually experienced.

“Moreover, in outcome it is a matter of indifference whether I say that in the empirical progress in space I can meet with stars a hundred times farther removed than the outermost now perceptible to me, or whether I say that they are perhaps to be met with in cosmical space even though no human being has ever perceived or ever will perceive them. For though they might be given as things in themselves, without relation to possible experience, they are still nothing for me, and therefore are not objects, save in so far as they are contained in the series of the empirical regress.” “The cause of the empirical conditions of this process, that which determines what members I shall meet with and how far by means of such members I can carry out the regress, is transcendental and is therefore necessarily unknown to me.”

Such is the form in which Kant’s pre-Critical doctrine of the transcendental object survives in the *Critique*. It contains no trace of the teaching of the objective deduction of the first and second edition or of the teaching of the refutation of idealism in the second edition. It closely resembles Mill’s doctrine of the permanent possibilities of sensation, and is almost equally subjectivist in character. As already noted, it also lies open to the further objection that it involves an illegitimate application of the categories to things in themselves. As Kant started from the naïve and natural assumption that reference of representations to objects must be their reference to things in themselves, he also took over the current Cartesian view that it is by an inference in terms of the category of causality that we advance from a representation to its cause. The thing in itself is regarded as the sole true substance and as the real cause of everything which happens in the natural world. Appearances, being representations merely, are wholly transitory and completely inefficacious. *Not only, therefore, are the categories regarded as valid of things in themselves, they are also declared to have no possible application to phenomena.* Sense appearances do not, on this view, constitute the mechanical world of the natural sciences; they have a purely subjective, more or less epi-phenomenal, existence in the mind of each separate observer. It was very gradually, in the process of developing his own Critical teaching, that Kant came to realise the very different position to which he was thereby committed. The categories, including that of causality, are pre-empted for the *empirical* object which is now regarded as immediately apprehended; and the function of mediating the reference of phenomena to things in themselves now falls to the Ideas of Reason. The distinction between appearance and reality is no longer that between representations and their noumenal causes, but between the limited and relative character of the entire world in space and time and the unconditioned demanded by Reason. But these are questions whose discussion must meantime be deferred.

I may now briefly summarise the evidence in favour of the view that the doctrine of the transcendental object is a pre-Critical or semi-Critical survival and must not be taken as forming part of Kant’s final and considered position. (I) Of the six sections in which the phrase transcendental object occurs, three were omitted in the second edition, and in the passages which were substituted for them it receives no mention.

There are various reasons which can be suggested in explanation of the retention of the other three in the second edition. The *Note on Amphiboly* was too unsatisfactory as a whole to encourage Kant to improve upon it in detail. The other two are outside the limit at which Kant thought good to terminate all attempts to improve, whether in major or in minor matters, the text of the first edition. To have recast the *Antinomies* as he had recast the *Paralogisms* would have involved alterations much too extensive. Also, there were no outside polemical influences — or at least none acting quite directly — such as undoubtedly reinforced his other reasons for revising the *Paralogisms*. (2) Secondly, the transcendental object is not mentioned in the later layers of the deduction of the first edition, nor in the deduction of the second edition, nor in any passage or note added in the second edition. That Kant should thus suddenly cease to employ a phrase to which he had accustomed himself is the more significant in view of his conservative preference for the adapting of familiar terminology to new uses. It can only be explained as due to his recognition of the completely untenable character of the teaching to which it had given expression. As the object of knowledge is always empirical, it can never legitimately be called transcendental. (3) Thirdly, the general teaching of the passages in which the phrase transcendental object occurs is by itself sufficient proof of their early origin. They reveal not the least trace of the deepened insight of his final standpoints. As we know, it was certain difficulties involved in the working out of the objective deduction that delayed the publication of the *Critique* for so many years; and the sections which deal with these difficulties contain Kant's maturest teaching. In them he seems to withdraw definitely from the positions to which he had unwarily committed himself by his un-Critical doctrine of the transcendental object. I now pass to the second section constitutive of the first stage.

A 84-92=B 116-24, I. § 13. — Just as in II. § 3 Kant deals solely with the first of the two questions formulated in the letter of 1772 to Herz — the reference of *sense*-representations to an object, — so in I. § 13 he raises only the second — that of the objective validity of *intellectual* representations (now spoken of as pure concepts of understanding, or pure *a priori* concepts, and only in one sentence as categories). And just as in the former section he carries the problem a step further, yet without attaining to the true Critical position, so in this latter he still assumes that it is the application of these pure concepts to real independent objects, *i.e.* to *things in themselves*, which calls for justification. We must again consider the exact terms in which this problem is formulated in the letter to Herz.

"Similarly, if that in us which is called a representation, were active in relation to the object, that is to say, if the object itself were produced by the representation (as on the view that the ideas in the Divine Mind are the archetypes of things), the conformity of representations with objects might be understood. We can thus render comprehensible at least the possibility of two kinds of intelligence — of an *intellectus archetypus*, on whose intuition the things themselves are grounded, and of an *intellectus ectypus* which derives the data of its logical procedure from the sensuous intuition of things. But our understanding (leaving moral ends out of account) is not the cause of the object through its representations, nor is the object the cause of its intellectual representations (*in sensu reali*). Hence, the pure concepts of the understanding cannot be abstracted from the data of the senses, nor do they express our capacity for receiving representations through the senses. But, whilst they have their sources in the nature of the soul, they originate there neither as the result of the action of the object upon it, nor as themselves producing the object. In the *Dissertation* I was content to explain the nature of these intellectual representations in a merely negative manner, viz. as not being modifications of the soul produced by the object. But I silently passed over the further question, how such representations, which refer to an object and yet are not the result of an affection due to that object, can be possible. I had maintained that the sense representations represent things as they appear, the intellectual representations things as they are. But how then are these things given to us, if not by the manner in which they affect us? And if such intellectual representations are due to our own inner activity, whence comes the agreement which they are supposed to have with objects, which yet are not their products? How comes it that the

axioms of pure reason about these objects agree with the latter, when this agreement has not been in any way assisted by experience? In mathematics such procedure is legitimate, because its objects only *are* quantities for us, and can only be represented as quantities, in so far as we can generate their representation by repeating a unit a number of times. Hence the concepts of quantity can be self-producing, and their principles can therefore be determined *a priori*. But when we ask how the understanding can form to itself completely *a priori* concepts of things in their *qualitative* determination, with which these things must of necessity agree, or formulate in regard to their possibility principles which are independent of experience, but with which experience must exactly conform, — we raise a question, that of the origin of the agreement of our faculty of understanding with the things in themselves, over which obscurity still hangs."

The section before us represents the same general standpoint as that given in the above letter. Here, too, it is the validity of the *a priori* concepts in reference to *things in themselves* that is under consideration. The implication of Kant's argument is that the categories, being neither determinable nor discoverable by means of experience, will only apply to appearances if they determine, or rather reveal, the actual non-experienced nature of things in themselves. These pure concepts, it is implied, owing to their combined *a priori* and intellectual characteristics, make this inherent claim. Either they are altogether empty and illusory, or such unlimited validity must be granted to them. Kant, that is to say, still holds, as in the *Dissertation*, that sense-representations reveal things as they *appear*, intellectual representations things as they *are*.

"We have either to surrender completely all claims to judgments of pure reason, in the most esteemed of all fields, that which extends beyond the limits of all possible experience, or we must bring this Critical investigation to perfection."

The pure concepts, unlike space, "apply to objects generally, apart from the conditions of sensibility." But here also, as in the letter to Herz, the strange and problematic character of such knowledge is clearly recognised.

Kant's discussion of the concept of causality in A 90 may seem to conflict with the above contention — that it is its applicability to things in themselves which Kant is considering. But this difficulty vanishes if we bear in mind that here, as in the *Dissertation*, there is no such distinction as we find in Kant's later more genuinely phenomenalist position, between the objects causing our sensations and *things in themselves*. The purely intelligible object, supposed to remain after elimination of the empirical and *a priori* sensory factors, is the thing in itself. The objects apprehended through sense are real, only not in their sensuous form.

There are two connected facts which together may perhaps be taken as evidence that I. § 13 is later than II. 3 *b*. Intellectual concepts are reinstated alongside the *a priori* concepts of space and time. Kant has evidently in the meantime given up the attempt to construe the former as empirical in origin. That that attempt was earlier in time would seem to be proved by the further fact, that the *a priori* concepts are here viewed as performing the same kind of function as that ascribed in II. 3 *b* to concepts that are empirical. They are conditions of the "synthetic unity of thought." This view of the function of concepts is certainly fundamental and important, and Kant permanently retained it from his previous abortive method of 'deduction.' But it was a long step from the discovery of the distinction between empirical and *a priori* concepts to its fruitful application. That involved appreciation of the further fact that the two problems, separately stated in the letter to Herz and separately dealt with in II. 3 *b* and in I. § 13 — the problem of the relation of *sense*-representations, and the problem of the relation of *intellectual* representations, to an object, — are indeed one and the same, soluble from one and the same standpoint, by one and the same method of deduction, namely, by reference to the possibility of experience. Only in and through relation to an object can sense-representations be apprehended; and only as conditions of such sense-experience are the categories objectively valid. Relation to an object is constituted by the categories, and is necessary in

reference to sense-representations, because only thereby is consciousness of any kind possible at all.

That this truly Critical position had not been attained when I. § 13 was written, is shown not only by its concentration on the single problem of the validity of *a priori* concepts, but also by its repeated assertion that representations can be consciously apprehended independently of all relation to the faculty of understanding. The directly counter assertion appears, however, in the sections (I. § 14, II.: first four paragraphs) which immediately follow in the text of the *Critique* — indicating that in the period represented by these latter the revolutionary discovery, the truly Copernican hypothesis, had at last been achieved. They constitute the second stage, and to it we may now proceed.

Second Stage. — A 92-4 = B 124-7; A 95-7; A 110-14.

A 92-4, I. § 14 (with the exception of the concluding classification of mental powers). — This section makes a fresh start; it stands in no necessary relation to any preceding section. The problem is still formulated, in its opening sentences, in terms reminiscent of the letter to Herz; but otherwise the standpoint is entirely new, and save for the wording of a single sentence (A 93: "if not intuited, yet"), is genuinely Critical. The phrase "possibility of experience" now appears, and is at once assigned the central rôle. The words "if not intuited, yet" in A 93 may possibly have been inserted later in order to tone down the flagrant contradiction with the preceding paragraphs. In any case, even this qualification is explicitly retracted in A 94.

A 95-7. — The same standpoint appears in the first three paragraphs of Section II. The categories are "the *a priori* conditions on which the possibility of experience depends." By the categories alone "can an object be thought." The further important point that only in their empirical employment do the categories have use and meaning is excellently developed.

"An *a priori* concept not referring to experience would be the logical form only of a concept, but not the concept itself by which something is thought."

A 110-14, II. 4. — In this section also the argument starts afresh, indicating (if such evidence were required) that, like I. § 14, it must have been written independently of its present context. But the argument is now advanced one step further. The categories are recognised as simultaneously conditioning both unity of consciousness and objectivity.

"There is but one experience ... as there is but one space and one time...." "The *a priori* conditions of a possible experience are at the same time conditions of the possibility of objects of experience" "...the necessity of these categories rests on the relation which our whole sensibility, and with it also all possible appearances, have to the original unity of apperception...."

Now also it is *emphasised* that save in and through *a priori* concepts no representations can exist for consciousness.

"They would then belong to no experience, would be without an object, a blind play of representations, less even than a dream." They "would be to us the same as nothing."

The wording is still not altogether unambiguous, but the main point is made sufficiently clear.

These paragraphs are the earliest in which traces of a genuine phenomenalism can be detected. The transcendental object, one and the same for all our knowledge, is not referred to. 'Objects' (in the plural) is the term which is used wherever the context permits. The empirical object is thus made to intervene between the thing in itself and the subjective representations. But the distinction between empirical objects and subjective representations on the one hand, and between empirical objects and things in themselves on the other, is not yet drawn in any really clear and definite manner.

A similar phenomenalist tendency crops out in Kant's distinction between objective affinity and subjective association.

"The ground of the possibility of the association of the manifold, so far as it lies in the object, is named the affinity of the manifold."

None the less Kant's subjectivism finds one of its most decided expressions in A 114.

Third Stage. — A 119-23 = III. β; A 116-19 = III. α; A 94-5 = I. § 14 C(oncluding paragraph); A 126-8 = III. δ; A 128-30 = S(ummary); A 123-6 = III. γ; A 115-16 = III. I(ntroduction); A 76-9 (B 102-4) = § 10 T(ransition to fourth stage).

A 119-23, III. β (from the beginning of the seventh paragraph to the end of the twelfth). The doctrine of objective affinity already developed in the above sections is now made to rest upon a new faculty, the productive imagination. As Vaihinger remarks, the wording of this section would seem to indicate that it is Kant's first attempt at formulating that new doctrine. He has not as yet got over his own surprise at the revolutionary nature of the conclusions to which he feels himself driven by the exigencies of Critical teaching. He finds that it is deepening into consequences which may lead very far from the current psychology and from his own previous views regarding the nature and conditions of the knowing process and of personality. As evidence that this section was not written continuously with II. 4, we have the further fact that though the doctrine of objective affinity is dwelt upon, it is described afresh, with no reference to the preceding account. Also, the empirical processes of apprehension and reproduction, already mentioned in A 104-10, are now ascribed to the empirical imagination which is carefully distinguished from the productive.

III. α repeats "from above" the argument given in III. β "from below." It insists upon the close connection between the categories (first introduced in II. 4) with the productive imagination of III. β.

Vaihinger places III. δ next in order, on account of the connection of its argument with III. α. But it dwells only upon the chief outcome of the total argument, viz. that the orderliness of nature is due to understanding. That productive imagination is not mentioned, is taken by Vaihinger to signify Kant's recognition that it can be postulated only hypothetically, and that as doctrine it is not absolutely essential to the strict deduction.

S summarises the entire argument, and in it "pure imagination" receives mention.

Within this third stage III. γ is subsequent to the above four sections. For it carries the doctrine of productive imagination one step further. In III. β, III. α, and S, productive imagination has been treated merely as an auxiliary function of pure understanding.

"The unity of apperception in relation to the synthesis of imagination is the *understanding*; and the same unity with reference to the transcendental synthesis of the imagination is the *pure understanding*."

It is now treated as a separate and distinct faculty. So far from being a function of understanding, its synthesis "by itself, though carried out *a priori*, is always sensuous." It is

"one of the fundamental faculties of the human soul.... The two extreme ends, sensibility and understanding, must be brought into connection with each other by means of this transcendental function of imagination."

In this section there also appears a new element which would seem to connect it with the next following stage, namely, the addition to the series, apprehension, association, and reproduction, of the further process, recognition. As here introduced it is extremely ambiguous in character. It is counted as being empirical, and yet as containing *a priori* concepts. This decidedly hybrid process would seem to represent Kant's first formulation of the even more ambiguous process, which corresponds to it in the fourth stage.

In III. I recognition is again mentioned, but this time in a form still more akin to its treatment in the fourth stage. It is not recognition through categories, but, as a form in apperception, is the

"empirical consciousness of the identity of the reproductive representations with the appearances by which they were given."

In all other respects, however, the above six sections agree (along with I. § 14 C) in holding to a threefold division of mental powers: sensibility, imagination, and apperception. This third stage is thereby marked off sufficiently clearly from the second stage in which pure imagination is wanting, and from the fourth stage in which it is dissolved into a threefold *a priori* synthesis.

In both I. § 14 C and in III. I the classification which underlies the third stage is explicitly formulated. Their statements harmoniously combine to yield the following tabular statement:

1. The *synopsis* of the manifold — *a priori* through sense, *i.e*. in pure intuition.
2. The synthesis of this manifold — through pure transcendental imagination.
3. The unity of this synthesis — through pure original transcendental apperception.

At this point Vaihinger adds to the above section the earlier passage § 10 T. It is even more definitely than III. γ and III. I transitional to the fourth stage. It must be classed within the third stage, as it holds to the above threefold classification. But it modifies that classification in two respects. First, in that it does not employ the term *synopsis*, but only speaks of pure intuition as required to yield us a manifold. The term synopsis, as used by Kant, is, however, decidedly misleading. His invariable teaching is that all connection is due to synthesis. By synopsis, therefore, which he certainly does not employ as synonymous with synthesis, can be meant only apprehension of external side-by-sideness. It never signifies anything except apprehension of the lowest possible order. Kant's omission of the term, therefore, tends to clearness of statement. Secondly, the classification is also modified by the substitution of understanding for the unity of apperception. Apperception is, however, so obscurely treated in all of the above sections, that this cannot be regarded as a vital alteration. What is new in this section, and seems to connect it in a curious and interesting manner with sections in the fourth stage, is its doctrine of

"a manifold of *a priori* sensibility." "Space and time contain a manifold of pure *a priori* intuition."

That is, in this connection, an entirely new doctrine. In all the previous sections of the deduction (previous in the assumed order of original writing) the manifold supplied through intuition is taken as being empirical, and as consisting of sensations. Kant here also adds that the manifold, "whether given empirically or *a priori*," must be synthesised before it can be known.

"The spontaneity of our thought requires that this manifold [of pure *a priori* intuition] should be run through in a certain manner, taken up, and connected, in order that a knowledge may be formed out of it. This action I call synthesis."

Fourth Stage. — A 98-104; A 97-8. — As already noted, there are in Kant two persistent but conflicting interpretations of the nature of the synthetic processes exercised by imagination and understanding, the subjectivist and the phenomenalist. Now, on the former view, imagination is simply understanding *at work*. In other words, imagination is merely the active synthesising side of a faculty whose complementary aspect appears in the logical unity of the concept. From this point of view the transcendental and the empirical factors may be taken as forming a single series. The transcendental and the empirical processes will vary together, some form of transcendental activity corresponding to every fundamental form of empirical activity and *vice versa*. Such an inference only follows *if* the subjectivist standpoint be accepted to the exclusion of the phenomenalist point of view. But since Kant constantly alternates between them, and never quite definitely formulates them in their distinction and opposition; since, in fact, they were rather of the nature of obscurely felt tendencies than of formulated standpoints, it is quite intelligible that an inference derived from the one should be drawn even at the very time when the other is being more explicitly developed. This, it would seem, is what actually happened. When we come to consider the evidence derivable from the *Reflexionen* and *Lose Blätter*, we shall find support for the view that after January 1780, on the very eve of the publication of the *Critique*, while the revolutionary, phenomenalist consequences of the Critical hypothesis were becoming clearer to him, he unguardedly allowed the above inference to lead him to recast his previous views in a decidedly subjectivist manner. The view that transcendental imagination has a special and unique activity altogether different in type from any of its empirical processes, namely, the "productive," is now allowed to drop; and in place of it Kant develops the view that transcendental functions run exactly parallel with the empirical processes of apprehension, reproduction, and recognition. Accordingly, in place of the classification presented in the

third stage, we find a new and radically different one introduced into the text, without the least indication that Kant's standpoint has meantime changed. It is given in A 97:

A. Synopsis of the manifold through sense.

B. Synthesis.

1. Synthesis of apprehension of representations in [inner] intuition.

2. Synthesis of reproduction of representations in imagination.

3. Synthesis of recognition of representations in the concept.

And Kant adds in explanation that "these point to three subjective sources of knowledge which make the understanding itself possible, and which in so doing make all experience possible, in so far as it is an empirical product of the understanding." What, now, are these three subjective sources of knowledge? They certainly are not those classified in the table of the third stage. *A* roughly coincides with its first member; consequently *B* 1 is left without proper correlate. *B* 2 is altogether different from the previous synthesis of imagination, for in the earlier table transcendental imagination is regarded as being solely productive, *never* reproductive. It is now asserted to be reproductive — a contradiction of one of his own most emphatic contentions, which can only be accounted for by some such explanation as we are here stating. Nothing is lacking as regards explicitness in the statement of this new position. "...the *reproductive* synthesis of imagination belongs to the transcendental acts of the soul, and, in reference to it [viz. to the reproductive synthesis], we will call this power too the transcendental power of the imagination." Lastly, even B 3 does not coincide with the pure apperception of the other table. B 3 is more akin to the recognition which in the third stage is declared to be always empirical. In any case, it is recognition *in the concept*; and though that may ultimately involve and condition transcendental apperception, it remains, in the manner in which it is here developed by Kant, something very different. But this is a point to which we shall return. There is an added complication, running through this entire stage, which first requires to be disentangled. The transcendental syntheses are declared to condition the pure representations of space and time no less than those of sense-experience.

"This synthesis of apprehension also must be executed *a priori*, *i.e.* in reference to representations which are not empirical. For without it we could not have the *a priori* representations either of space or of time, since these can be generated only through the synthesis of the manifold which sensibility presents in its original receptivity. Thus we have a pure synthesis of apprehension" "...if I draw a line in thought or desire to think of the time from one noon to another, or merely represent to myself a certain number, I must, firstly, apprehend these manifold representations one after the other. But if the preceding representations (the first parts of the line, the antecedent parts of time or the units serially represented) were always to drop out of my thought, and were not reproduced when I advance to those that follow, no complete representation, and none of all the aforementioned thoughts, not even the purest and first basal representations of space and time, could ever arise."

This, as Vaihinger remarks, is a point of sufficient importance to justify separate treatment. But it is introduced quite incidentally by Kant, and obscures quite as much as it clarifies the main argument.

It is convenient to start with the second synthesis. Kant's argument is much clearer in regard to it than in regard to the other two. He distinguishes between empirical and transcendental reproduction. Reproduction in ordinary experience, in accordance with the laws of association, is merely empirical. The *de facto* conformity of appearances to rules is what renders such empirical reproduction possible;

"...otherwise our faculty of empirical imagination would never find any opportunity of action suited to its capacities, and would remain hidden within the mind as a dead, and to us unknown power."

Kant proceeds to argue, consistently with his doctrine of objective affinity, that empirical reproduction is itself transcendentally conditioned. The form, however, in which this argument is developed is peculiar to the section before us, and is entirely new.

"If we can show that even our purest *a priori* intuitions yield no knowledge, save in so far as they

contain such connection of the manifold as will make possible a thoroughgoing synthesis of reproduction, this synthesis of the imagination must be grounded, prior to all experience, on *a priori* principles; and since experience necessarily presupposes that appearances can be reproduced, we shall have to assume a pure transcendental synthesis of the imagination as conditioning even the possibility of all experience."

In the concluding paragraph Kant makes clear that he regards this *transcendental* activity as being exercised in a twofold manner: in relation to the *empirically* given manifold as well as in relation to the *a priori* given manifold. How this transcendental activity is to be distinguished from the empirical is not further explained. I discuss this point below.

The argument of the section on the synthesis of *apprehension*, to which we may now turn back, suffers from serious ambiguity. It is not clear whether a distinction, analogous to that between empirical and transcendental reproduction, is being made in reference to apprehension. The actual wording of its two last paragraphs would lead to that conclusion. That, however, is a view which would seem to be excluded by the wider context. Kant is dealing with the synthesis of apprehension in *inner* intuition, *i.e.* in time. By the fundamental principles of his teaching such intuition must always be transcendental. Empirical apprehension can only concern the data of the special senses. The process of apprehension referred to in the middle paragraph must therefore itself be transcendental.

But it is in dealing with the synthesis of *recognition* that the argument is most obscure. It is idle attempting to discover any possible distinction between an empirical and a transcendental process of recognition. For the transcendental process here appears as being the consciousness that what we are thinking now is the same as what we thought a moment before; and it is illustrated not by reference to the pure intuitions of space and time, but only by the process of counting. It may be argued that empirical recognition is mediated by transcendental factors — by pure concepts and by apperception. But unless we are to take transcendental recognition as synonymous with transcendental apperception, which Kant's actual teaching does not seem to justify us in doing, such considerations will not enable us to distinguish two forms of recognition. Apart, however, from this difficulty, there is the further one that the concepts in and through which the recognition is executed are here described as being empirical. The only key that will solve the mystery of this extraordinary section, hopelessly inexplicable when viewed as a single continuous whole, is, it would seem, the theory of Vaihinger, namely, that from the third paragraph onwards (already dealt with as forming the first stage of the deduction) Kant is making use of manuscript which represents the *earliest* form in which his explanation of the consciousness of objects was developed, with the strange result that this section is a combination of the latest and of the earliest forms of the deduction. While seeking to make out a parallelism between the empirical, conscious activities of imagination and understanding on the one hand, and its transcendental functions on the other, he must have bethought himself of the earlier attempt to explain consciousness of objects through empirical concepts conditioned by transcendental apperception, and so have attempted to expound the third form of synthesis by means of it. As thus extended it involves a distinction between transcendental and empirical apperception, and upon that the discussion, so far as it concerns anything akin to recognition, altogether turns. But there is not the least further mention of recognition itself. As transcendental, it cannot be taken as the equivalent of empirical apperception; and as a synthesis through concepts, can hardly coincide with pure apperception. The title of the section, "the synthesis of recognition in the concept," is thus no real indication of the astonishing fare prepared for the reader. The doctrine of a threefold synthesis seems to have occurred to Kant on the very eve of the publication of the *Critique*. The passage expounding it may well have been hurriedly composed, and when unforeseen difficulties accumulated, especially in regard to recognition as a transcendental process, Kant must have resolved simply to close the matter by inserting the older manuscript.

III. Evidence yielded by the "Reflexionen" and "Lose Blätter" in support of the above analysis.

The evidence, derived by Vaihinger from the *Reflexionen* and *Lose Blätter*, briefly outlined, is as

follows. (1) In the *Reflexionen zur Anthropologie* relevant passages are few in number, and represent a standpoint very close to that of the 1770 *Dissertation*. Imagination is treated only as an empirical faculty. Recognition, which is only once mentioned, is also viewed as merely empirical. The understanding is spoken of as the faculty through which objects are thought. The categories are not mentioned, and it is stated that the understanding yields only ideas of reflection. “All knowledge of things is derived, as regards its matter, from sensation — the understanding gives only ideas of reflection.” So far, these *Reflexionen* would seem to coincide, more or less, with the first stage of the deduction. They contain, however, no reference to *transcendental* apperception; and are therefore regarded by Vaihinger as representing a still earlier standpoint.

(2) In the *Reflexionen zur Kritik der reinen Vernunft* there is a very large and valuable body of relevant passages. No. 925 must be of the same date as the letter of 1772 to Herz; it formulates its problem in practically identical terms. Nos. 946-52 and 955 may belong to the period of the first stage. For though the doctrine of the transcendental object as the opposite counterpart of the transcendental subject is not mentioned, the spiritualist view of the self is prominent. In No. 946 it is asserted that the representation of an object is “made by us through freedom.”

“Free actions are already given *a priori*, namely our own.” “To pass universal objective judgments, and to do so apodictically, reason must be free from subjective grounds of determination. For were it so determined the judgment would be merely accidental, namely in accordance with its subjective cause. Thus reason is conscious *a priori* of its freedom in objectively necessary judgments in so far as it apprehends them as exclusively grounded through their relation to the object.” “Transcendental freedom is the necessary hypothesis of all rules, and therefore of all employment of the understanding.” “Appearances are representations whereby we are affected. The representation of our free self-activity does not involve affection, and accordingly is not appearance, but apperception.”

It is significant that the categories receive no mention.

Almost all the other *Reflexionen* would seem to have originated in the period of the second stage of the deduction; but they still betray a strong spiritualist bias.

“Impressions are not yet representations, for they must be related to something else which is an action. Now the reaction of the mind is an action which relates to the impression, and which if taken alone may in its special forms receive the title categories.” “We can know the connection of things in the world only if we produce it through a universal action, and so out of a principle of inner power (*aus einem Prinzip der inneren Potestas*): substance, ground, combination.”

These *Reflexionen* recognise only the categories of relation, and must therefore be prior to the twelvefold classification. There is not the least trace of the characteristic doctrines of the third and fourth stages of the deduction, viz. of the transcendental function of the imagination or of a threefold transcendental synthesis. The nature of apprehension is also most obscure. It is frequently equated with apperception.

(3) The *Lose Blätter aus Kants Nachlass* (Heft I.) contains fragments which also belong to the second stage of the deduction, but which would seem to be of somewhat earlier date than the above *Reflexionen*. They have interesting points of contact with the first stage. Thus though the phrase transcendental object does not occur in them, the object of knowledge is equated with *x*, and is regarded in the manner of the first stage as the opposite counterpart of the unity of the self. These fragments belong, however, to the second stage in virtue of their recognition of the *a priori* categories of relation. There is also here, as is in the *Reflexionen*, great lack of clearness regarding the nature of apprehension; and there is still no mention of the transcendental faculty of imagination. Fragment 8 is definitely datable. It covers the free spaces of a letter of invitation dated May 20, 1775. Fragment B 12 belongs to a different period from the above. This is sufficiently evident from its contents; but fortunately the paper upon which it is written — an official document in the handwriting of the Rector of the Philosophical Faculty of Königsberg — enables us to

decide the exact year of its origin. It is dated January 20, 1780. The fragment must therefore be subsequent to that date. Now in it transcendental imagination appears as a third faculty alongside sensibility and understanding, and a distinction is definitely drawn between its empirical and its transcendental employment. The former conditions the synthesis of apprehension; the latter conditions the synthetic unity of apperception. It further distinguishes between reproductive and productive imagination, and ascribes the former exclusively to the empirical imagination. In all these respects it stands in complete agreement with the teaching of the third stage of the deduction. The fact that this fragment is subsequent to January 1780 would seem to prove that even at that late date Kant was struggling with his deduction. But the most interesting of all Vaihinger's conclusions has still to be mentioned. He points out that at the time when this fragment was composed Kant had not yet developed the doctrine characteristic of the fourth stage, namely, of a threefold transcendental synthesis. Moreover, as he observes, the statement which it explicitly contains, that reproductive imagination is always empirical, is inconsistent with any such doctrine. The teaching of the fourth stage must consequently be ascribed to an even later date.

(4) The *Lose Blätter* (Heft II.), though almost exclusively devoted to moral and legal questions, contain in E 67 a relevant passage which Reicke regards as belonging to the 'eighties, but which Adickes and Vaihinger agree in dating "shortly before 1781." On Vaihinger's view it is a preliminary study for the passages of the fourth stage of the deduction. But such exact dating is not essential to Vaihinger's argument. It is undoubtedly quite late, and contains the following sentence:

"All representations, whatever their origin, are yet ultimately as representations modifications of inner sense, and their unity must be viewed from this point of view. A spontaneity of synthesis corresponds to their receptivity: either of apprehension as sensations or of reproduction as images (*Einbildungen*) or of recognition as concepts."

This is the doctrine from which the deduction of the first edition *starts*; it was, it would seem, *the last to be developed*. That we find no trace of it in the *Prolegomena*, and that it is not only eliminated from the second edition, but is expressly disavowed, would seem to indicate that it had been hastily adopted on the very eve of publication, and that upon reflection Kant had felt constrained definitively to discard it. The threefold synthesis can be verified on the empirical level, but there is no evidence that there exist corresponding transcendental activities.

IV. Connected Statement and Discussion of Kant's Subjective and Objective Deductions in the First Edition

Such are the varying and conflicting forms in which Kant has presented his deduction of the categories. We may now apply our results to obtain a connected statement of the essentials of his argument. The following exposition, which endeavours to emphasise its main broad features, to distinguish its various steps, and to disentangle its complex and conflicting tendencies, will, I trust, yield to the reader such steady orientation as is necessary in so bewildering a labyrinth. In the meantime I shall take account only of the deductions of the first edition, and from them shall strive to construct the ideal statement to which they severally approximate. Any single relatively consistent and complete deduction that is thus to serve as a standard exposition must, like the root-languages of philology, be typical or archetypal, representing the argument at which Kant aimed; it cannot be one of the alternative expositions which he himself gives. Such reconstruction of an argument which Kant has failed to express in a final and genuinely adequate form must, of course, lie open to all the dangers of arbitrary and personal interpretation. It is an extremely adventurous undertaking, and will have to be carefully guarded by constant reference to Kant's *ipsissima verba*. Proof of its historical validity will consist in its capacity to render intelligible Kant's own departures from it, and in its power of explaining the reasons of his so doing. Its expository value will be in proportion to the assistance which it may afford to the reader in deciphering the actual texts.

Our first task is to make clear the nature of the distinction which Kant draws between the "subjective"

and the “objective” deductions. This is a distinction of great importance, and raises issues of a fundamental character. In regard to it students of Kant take widely different views. For it brings to a definite issue many of the chief controversies regarding Critical teaching. Kant has made some very definite statements in regard to it; and one of the opposing schools of interpretation finds its chief and strongest arguments in the words which he employs. But for reasons which will appear in due course, adherence to the letter of the *Critique* would in this case involve the commentator in great difficulties. We have no option except to adopt the invidious position of maintaining that we may now, after the interval of a hundred years and the labours of so many devoted students, profess to understand Kant better than he understood himself. For such procedure we may indeed cite his own authority.

“Not infrequently, upon comparing the thoughts which an author has expressed in regard to his subject, whether in ordinary conversation or in writing, we find that we can understand him better than he understood himself. As he has not sufficiently determined his concept, he has sometimes spoken, or even thought, in opposition to his own intention.”

Let us, then, consider first the distinction between the two types of deduction in the form in which it is drawn by Kant. In the *Preface* to the first edition, Kant states that his transcendental deduction of the categories has two sides, and assigns to them the titles subjective and objective.

“This enquiry, which is somewhat deeply grounded, has two sides. The one refers to the objects of pure understanding, and is intended to expound and render intelligible the objective validity of its *a priori* concepts. It is therefore essential to my purposes. The other seeks to investigate the pure understanding itself, its possibility and the cognitive faculties upon which it rests. Although this latter exposition is of great importance for my chief purpose, it does not form an essential part of it. For the chief question is always simply this, — what and how much can the understanding and Reason know apart from all experience? not — how is the faculty of thought itself possible? The latter is as it were a search for the cause of a given effect; and therefore is of the nature of an hypothesis (though, as I shall show elsewhere, this is not really so); and I would appear to be taking the liberty simply of expressing an opinion, in which case the reader would be free to express a different opinion. For this reason I must forestall the reader’s criticism by pointing out that the objective deduction, with which I am here chiefly concerned, retains its full force even if my subjective deduction should fail to produce that complete conviction for which I hope....”

The subjective deduction seeks to determine the subjective conditions which are required to render knowledge possible, or to use less ambiguous terms the generative processes to whose agency human knowledge is due. It is consequently psychological in character. The objective deduction, on the other hand, is so named because it deals not with psychological processes but with questions of objective validity. It enquires how concepts which are *a priori*, and which as *a priori* must be taken to originate in pure reason, can yet be valid of objects. In other words, the objective deduction is logical, or, to use a post-Kantian term, epistemological in character.

It is indeed true, as Kant here insists, that the subjective deduction does not concern itself in any quite direct fashion with the Critical problem — how *a priori* ideas can relate to objects. “Although of great importance for my chief purpose, it does not form an essential part of it.” This, no doubt, is one reason why Kant omitted it when he revised the *Critique* for the second edition. None the less it is, as he here says, important; and what exactly that importance amounts to, and whether it is really true that it has such minor importance as to be rightly describable as unessential, is what we have to decide.

Though empirical psychology, in so far as it investigates the temporal development of our experience, is, as Kant very justly claims, entirely distinct in aim and method from the Critical enquiry, the same cannot be said of a psychology which, for convenience, and on the lines of Kant’s own employment of terms, may be named transcendental. For it will deal, not with the temporal development of the concrete and varied aspects of consciousness, but with the more fundamental question of the generative conditions

indispensably necessary to consciousness as such, *i.e.* to consciousness in each and every one of its possible embodiments. In the definition above given of the objective deduction, I have intentionally indicated Kant's unquestioning conviction that the *a priori* originates independently of the objects to which it is applied. This independent origin is only describable in mental or psychological terms. The *a priori* originates from within; it is due to the specific conditions upon which human thinking rests. Now this interpretation of the *a priori* renders the teaching contained in the subjective deduction much more essential than Kant is himself willing to recognise. The conclusions arrived at may be highly schematic in conception, and extremely conjectural in detail; they are none the less required to supplement the results of the more purely logical analysis. For though in the second edition the sections devoted to the subjective deduction are suppressed, their teaching, and the distinctions which they draw between the different mental processes, continue to be employed in the exposition of the objective deduction, and indeed are presupposed throughout the *Critique* as a whole. They are indispensably necessary in order to render really definite many of the contentions which the objective deduction itself contains. To eliminate the subjective deduction is not to cut away these presuppositions, but only to leave them in the obscure region of the undefined. They will still continue to influence our mode of formulating and of solving the Critical problem, but will do so as untested and vaguely outlined assumptions, acting as unconscious influences rather than as established principles. For these reasons the omission of the subjective deduction is to be deplored. The explicit statement of the implied psychological conditions is preferable to their employment without prior definition and analysis. The deduction of the second edition rests throughout upon the initial and indispensable assumption, that though connection or synthesis can never be given, it is yet the generative source of all consciousness of order and relation. Factors which are transcendental in the strict or logical meaning of the term rest upon processes that are transcendental in a psychological sense.

This last phrase, 'transcendental in a psychological sense,' calls for a word of justification. The synthetic processes generative of experience are not, of course, transcendental in the strict sense. For they are not *a priori* in the manner of the categories. None the less they are discoverable by the same transcendental method, namely, as being, like the categories, indispensably necessary to the possibility of experience. They differ from the categories in that they are not immanent in experience, constituent of it, and cannot therefore be known in their intrinsic nature. As they fall outside the field of consciousness, they can only be hypothetically postulated. None the less, formal categories and generative processes, definable elements and problematic postulates, alike agree in being conditions *sine qua non* of experience. And further, in terms of Kant's presupposed psychology, the latter are the source to which the former are due. There would thus seem to be sufficient justification for extending the term transcendental to cover both; and in so doing we are following the path which Kant himself willingly travelled. For such would seem to have been his unexpressed reasons for ascribing, as he does, the synthetic generative processes to what he himself names transcendental faculties.

This disposes of Kant's chief reason for refusing to recognise the subjective deduction as a genuine part of the Critical enquiry, namely, the contention upon which he lays such emphasis in the prefaces both of the first and of the second edition, that in transcendental philosophy nothing hypothetical, nothing in any degree dependent upon general reasoning from contingent fact, can have any place. That contention proves untenable even within the domain of his purely logical analyses. The very essence of his transcendental method consists in the establishment of *a priori* elements through proof of their connection with factual experience. Kant is here revealing how greatly his mind is still biased by the Leibnizian rationalism from which he is breaking away. His *a priori* cannot establish itself save in virtue of hypothetical reasoning. His transcendental method, rightly understood, does not differ in essential nature from the hypothetical method of the natural sciences; it does so only in the nature of its starting-point, and in the character of the analyses which that starting-point prescribes. And if hypothetical reasoning may be allowed in the

establishment of the logical *a priori*, there is no sufficient reason why it may not also be employed for the determination of dynamical factors. The sole question is as to whether the hypotheses conform to the logical requirements and so raise themselves to a different level from mere opinion and conjecture. As Kant himself says, though his conclusions in the subjective deduction may seem to be hypothetical in the illegitimate sense, they are not really so. From the experience in view of which they are postulated they receive at once the proof of their actuality and the material for their specification.

We may now return to the question of the nature of the two deductions. The complex character of their interrelations may be outlined as follows:

1. Though the subjective deduction is in its later stages coextensive with its objective counterpart, in its earlier stages it moves wholly on what may be called the empirical level. The data which it analyses and the conditions which it postulates are both alike empirical. The objective deduction, on the other hand, deals from start to finish with the *a priori*.

2. The later stages of the subjective deduction are based upon the results of the objective deduction. The existence and validity of *a priori* factors having been demonstrated by transcendental, *i.e.* logical, analysis, the subjective deduction can be extended from the lower to the higher level, and can proceed to establish for the *a priori* elements what in its earlier stages it has determined for empirical consciousness, namely, the nature of the generative processes which require to be postulated as their ground and origin. When the two deductions are properly distinguished the objective deduction has, therefore, to be placed midway between the initial and the final stages of the subjective deduction.

3. The two deductions concentrate upon different aspects of experience. In the subjective deduction experience is chiefly viewed as a *temporal process* in which the given falls apart into successive events, which, in and by themselves, are incapable of constituting a unified consciousness. The fundamental characteristic of human experience, from this point of view, is that it is *serial* in character. Though it is an apprehension of time, it is itself also a process in time. In the objective deduction, on the other hand, the time element is much less prominent. Awareness of *objects* is the subject-matter to which analysis is chiefly devoted. This difference very naturally follows from the character of the two deductions. The subjective enquiry is mainly interested in the conditions generative of experience, and finds its natural point of departure in the problem by what processes a unified experience is constructed out of a succession of distinct happenings. The objective deduction presents the logical problem of validity in its most striking form, in our awareness of objects; the objective is contrasted with the subjective as being that which is universally and necessarily the same for all observers. Ultimately each of the two deductions must yield an analysis of both types of consciousness — awareness of time and awareness of objects; *a priori* factors are involved in the former no less than in the latter, and both are conditioned by generative processes. Unfortunately the manner in which this is done in the *Critique* causes very serious misunderstanding. The problem of the psychological conditions generative of consciousness of objects is raised before the logical analysis of the objective deduction has established the data necessary for its profitable discussion. The corresponding defect in the objective deduction is of a directly opposite character, but is even more unfortunate in its effects. The results obtained from the analysis of our awareness of objects are not, within the limits of the objective deduction, applied in further analysis of our consciousness of time. That is first done, and even then by implication rather than by explicit argument, in the *Analytic of Principles*. This has the twofold evil consequence, that the relations holding between the two deductions are very greatly obscured, and that the reader is not properly prepared for the important use to which the results of the objective deduction are put in the *Analytic of Principles*. For it is there assumed — a quite legitimate inference from the objective deduction, but one whose legitimacy Kant has nowhere dwelt upon and explained — that to be conscious of time we must be conscious of it as existing in two distinct orders, subjective and objective. To be conscious of time we must be conscious of objects, and to be conscious of objects we must be able to distinguish between the order of our ideas and

the order of the changes (if any) in that which is known by their means.

Thus the two deductions, properly viewed in their full scope, play into one another's hands. The objective deduction is necessary to complete the analysis of time-consciousness given in the subjective deduction, and the extension of the analysis of object-consciousness to the explanation of time-consciousness is necessary in order to make quite definite and clear the full significance of the conclusions to which the objective enquiry has led.

One last point remains for consideration. Experience is a highly ambiguous term, and to fulfil the rôle assigned to it by Kant's transcendental method — that of establishing the reality of the conditions of its own possibility — its actuality must lie beyond the sphere of all possible controversy. It must be itself a datum, calling indeed for explanation, but not itself making claims that are in any degree subject to possible challenge. Now if we abstract from all those particularising factors which are irrelevant in this connection, we are left with only three forms of experience — experience of self, experience of objects, and experience of time. The two former are open to question. They may be illusory, as Hume has argued. And as their validity, or rather actuality, calls for establishment, they cannot fulfil the demands which the transcendental method exacts from the experience whose possibility is to yield proof of its discoverable conditions. Consciousness of time, on the other hand, is a fact whose actuality, however problematic in its conditions, and however mysterious in its intrinsic nature, cannot, even by the most metaphysical of subtleties, be in any manner or degree challenged. It is an unquestioned possession of the human mind. Whether time itself is real we are not metaphysically certain, but that, whatever be its reality or unreality, we are conscious of it in the form of change, is beyond all manner of doubt. Consciousness of time is the *factual* experience, as conditions of whose possibility the *a priori* factors are transcendentally proved. In so far as they can be shown to be its indispensable conditions, its mere existence proves their reality. And such in effect is the ultimate character of Kant's proof of the objective validity of the categories. They are proved in that it is shown that only in and through them is consciousness of time possible.

The argument gains immeasurably in clearness when this is recognised; and the deduction of the first edition of the *Critique*, in spite of its contorted character, remains in my view superior to that of the second edition owing to this more explicit recognition of the temporal aspect of consciousness and to employment of it as the initial starting-point. Analysis at once reveals that though consciousness of time is undeniably actual, it is conditioned in complex ways, and that among the conditions indispensably necessary to its possibility are both consciousness of self and consciousness of an objective order of existence. Starting from the undeniable we are thus brought to the problematic; but owing to the factual character of the starting-point we can substantiate what would otherwise remain open to question.

As this method of formulating Kant's argument gives greater prominence to the temporal factor than Kant himself does in his statement of the deductions, the reader may very rightly demand further evidence that I am not, by this procedure, setting the deductions in a false or arbitrary perspective. Any statement of Kant's position in other than his own *ipsissima verba* is necessarily, in large part, a matter of interpretation, and proof of its correctness must ultimately consist in the success with which it can be applied in unravelling the manifold strands that compose his tortuous and many-sided argument; but the following special considerations may be cited in advance. Those parts of the *Critique,* such as the chief paragraphs of the subjective deduction and the chapter on *Schematism,* which are demonstrably late in date of writing, agree in assigning greater prominence to the temporal aspect of experience. This is also true of those numerous passages added in the second edition which deal with inner sense. All of these show an increasing appreciation of the central rôle which time must play in the Critical enquiries. Secondly, proof of the validity of *specific* categories is given, as we shall find, not in the objective deduction of the *Analytic of Concepts,* but only in the *Analytic of Principles*. What Kant gives in the former is only the quite general demonstration that forms of unity, such as are involved in all judgment, are demanded for the possibility of experience. Now when proof of the specific categories does come, in

the *Analytic of Principles*, it is manifestly based on the analysis of time-experience. In the three *Analogies*, for example, Kant's demonstration of the objective validity of the categories of relation consists in the proof that they are necessary conditions of the possibility of our time-consciousness. That is to say, the transcendental method of proof, when developed in full detail, in reference to some specific category, agrees with the formulation which I have given of the subjective and objective deductions. In the third place, Kant started from a spiritualist standpoint, akin to that of Leibniz, and only very gradually broke away from the many illegitimate assumptions which it involves. But this original starting-point reveals its persisting influence in the excessive emphasis which Kant continued to lay upon the unity of apperception. He frequently speaks as if it were an ultimate self-justifying principle, by reference to which the validity of all presupposed conditions can be established. But that, as I have already argued, is a legitimate method of procedure only if it has previously been established that self-consciousness is involved in all consciousness, that is, involved even in consciousness of sequence and duration. And as just stated, the deductions of specific categories, given in the *Analytic of Principles*, fulfil these requirements of complete proof. They start from the time-consciousness, not from apperception.

I shall now summarise these introductory discussions in a brief tabulated outline of the main steps in the argument of the two deductions, and shall add a concluding note upon their interconnection.

Subjective Deduction. — 1. Consciousness of time is an experience whose actuality cannot be questioned; by its actuality it will therefore establish the reality of everything that can be proved to be its indispensable condition.

2. Among the conditions indispensably necessary to all consciousness of time are synthetic processes whereby the contents of consciousness, occurring in successive moments, are combined and unified. These processes are processes of apprehension, reproduction, and recognition.

3. Recognition, in turn, is conditioned by self-consciousness.

4. As no consciousness is possible without self-consciousness, the synthetic processes must have completed themselves before such self-consciousness is possible, and consequently are not verifiable by introspection but only by hypothetical construction.

[1, 2, 3, and 4 are steps which can be stated independently of the argument of the objective deduction.]

5. Self-consciousness presupposes consciousness of objects, and consciousness of objects presupposes the synthetic activities of productive imagination whereby the matter of sense is organised in accordance with the categories. These productive activities also are verifiable only by conjectural inference, and only upon their completion can consciousness of any kind make its appearance.

6. Consciousness of self and consciousness of objects thus alike rest upon a complexity of non-phenomenal conditions. For anything that critical analysis can prove to the contrary, consciousness and personality may not be ultimates. They may be resultants due to realities fundamentally different from themselves.

[5 is a conclusion obtained only by means of the argument of the objective deduction. 6 is a further conclusion, first explicitly drawn by Kant in the *Dialectic*.]

Objective Deduction. — 1. The starting-point coincides with that of the subjective deduction. Consciousness of time is an experience by whose actuality we can establish the reality of its indispensable conditions.

2. Among the conditions necessary to all consciousness of time is self-consciousness.

3. Self-consciousness, in turn, is itself conditioned by consciousness of objects.

4. Consciousness of objects is possible only if the categories have validity within the sphere of sense-experience.

5. Conclusion. — The empirical validity of the categories, and consequently the empirical validity of our consciousness alike of the self and of objects, must be granted as a *conditio sine qua non* of our consciousness of time. They are the indispensable conditions of that fundamental experience.

As above stated, the preliminary stages of the subjective deduction prepare the way for the argument of

the objective deduction, while the results obtained by the latter render possible the concluding steps of the former. That is to say, the objective deduction has to be intercalated midway between the opening and the concluding stages of the subjective deduction. It may also be observed that whereas the objective deduction embodies the main positive teaching of the *Analytic*, in that it establishes the possibility of natural science and of a metaphysics of experience, the subjective deduction is more directly concerned with the subject-matter of the *Dialectic*, reinforcing, as it does, the more negative consequences which follow from the teaching of the objective deduction — the impossibility of transcendent speculation. It stands in peculiarly close connection with the teaching of the section on the *Paralogisms*. We may now proceed to a detailed statement of the argument of the two deductions.

THE SUBJECTIVE DEDUCTION IN ITS INITIAL EMPIRICAL STAGES

In the opening of the subjective deduction Kant is careful to give due prominence to the temporal aspect of our human experience.

"...all the contents of our knowledge are ultimately subject to the formal condition of inner sense, that is, to time, as that wherein they must all be ordered, connected, and brought into relation to one another. This is a general remark which the reader must bear in mind as being a fundamental presupposition of my entire argument."

Consciousness of time is thus the starting-point of the deduction. Analysis reveals it as highly complex; and the purpose of the deduction is to discover, and, as far as may be possible, to define its various conditions. The argument can best be expounded by reference to a single concrete example — say, our experience of a series of contents, *a*, *b*, *c*, *d*, *e*, *f*, as in succession to one another and as together making up the total six. In order that such an experience may be possible the successive members of the series must be held together simultaneously before the mind. Obviously, if the earlier members dropped out of consciousness before the mind reached *f*, *f* could not be apprehended as having followed upon them. There must be a synthesis of apprehension of the successive items.

Such a synthesis of apprehension is, however, only possible through reproduction of the earlier experiences. If when the mind has passed from *a* to *f*, *f* is apprehended as having followed upon *a*, *b*, *c*, *d*, *e*, such consciousness is only possible in so far as these earlier contents are reproduced in image. Synthesis of apprehension is conditioned by synthesis of reproduction in imagination.

"But if the preceding representations (the first parts of [a] line, the earlier moments of time or the units represented in sequent order) were always to drop out of my thought, and were not reproduced when I advance to those that follow, no complete representation, and none of all the aforementioned thoughts, not even the purest and first basal representations of space and time, could ever arise."

In order, however, that the reproduced images may fulfil their function, they must be recognised as standing for or representing contents which the self has just experienced.

"Without the consciousness that what we are thinking is the same as what we thought a moment before, all reproduction in the series of representations would be in vain."

Each reproduced image would in its present state be a new experience, and would not help in the least towards gaining consciousness of order or number in the succession of our experiences. Recognition is, therefore, a third form of synthesis, indispensably necessary to consciousness of time. But further, the recognition is recognition of a succession as forming a unity or whole, and that unity is always conceptual.

"The word concept (*Begriff*) might of itself have suggested this remark. For it is this unitary consciousness which unites into a single representation a manifold that has been successively intuited and then subsequently reproduced." "If in counting I forgot that the units ... have been added to one another in

succession, I should never recognise what the sum-total is that is being produced through the successive addition of unit to unit; and so would remain ignorant of the number. For the concept of this number is nothing but the consciousness of this unity of synthesis."

The synthesis of recognition is thus a synthesis which takes place in and through empirical concepts. In the instance which we have chosen, the empirical concept is that of the number six.

The analysis, however, is not yet complete. Just as reproduction conditions apprehension and both rest on recognition, so in turn recognition presupposes a still further condition, namely, self-consciousness. For it is obvious, once the fact is pointed out, that the recognition of reproduced images as standing for past experiences can only be possible in so far as there is an abiding self which is conscious of its identity throughout the succession. Such an act of recognition is, indeed, merely one particular form or concrete instance of self-consciousness. The unity of the empirical concept in and through which recognition takes place finds its indispensable correlate in the unity of an empirical self. Thus an analysis of our consciousness, even though conducted wholly on the empirical level, that is, without the least reference to the *a priori*, leads by simple and cogent argument to the conclusion that it is conditioned by complex synthetic processes, and that these syntheses in turn presuppose a unity which finds twofold expression for itself, objectively through a concept and subjectively in self-consciousness.

So far I have stated the argument solely in reference to serial consciousness. Kant renders his argument needlessly complex and diminishes its force by at once extending it so as to cover the connected problem, how we become aware of objects. This occurs in the section on the synthesis of reproduction. An analysis of our consciousness of objects, as distinct from consciousness of the immediately successive, forces us to postulate further empirical conditions. Since the reproductive imagination, to whose agency the apprehension of complex unitary existences is psychologically due, acts through the machinery of association, it presupposes constancy in the apprehended manifold.

"If cinnabar were sometimes red, sometimes black, sometimes light, sometimes heavy, if a man changed sometimes into this and sometimes into that animal form, if the country on the longest day were sometimes covered with fruits, sometimes with ice and snow, my empirical imagination would never even have occasion when representing red colour to bring to mind heavy cinnabar...."

This passage may be compared with the one which occurs in the section on the synthesis of recognition. Our representations, in order to constitute knowledge, must have the unity of some concept; the manifold cannot be apprehended save in so far as this is possible.

"All knowledge demands a concept, though that concept may be quite imperfect or obscure. But a concept is always, as regards its form, something general which serves as a rule. The concept of body, for instance, as the unity of the manifold which is thought through it, serves as a rule to our knowledge of outer appearances.... It necessitates in the perception of something outside us the representation of extension, and therewith the representations of impenetrability, form, etc."

So far the deduction still moves on the empirical level. When Kant, however, proceeds to insist that this empirical postulate itself rests upon a transcendental condition, the argument is thrown into complete confusion, and the reader is bewildered by the sudden anticipation of one of the most difficult and subtle conclusions of the objective deduction. The same confusion is also caused throughout these sections as a whole by Kant's description of the various syntheses as being transcendental. They cannot properly be so described. The concepts referred to as unifying the syntheses, and the self-consciousness which is proved to condition the syntheses, are all empirical. They present themselves in concrete form, and presuppose characteristics due to the special contingent nature of the given manifold; as Kant states in so many words in the second edition.

"Whether I can become *empirically* conscious of the manifold as simultaneous or as successive depends on circumstances or empirical conditions. The empirical unity of consciousness, through association of representations, therefore itself relates to an appearance, and is wholly contingent."

The argument in these preliminary stages of the subjective deduction, in so far as it is employed to yield proof that all consciousness involves the unity of concepts and the unity of self-consciousness, is independent of any reference to the categories, and consequently to transcendental conditions. In accordance with the plan of exposition above stated, we may now pass to the objective deduction.

OBJECTIVE DEDUCTION AS GIVEN IN THE FIRST EDITION

The transition from the preliminary stages of the subjective deduction to the objective deduction may be made by further analysis either of the objective unity of empirical concepts or of the subjective unity of empirical self-consciousness. It is the former line which the argument of the first edition follows. Kant is asking what is meant by an object corresponding to our representations, and answers by his objective deduction. He substitutes the empirical for the transcendental object, and in so doing propounds one of the central and most revolutionary tenets of the Critical philosophy. Existence takes a threefold, not a merely dual form. Besides representations and things in themselves, there exist the objects of our representations — the extended world of ordinary experience and of science. Such a threefold distinction is prefigured in the Leibnizian metaphysics, and is more or less native to every philosophy that is genuinely speculative. Kant himself claims Plato as his philosophical progenitor. The originality is not in the bare thesis, but in the fruitful, tenacious, and consistent manner in which it is developed through detailed analysis of our actual experience.

In its first stages the argument largely coincides with the argument of the paragraphs which deal with the transcendental object. When we examine the objective, we find that the primary characteristic distinguishing it from the subjective is that it lays a compulsion upon our minds, constraining us to think about it in a certain way. By an object is meant something which will not allow us to think at haphazard. Cinnabar is an object which constrains us to think it as heavy and red. An object is thus the external source of a necessity to which our thinking has to conform. The two arguments first begin to diverge when Kant sets himself to demonstrate that our consciousness of this external necessity is made possible by categories which originate from within.

For this conclusion Kant prepares the way by an analysis of the second main characteristic constitutive of an object, viz. its unity. This unity is of a twofold nature, involving either the category of substance and attribute or the category of cause and effect. The two categories are ultimately inseparable, but lead us to conceive the object in two distinct modes. When we interpret an object through the *a priori* concept of substance and attribute, we assert that all the contents of our perceptions of it are capable of being regarded as qualities of one and the same identical substance. No one of its qualities can be incongruent with any other, and all of them together, in their unity, must be expressive of its substantial nature.

The causal interpretation of the object is, however, the more important, and is that which is chiefly emphasised by Kant. It is, indeed, simply a further and more adequate mode of expressing the substantial unity of the object. All the qualities must be causally bound up with one another in such a way that the nature of each is determined by the nature of all the others, and that if any one quality be changed all the others must undergo corresponding alterations. Viewed in this manner, in terms of the category of causality, an object signifies a necessitated combination of interconnected qualities or effects. But since no such form of *necessitation* can be revealed in the manifold of sense, our *consciousness* of compulsion cannot originate from without, and must be due to those *a priori* forms which, though having their source within, control and direct our interpretation of the given. Though the objective compulsion is not itself due to the mind, our *consciousness* of it has this mental *a priori* source. The concept of an object consists in the thought of a manifold so determined in its specific order and groupings as to be interpretable in terms of the categories of substance and causality.

But the problem of the deduction proper is not yet raised. On the one hand, Kant has defined what the

concept of the objective must be taken as involving, and on the other, has pointed out that since the given as given is an unconnected manifold, any categories through which it may be interpreted must be of independent origin; but it still remains to be proved that the above is a valid as well as a possible mode of construing the given appearances. The categories, as *a priori* concepts, originate from within. By what right may we assert that they not only relate to an object, but even constitute the very concept of it? Are appearances legitimately interpretable in any such manner? It was, we may believe, in the process of answering this question that Kant came to realise that the objects of our representations must no longer be regarded as things in themselves. For, as he finds, a solution is possible only on the further assumption that the mind is legislating merely for the world of sense-experience, and is making no assertion in regard to the absolutely and independently real. Kant's method of proof is the transcendental, *i.e.* he seeks to demonstrate that this interpretation of the given is indispensably necessary as being a *sine qua non* of its possible apprehension. This is achieved by means of the conclusion already established through the preliminary steps of the subjective deduction, namely, that all consciousness involves self-consciousness. Kant's proof of the objective validity of the categories consists in showing that only by means of the interpretation of appearances as *empirically* objective is self-consciousness possible at all.

The self-consciousness of the subjective deduction, in the preliminary form above stated, is, however, itself empirical. Kant, developing on more strictly Critical lines the argument which had accompanied his earlier doctrine of the transcendental object, now proceeds to maintain in what is at once the most fruitful and the most misleading of his tenets, that the ultimate ground of the possibility of consciousness and therefore also of empirical self-consciousness is the transcendental unity of apperception. Such apperception, to use Kant's ambiguous phraseology, precedes experience as its *a priori* condition. The interpretation of given appearances through *a priori* categories is a necessity of consciousness because it is a condition of self-consciousness; and it is a condition of self-consciousness because it alone will account for the transcendental apperception upon which all empirical self-consciousness ultimately depends.

One chief reason why Kant's deduction is found so baffling and illusive is that it rests upon an interpretation of the unity of apperception which is very definitely drawn, but to which Kant himself gives only the briefest and most condensed expression. I shall therefore take the liberty of restating it in more explicit terms. The true or transcendental self has no content of its own through which it can gain knowledge of itself. It is mere identity, I am I. In other words, self-consciousness is a mere *form* through which contents that never themselves constitute the self are yet apprehended as being objects to the self. Thus though the self in being conscious of time or duration must be conscious of itself as *identical* throughout the succession of its experiences, that identity can never be discovered in those experiences; it can only be thought as a condition of them. The continuity of memory, for instance, is not a possible substitute for transcendental apperception. As the subjective deduction demonstrates, self-consciousness conditions memory, and cannot therefore be reduced to or be generated by it. When, however, such considerations are allowed their due weight, the necessity of postulating a transcendental unity becomes only the more evident. Though it can never itself be found among appearances, it is an interpretation which we are none the less compelled to give to appearances.

To summarise before proceeding. We have obtained two important conclusions: first, that all consciousness involves self-consciousness; and secondly, that self-consciousness is a mere form, in terms of which contents that do not constitute the self are apprehended as existing for the self. The first leads up to the second, and the second is equivalent to the assertion that there can be no such thing as a pure self-consciousness, *i.e.* a consciousness in which the self is aware of itself and of nothing but itself. Self-consciousness, to be possible at all, must at the same time be a consciousness of something that is not-self. Only one further step is now required for the completion of the deduction, namely, proof that this not-self, consciousness of which is necessary to the possibility of self-consciousness, must consist in

empirical objects apprehended in terms of the categories. For proof Kant again appeals to the indispensableness of apperception. As no intuitions can enter consciousness which are not capable of being related to the self, they must be so related to one another that, notwithstanding their variety and diversity, the self can still be conscious of itself as identical throughout them all. In other words, no intuition can be related to the self that is incapable of being combined together with all the other intuitions to form a unitary consciousness. I may here quote from the text of the second edition:

"...only in so far as I can grasp the manifold of the representations in one consciousness, do I call them one and all mine. For otherwise I should have as many-coloured and diverse a self as I have representations of which I am conscious to myself."

Or as it is stated in the first edition:

"We are *a priori* aware of the complete identity of the self in respect of all representations which belong to our knowledge ... as a necessary condition of the possibility of all representations."

These are the considerations which lead Kant to entitle the unity of apperception *transcendental*. He so names it for the reason that, though it is not itself *a priori* in the manner of the categories, we are yet enabled by its means to demonstrate that the unity which is necessary for possible experience can be securely counted upon in the manifold of all possible representations, and because (as he believed) it also enables us to prove that the forms of such unity are the categories of the understanding.

To the argument supporting this last conclusion Kant does not give the attention which its importance would seem to deserve. He points out that as the given is an unconnected manifold, its unity can be obtained only by synthesis, and that such synthesis must conform to the conditions prescribed by the unity of apperception. That these conditions coincide with the categories he does not, however, attempt to prove. He apparently believes that this has been already established in the metaphysical deduction. The forms of unity demanded by apperception, he feels justified in assuming, are the categories. They may be regarded as expressing the minimum of unity necessary to the possibility of self-consciousness. If sensations cannot be interpreted as the diverse attributes of unitary substances, if events cannot be viewed as arising out of one another, if the entire world in space cannot be conceived as a system of existences reciprocally interdependent, all unity must vanish from experience, and apperception will be utterly impossible.

The successive steps of the total argument of the deduction, as given in the first edition, are therefore as follows: Consciousness of time involves empirical self-consciousness; empirical self-consciousness is conditioned by a transcendental self-consciousness; and such transcendental self-consciousness is itself, in turn, conditioned by consciousness of objects. The argument thus completed becomes the proof of mutual interdependence. Self-consciousness and consciousness of objects, as polar opposites, mutually condition one another. Only through consciousness of both simultaneously can consciousness of either be attained. Only in and through reference to an object can an idea be related to a self, and so be accompanied by that self-consciousness which conditions recognition, and through recognition all the varying forms in which our consciousness can occur. From the point of view, however, of a Critical enquiry apperception is the more important of the two forms of consciousness. For though each is the *causa existendi* of the other, self-consciousness has the unique distinction of being the *causa cognoscendi* of the objective and *a priori* validity of the forms of understanding.

"The synthetic proposition, that all the variety of empirical consciousness must be combined in a single self-consciousness, is the absolutely first and synthetic principle of our thought in general."

We may at this point consider Kant's doctrine of "objective affinity." It excellently enforces the main thesis which he is professing to establish, namely, that the conditions of *unitary* consciousness are the conditions of *all* consciousness. The language, however, in which the doctrine is expounded is extremely obscure and difficult; and before commenting upon Kant's own methods of statement, it seems advisable to paraphrase the argument in a somewhat free manner, and also to defer consideration of the

transcendental psychology which Kant has employed in its exposition. Association can subsist only between ideas, both of which have occurred within the same conscious field. Now the fundamental characteristic of consciousness, the very condition of its existing at all, is its unity; and until this has been recognised, there can be no understanding of the associative connection which arises under the conditions which consciousness supplies. To attempt to explain the unity of consciousness through the mechanism of association is to explain an agency in terms of certain of its own effects. It is to explain the fundamental in terms of the derivative, the conditions in terms of what they have themselves made possible. Kant's argument is therefore as follows. Ideas do not become associated merely by co-existing. They must occur together in a unitary consciousness; and among the conditions necessary to the possibility of association are therefore the conditions of the possibility of experience. Association is transcendentally grounded. So far from accounting for the unity of consciousness, it presupposes the latter as determining the conditions under which alone it can come into play.

"...how, I ask, is association itself possible?... On my principles the thorough-going affinity of appearances is easily explicable. All possible appearances belong as representations to the totality of a possible self-consciousness. But as this self-consciousness is a transcendental representation, numerical identity is inseparable from it and is *a priori* certain. For nothing can come to our knowledge save in terms of this original apperception. Now, since this identity must necessarily enter into the synthesis of all the manifold of appearances, so far as the synthesis is to yield empirical knowledge, the appearances are subject to *a priori* conditions, with which the synthesis of their apprehension must be in complete accordance.... Thus all appearances stand in a thorough-going connection according to necessary laws, and therefore in a transcendental affinity of which the empirical is a mere consequence."

In other words, representations must exist in consciousness before they can become associated; and they can exist in consciousness only if they are consciously apprehended. But in order to be consciously apprehended, they must conform to the transcendental conditions upon which all consciousness rests; and in being thus apprehended they are set in thoroughgoing unity to one another and to the self. They are apprehended as belonging to an objective order or unity which is the correlate of the unity of self-consciousness. This is what Kant entitles their objective affinity; it is what conditions and makes possible their associative or empirical connection.

This main point is very definitely stated in A 101.

"If we can show that even our purest *a priori* intuitions yield no knowledge, save in so far as they contain such a connection of the manifold as will make possible a thoroughgoing synthesis of reproduction, this synthesis of the imagination" [which acts through the machinery of association] "must be grounded, prior to all experience, on *a priori* principles, and since experience necessarily presupposes that appearances can be reproduced, we shall have to assume a pure transcendental synthesis of the imagination" [*i.e.* such synthesis as is involved in the unity of consciousness] "as conditioning even the possibility of all experience."

In A 121-2 Kant expresses his position in a more ambiguous manner. He may seem to the reader merely to be arguing that a certain minimum of regularity is necessary in order that representations may be associated, and experience may be possible. But the general tenor of the passage as a whole, and especially its concluding sentences, enforce the stronger, more consistent, thesis.

"[The] subjective and empirical ground of reproduction according to rules is named the association of representations. If this unity of association did not also have an objective ground, which makes it impossible that appearances should be apprehended by the imagination except under the condition of a possible synthetic unity of this apprehension, it would be entirely accidental that appearances should fit into a connected whole of human knowledge. For even though we had the power of associating perceptions, it would remain entirely undetermined and accidental whether they would themselves be associable; and should they not be associable, there might exist a multitude of perceptions, and indeed an

entire sensibility, in which much empirical consciousness would arise in my mind, but in a state of separation, and without belonging to one consciousness of myself. That, however, is impossible. For only in so far as I ascribe all perceptions to one consciousness (original apperception), can I say in all perceptions that I am conscious of them. There must therefore be an objective ground (that is, one that can be recognised *a priori*, antecedently to all empirical laws of the imagination) upon which may rest the possibility, nay the necessity, of a law that extends to all appearances....”

Kant is not merely asserting that the associableness of ideas, and the regularity of connection which that implies, must be postulated as a condition of experience. That would be a mere begging of the issue; the correctness of the postulate would not be independently proved. Kant is really maintaining the much more important thesis, that the unity of experience, *i.e.* of consciousness, is what makes association possible at all. And since consciousness must be unitary in order to exist, there cannot be any empirical consciousness in which the conditions of association, and therefore of reproduction, are not to be found.

A further misunderstanding is apt to be caused by Kant’s statement that associative affinity rests upon objective affinity. This seems to imply, in the same manner as the passage which we have just considered, that instead of proving that appearances are subject to law and order, he is merely postulating that an abiding ground of such regularity must exist in the noumenal conditions of the sense manifold. But he himself again supplies the needful correction.

“This [objective ground of all association of appearances] can nowhere be found, except in the principle of the unity of apperception in respect of all forms of knowledge which can belong to me. In accordance with this principle all appearances must so enter the mind, or be so apprehended, that they fit together to constitute the unity of apperception. This would be impossible without synthetic unity in their connection, and that unity is therefore also objectively necessary. The objective unity of all empirical consciousness in one consciousness, that of original apperception, is therefore the necessary condition of all (even of all *possible*) perception; and the affinity of all appearances, near or remote, is a necessary consequence of a synthesis in imagination which is grounded *a priori* on rules.”

The fundamental characteristic of consciousness is the unified form in which alone it can exist; only when this unity is recognised as indispensably necessary, and therefore as invariably present whenever consciousness exists at all, can the inter-relations of the contents of consciousness be properly defined.

If this main contention of the Critical teaching be accepted, Hume’s associationist standpoint is no longer tenable. Association cannot be taken to be an ultimate and inexplicable property of our mental states. Nor is it a property which can be regarded as belonging to presentations viewed as so many independent existences. It is conditioned by the unity of consciousness, and therefore rests upon the “transcendental” conditions which Critical analysis reveals. Since the unity of consciousness conditions association, it cannot be explained as the outcome and product of the mechanism of association.

In restating the objective deduction in the second edition, Kant has omitted all reference to this doctrine of objective affinity. His reasons for this omission were probably twofold. In the first place, it has been expounded in terms of a transcendental psychology, which, as we shall find, is conjectural in character. And secondly, the phrase “objective affinity” is, as I have already pointed out, decidedly misleading. It seems to imply that Kant is postulating, without independent proof, that noumenal conditions must be such as to supply an orderly manifold of sense data. But though the doctrine of objective affinity is eliminated, its place is to some extent taken by the proof that all apprehension is an act of judgment and therefore involves factors which cannot be reduced to, or explained in terms of, association.

There are a number of points in the deduction of the first edition which call for further explanatory and critical comment. The first of these concerns the somewhat misleading character of the term *a priori* as applied to the categories. It carries with it rationalistic associations to which the Critical standpoint, properly understood, yields no support. The categories are for Kant of merely *de facto* nature. They have no intrinsic validity. They are proved only as being the indispensable conditions of what is before the

mind as brute fact, namely, conscious experience. By the *a priori* is meant merely those *relational* factors which are required to supplement the given manifold in order to constitute our actual consciousness. And, as Kant is careful to point out, the experience, as conditions of which their validity is thus established, is of a highly specific character, resting upon synthesis of a manifold given in space and time. That is to say, their indispensableness is proved only for a consciousness which in these fundamental respects is constituted like our own. And secondly, the validity of the *a priori* categories, even in our human thinking, is established only in reference to that empirical world which is constructed out of the given manifold in terms of the intuitive forms, space and time. Their validity is a merely phenomenal validity. They are valid of appearances, but not of things in themselves. The *a priori* is thus doubly *de facto*: first as a condition of brute fact, namely, the actuality of our human consciousness; and secondly, as conditioning a consciousness whose knowledge is limited to appearances. It is a relative, not an absolute *a priori*. Acceptance of it does not, therefore, commit us to rationalism in the ordinary meaning of that term. Its credentials are conferred upon it by what is mere fact; it does not represent an order superior to the actual and legislative for it. In other words, it is Critical, not Leibnizian in character. No transcendent metaphysics can be based upon it. In formulating this doctrine of the *a priori* as yielding objective insight and yet as limited in the sphere of its application, the *Critique of Pure Reason* marks an epoch in the history of scepticism, no less than in the development of Idealist teaching.

There is one important link in the deduction, as above given, which is hardly calculated to support the conclusions that depend upon it. Kant, as we have already noted, asserts that the categories express the minimum of unity necessary for the possibility of apperception. A contention so essential to the argument calls for the most careful scrutiny and a meticulous exactitude of proof. As a matter of fact, such proof is not to be found in any part of the deductions, whether of the first or of the second editions. It is attempted only in the later sections on the *Principles of Understanding*, and even there it is developed, in any really satisfactory fashion, only in regard to the categories of causality and reciprocity. This proof, however, as there given, is an argument which in originality, subtlety and force goes far to atone for all shortcomings. It completes the objective deduction by developing in masterly fashion (in spite of the diffuse and ill-arranged character of the text) the central contention for which the deduction stands. But in the transcendental deduction itself, we find only such an argument — if it may be called an argument — as follows from the identification of apperception with understanding.

“The unity of apperception, in relation to the synthesis of imagination, is the understanding.... In understanding there are pure *a priori* forms of knowledge which contain the necessary unity of pure synthesis of imagination in respect of all possible appearances. But these are the categories, *i.e.* pure concepts of understanding.”

The point is again merely assumed in A 125-6. So also in A 126:

“Although through experience we learn many laws, these are only special determinations of still higher laws, of which the highest, under which all others stand, originate *a priori* in the understanding itself....”

Again in A 129 it is argued that as we prescribe *a priori* rules to which all experience must conform, those rules cannot be derived from experience, but must precede and condition it, and can do so only as originating from ourselves (*aus uns selbst*).

“[They] precede all knowledge of the object as [their] intellectual form, and constitute a formal *a priori* knowledge of all objects in so far as they are thought (categories).”

But this is only to repeat that such forms of unity as are necessary to self-consciousness must be realised in all synthesis. It is no sufficient proof that those forms of relation coincide with the categories. As we shall find in considering the deduction of the second edition, Kant to some extent came to recognise the existence of this gap in his argument and sought to supply the missing steps. But his method of so doing still ultimately consists in an appeal to the results of the metaphysical deduction, and therefore rests upon his untenable belief in the adequacy of formal logic. It fails to obviate the objection in any

satisfactory manner.

As regards the negative aspect of the conclusion reached — that the validity of the categories is established only for appearances — Kant maintains that this is a necessary corollary of their validity being *a priori*. That things in themselves must conform to the conditions demanded by the nature of our self-consciousness is altogether impossible of proof. Even granting, what is indeed quite possible, that things in themselves embody the pure forms of understanding, we still cannot have any ground for maintaining that they must do so of necessity and will be found to do so universally. For even if we could directly experience things in themselves, and apprehend them as conforming to the categories, such conformity would still be known only as contingent. But when it is recognised that nature consists for us of nothing but appearances, existing only in the mode in which they are experienced, and therefore as necessarily conforming to the conditions under which experience is alone possible, the paradoxical aspect of the apriority ascribed to the categories at once vanishes. Proof of their *a priori* validity presupposes the phenomenal character of the objects to which they apply. They can be proved to be universal and necessarily valid of objects only in so far as it can be shown that they have antecedently conditioned and constituted them. The sole sufficient reason for asserting them to be universally valid throughout experience is that they are indispensably necessary for rendering it possible. The transcendental method of proof, *i.e.* proof by reference to the very possibility of experience, is for this reason, as Kant so justly emphasises, the sole type of argument capable of fulfilling the demands which have to be met. It presupposes, and itself enforces, the truth of the fundamental Critical distinction between appearances and things in themselves.

Kant entitles the unity of apperception *original* (*ursprünglich*); and we may now consider how far and in what sense this title is applicable. *From the point of view of method* there is the same justification for employing the term ‘original’ as for entitling the unity of apperception transcendental. Self-consciousness is more fundamental or original than consciousness of objects, in so far as it is only from the subjective standpoint which it represents that the objective deduction can demonstrate the necessity of synthesis, and the empirical validity of the pure forms of understanding. It is as a condition of the possibility of self-consciousness that the objective employment of the categories is proved to be legitimate. *In the development of the deduction* self-consciousness is, therefore, more original than consciousness of objects. Kant’s employment of the term is, however, extremely misleading. For it would seem to imply that the self has been proved to be original or ultimate in an ontological sense, as if it preceded experience, and through its antecedent reality rendered objective experience possible of achievement. Such a view is undoubtedly reinforced by Kant’s transformation of apperception into a faculty — *das Radicalvermögen aller unsrer Erkenntniss* — and his consequent identification of it with the understanding. It then seems as if he were maintaining that the transcendental ego is ultimate and is independent of all conditions, and that to its synthetic activities the various forms of objective consciousness are due.

This unfortunate phraseology is directly traceable to the spiritualistic or Leibnizian character of Kant’s earlier standpoint. In the *Dissertation* the self is viewed as an ultimate and unconditioned existence, antecedent to experience and creatively generative of it. We have already noted that a somewhat similar view is presented in the *Critique* in those paragraphs which Vaihinger identifies as embodying the earliest stage in the development of the argument of the deduction. The self is there described as coming to consciousness of its permanence through reflection upon the constancy of its own synthetic activities. Our consciousness of a transcendental object, and even the possibility of the empirical concepts through which such consciousness is, in these paragraphs, supposed to be mediated, are traced to this same source. To the last this initial excess of emphasis upon the unity of apperception remained characteristic of Kant’s Critical teaching; and though in the later statements of his theory, its powers and prerogatives were very greatly diminished, it still continued to play a somewhat exaggerated rôle. The early spiritualistic views

were embodied in a terminology which he continued to employ; and unless the altered meaning of his terms is recognised and allowed for, misunderstanding is bound to result. The terms, having been forged under the influence of the older views, are but ill adapted to the newer teaching which they are employed to formulate.

There was also a second influence at work. When Kant was constrained in the light of his new and unexpected results to recognise his older views as lacking in theoretical justification, he still held to them in his own personal thinking. For there is ample evidence that they continued to represent his *Privatmeinungen*.

Only, therefore, when these misleading influences, verbal, expository, and personal, are discounted, do the results of the deduction appear in their true proportions. Kant's Critical philosophy does not profess to prove that it is self-consciousness, or apperception, or a transcendental ego, or anything describable in kindred terms, which ultimately renders experience possible. The most that we can legitimately postulate, as noumenally conditioning experience, are "syntheses" (themselves, in their generative character, not definable) in accordance with the categories. For only upon the completion of such syntheses do consciousness of self and consciousness of objects come to exist. Consciousness of objects does, indeed, according to the argument of the deduction, involve consciousness of self; self-consciousness is the form of all consciousness. But, by the same argument, it is equally true that only in and through consciousness of objects is any self-consciousness possible at all. Consciousness of self and consciousness of objects *mutually* condition one another. Only through consciousness of both simultaneously can consciousness of either be attained. Self-consciousness is not demonstrably in itself any more ultimate or original than is consciousness of objects. Both alike are forms of experience which are conditioned in complex ways. Upon the question as to whether or not there is any such thing as abiding personality, the transcendental deduction casts no direct light. Indeed consciousness of self, as the more inclusive and complex form of awareness, may perhaps be regarded as pointing to a greater variety of contributory and generative conditions.

Unfortunately Kant, for the reasons just stated, has not sufficiently emphasised this more negative, or rather noncommittal, aspect of the results of the deduction. But when later in the chapter on the *Paralogisms* he is brought face to face with the issue, and has occasion to pronounce upon the question, he speaks with no uncertain voice. In the theoretical sphere there is, he declares, no sufficient proof of the spirituality, or unitary and ultimate character, of the self. Like everything else the unity of apperception must be noumenally conditioned, but it cannot be shown that in itself, *as self-consciousness or apperception*, it represents any noumenal reality. It may be a resultant, resting upon, and due to, a complexity of generative conditions; and these conditions may be fundamentally different in character from itself. They may, for all that we can prove to the contrary, be of a non-conscious and non-personal nature. There is nothing in our cognitive experience, and no result of the Critical analysis of it, which is inconsistent with such a possibility. Those commentators, such as Cohen, Caird, and Watson, who more or less follow Hegel in his criticism of Kant's procedure, give an interpretation of the transcendental deduction which makes it inconsistent with the sceptical conclusions which the *Critique* as a whole is made by its author to support. Unbiassed study of the *Analytic*, even if taken by itself in independence of the *Dialectic*, does not favour such a view. The argument of the transcendental deduction itself justifies no more than Kant is willing to allow in his discussion of the nature of the self in the section on the *Paralogisms*. It may, indeed, as Caird has so forcibly shown in his massive work upon the Critical philosophy, be developed upon Hegelian lines, but only through a process of essential reconstruction which departs very far from many of Kant's most cherished tenets, and which does so in a spirit that radically conflicts with that which dominates the *Critique* as a whole.

THE LATER STAGES OF THE SUBJECTIVE DEDUCTION

The reader will have noted that several of the factors in Kant's exposition have so far been entirely ignored. The time has now come for reckoning with them. They constitute, in my view, the later stages of the subjective deduction. That is to say, they refer to the transcendental generative powers which Kant, *on the strength of the results obtained in the more objective enquiry*, feels justified in postulating. Separate consideration of them tends to clearness of statement. Kant's constant alternation between the logical and the dynamical standpoints is one of the many causes of the obscurity in his argument. In this connection we shall also find opportunity to discuss the fundamental conflict, to which I have already had occasion to refer, between the subjectivist and the phenomenalist modes of developing the Critical standpoint.

The conclusions arrived at in the objective deduction compelled Kant to revise his previous psychological views. Hitherto he had held to the Leibnizian theory that *a priori* concepts are obtained by reflection upon the mind's native and fundamental modes of action. In the *Dissertation* he carefully distinguishes between the *logical* and the *real* employment of the understanding. Through the former empirical concepts are derived from concrete experience. Through the latter pure concepts are creatively generated. Logical and real thinking agree, however, Kant there argues, in being activities of the *conscious* mind. Both can be apprehended and adequately determined through the revealing power of reflective consciousness. Such a standpoint is no longer tenable for Kant. Now that he has shown that the consciousness of self and the consciousness of objects mutually condition one another, and that until both are attained neither is possible, he can no longer regard the mind as even possibly conscious of the activities whereby experience is brought about. The activities generative of consciousness have to be recognised as themselves falling outside it. Not even in its penumbra, through some vague form of apprehension, can they be detected. Only the finished products of such activities, not the activities themselves, can be presented to consciousness; and only by general reasoning, inferential of agencies that lie outside the conscious field, can we hope to determine them.

Now Kant appears to have been unwilling to regard the 'understanding' as ever unconscious of its activities. Why he was unwilling, it does not seem possible to explain; at most his rationalist leanings and Wolffian training may be cited as contributing causes. To the end he continued to speak of the understanding as the faculty whereby the *a priori* is brought to consciousness. In order to develop the distinctions demanded by the new Critical attitude, he had therefore to introduce a new faculty, capable of taking over the activities which have to be recognised as non-conscious. For this purpose he selected the imagination, giving to it the special title, *productive* imagination. The empirical reproductive processes hitherto alone recognised by psychologists are not, he declares, exhaustive of the nature of the imagination. It is also capable of *transcendental* activity, and upon this the "objective affinity" of appearances and the resulting possibility of their empirical apprehension is made to rest. The productive imagination is also viewed as rendering possible the understanding, that is, the conscious apprehension of the *a priori* as an element embedded in objective experience. Such apprehension is possible because in the pre-conscious elaboration of the given manifold the productive imagination has conformed to those *a priori* principles which the understanding demands for the possibility of its own exercise in conscious apprehension. Productive imagination acts in the manner required to yield experiences which are capable of relation to the unity of self-consciousness, *i.e.* of being found to conform to the unity of the categories. Why it should act in this manner cannot be explained; but it is none the less, on Critical principles, a legitimate assumption, since only in so far as it does so can experience, which *de facto* exists, be possible in any form. As a condition *sine qua non* of actual and possible experience, the existence of such a faculty is, Kant argues, a legitimate inference from the results of the transcendental deduction.

Though Kant's insistence upon the conscious character of understanding compels him to distinguish between it and the imagination, he has also to recognise their kinship. If imagination can never act save in conformity with the *a priori* forms of understanding, some reason must exist for their harmony. This

twofold necessity of at once distinguishing and connecting them is the cause of the hesitating and extremely variable account which in both editions of the *Critique* is given of their relation. In several passages the understanding is spoken of as simply imagination which has attained to consciousness of its activities. Elsewhere he explicitly states that they are distinct and separate. From this second point of view Kant regards imagination as mediating between sense and understanding, and, though reducible to neither, akin to both.

Only on one point is Kant clear and definite, namely, that it is to productive imagination that the *generation* of unified experience is primarily due. In it something of the fruitful and inexhaustible character of noumenal reality is traceable. Doubtless one chief reason for his choice of the title imagination is the creative character which in popular thought has always been regarded as its essential feature. As Kant, speaking of schematism, which is a process executed by the imagination, states in A 141: “This schematism ... is an *art* (*Kunst*) concealed in the depths of the human soul.” This description may perhaps be interpreted in the light of Kant’s account of the creative character of artistic genius in the *Critique of Judgment*, for there also imagination figures as the truly originative or creative faculty of the human spirit. To its noumenal character we may also trace its capacity of combining those factors of sense and understanding which in the realm of appearance remain persistently opposed. Imagination differs from the understanding chiefly in that it is at once more comprehensive and also more truly creative. It supplements the functional forms with a sensuous content, and applies them dynamically in the generation of experience.

The schemata, which the productive imagination is supposed to construct, are those generalised forms of temporal and spatial existence in which alone the unity of experience necessary to apperception can be realised. They are

“pure (without admixture of anything empirical), and yet are in one aspect intellectual and in another sensuous.”

Or as Kant describes the process in the chapter before us:

“We name the synthesis of the manifold in imagination transcendental, if without distinction of intuitions it is directed exclusively to the *a priori* combination of the manifold; and the unity of this synthesis is entitled transcendental, if it is represented as *a priori* necessary in relation to the original unity of apperception. As this unity of apperception conditions the possibility of all knowledge, the transcendental unity of the synthesis of imagination is the pure form of all possible knowledge. Hence, through it all objects of possible experience must be represented *a priori*.”

The schemata, thus transcendentally generated, are represented by Kant as limiting and controlling the empirical processes of apprehension, reproduction, and recognition. As no experience is attainable save in terms of the schemata, they enable us to determine, on *a priori* grounds, the degree of constancy and regularity that can be securely counted upon in all experience. This is Kant’s psychological explanation of what he has entitled “objective affinity.” The empirical ground of reproduction is the association of ideas; its transcendental ground is an objective affinity which is “a necessary consequence of a synthesis in imagination, grounded *a priori* on rules.”

“[The] subjective and empirical ground of reproduction according to rules is named the association of representations. If this unity of association did not also have an objective ground, which makes it impossible that appearances should be apprehended by the imagination except under the condition of a possible synthetic unity of this apprehension, it would be entirely accidental that appearances should fit into a connected whole of human knowledge.... There might exist a multitude of perceptions, and indeed an entire sensibility, in which much empirical consciousness would arise in my mind, but in a state of separation, and without belonging to one consciousness of myself. That, however, is impossible.” [As the subjective and objective deductions have demonstrated, where there is no self-consciousness there is no consciousness of any kind.] “There must therefore be an objective ground (that is, one that can be

determined *a priori*, antecedently to all empirical laws of the imagination) upon which may rest the possibility, nay, the necessity of a law that extends to all appearances — the law, namely, that all appearances must be regarded as data of the senses which are associable in themselves and subject to general rules of universal connection in their reproduction. This objective ground of all association of appearances I entitle their *affinity*.... The objective unity of all empirical consciousness in one consciousness, that of original apperception, is the necessary condition of all possible perception; and the affinity of all appearances, near or remote, is a necessary consequence of a synthesis in imagination which is grounded *a priori* on rules."

This part of Kant's teaching is apt to seem more obscure than it is. For the reader is not unnaturally disinclined to accept it in the very literal sense in which it is stated. That Kant means, however, exactly what he says, appears from the further consequence which he himself not only recognises as necessary, but insists upon as valid. The doctrine of objective affinity culminates in the conclusion that it is "we ourselves who introduce into the appearances that order and regularity which we name nature." The "we ourselves" refers to the mind in the transcendental activities of the productive imagination. The conscious processes of apprehension, reproduction, and recognition necessarily conform to schemata, non-consciously generated, which express the combined *a priori* conditions of intuition and understanding required for unitary consciousness.

Many points in this strange doctrine call for consideration. It rests, in the first place, upon the assumption of a hard and fast distinction, very difficult of acceptance, between transcendental and empirical activities of the mind. Secondly, Kant's assertion, that the empirical manifolds can be relied upon to supply a satisfactory content for the schemata, calls for more adequate justification than he himself adduces. It is upon independent reality that the fixity of empirical co-existences and sequences depends. Is not Kant practically assuming a pre-established harmony in asserting that as the mind creates the *form* of nature it can legislate *a priori* for all possible experience?

As regards the first assumption Kant would seem to have been influenced by the ambiguities of the term transcendental. It means, as we have already noted, either the science of the *a priori*, or the *a priori* itself, or the conditions which render experience possible. Even the two latter meanings by no means coincide. The conditions of the possibility of experience are not in all cases *a priori*. The manifold of outer sense is as indispensable a precondition of experience as are the forms of understanding, and yet is not *a priori* in any valid sense of that term. It does not, therefore, follow that because the activities of productive imagination "transcendentally" condition experience, they must themselves be *a priori*, and must, as Kant also maintains, deal with a pure *a priori* manifold. Further, the separation between transcendental and empirical activities of the mind must defeat the very purpose for which the productive imagination is postulated, namely, in order to account for the generation of a complex consciousness in which no one element can temporally precede any of the others. If the productive imagination generates only schemata, it will not account for that complex experience in which consciousness of self and consciousness of objects are indissolubly united. The introduction of the productive imagination seems at first sight to promise recognition of the dynamical aspect of our temporally sequent experience, and of that aspect in which as appearance it refers us beyond itself to non-experienced conditions. As employed, however, in the doctrines of schematism and of objective affinity, the imagination exhibits a formalism hardly less extreme than that of the understanding whose shortcomings it is supposed to make good.

In his second assumption Kant, as so often in the *Critique*, is allowing his old-time rationalistic leanings to influence him in underestimating the large part which the purely empirical must always occupy in human experience, and in exaggerating the scope of the inferences which can be drawn from the presence of the formal, relational factors. But this is a point which we are not yet in a position to discuss.

Fortunately, if Vaihinger's theory be accepted, section A 98-104 enables us to follow the movement of Kant's mind in the interval between the formulating of the doctrine of productive imagination and the

publication of the *Critique*. He himself would seem to have recognised the unsatisfactoriness of dividing up the total conditions of experience into transcendental activities that issue in schemata, and supplementary empirical processes which transform them into concrete, specific consciousness. The alternative theory which he proceeds to propound is at first sight much more satisfactory. It consists in duplicating each of the various empirical processes with a transcendental faculty. There are, he now declares, three transcendental powers — a transcendental faculty of apprehension, a transcendental faculty of reproduction (=imagination), and a transcendental faculty of recognition. Thus Kant's previous view that transcendental imagination has a special and unique activity, namely, the productive, altogether different in type from any of its empirical processes, is now allowed to drop; in place of it Kant develops the view that the transcendental functions run exactly parallel with the empirical processes. But though such a position may at first seem more promising than that which it displaces, it soon reveals its unsatisfactoriness. The two types of mental activity, transcendental and empirical, no longer, indeed, fall apart; but the difficulty now arises of distinguishing in apprehension, reproduction, and recognition any genuinely transcendental aspect. Apprehension, reproduction, and recognition are so essentially conscious processes that to view them as also transcendental does not seem helpful. They contain elements that are transcendental in the logical sense, but cannot be shown to presuppose in any analogous fashion mental powers that are transcendental in the dynamical sense. This is especially evident in regard to recognition, which is described as being "the *consciousness* that what we are thinking is the same as what we thought a moment before." In dealing with apprehension and reproduction the only real difference which Kant is able to suggest, as existing between their transcendental and their empirical activities, is that the former synthesise the pure *a priori* manifolds of space and time, and the latter the contingent manifold of sense. But even this unsatisfactory distinction he does not attempt to apply in the case of recognition. Nor can we hold that by the transcendental synthesis of recognition Kant means transcendental apperception. That is, of course, the suggestion which at once occurs to the reader. But however possible it might be to inject such a meaning into kindred passages elsewhere, it cannot be made to fit the context of this particular section.

Vaihinger's theory seems to be the only thread which will guide us through this labyrinth. Kant, on the eve of the publication of the *Critique*, recognising the unsatisfactoriness of his hard and fast separation of transcendental from empirical processes, adopted the view that some form of transcendental activity corresponds to every fundamental form of empirical activity and *vice versa*. Hastily developing this theory, he incorporated it into the *Critique* alongside his older doctrine. It does not, however, reappear in the *Prolegomena*, and its teaching is explicitly withdrawn in the second edition of the *Critique*. Its plausibility had entrapped him into its temporary adoption, but the defects which it very soon revealed speedily led him to reject it.

One feature of great significance calls for special notice. The breakdown of this doctrine of a threefold transcendental synthesis did not, as might naturally have been expected from what is stated in the prefaces to the *Critique* regarding the unessential and seemingly conjectural character of the subjective deduction, lead Kant to despair of developing a transcendental psychology. Though in the second edition he cuts away the sections containing the earlier stages of the subjective deduction, and in recasting the other sections gives greater prominence to the more purely logical analyses, the older doctrine of productive imagination is reinstated in full force, and is again developed in connection with the doctrine of pure *a priori* manifolds. Evidently, therefore, Kant was not disheartened by the various difficulties which lie in the path of a transcendental psychology, and it seems reasonable to conclude that there were powerful reasons inclining him to its retention. I shall now attempt, to the best of my powers, to explain — the task is a delicate and difficult one — what we may believe these reasons to have been.

THE DISTINCTION BETWEEN PHENOMENALISM AND SUBJECTIVISM

A wider set of considerations than we have yet taken into account must be borne in mind if certain broader and really vital implications of Kant's enquiry are to be properly viewed. The self has a twofold aspect. It is at once animal in its conditions and potentially universal in its powers of apprehension. Though man's natural existence is that of an animal organism, he can have consciousness of the spatial world out of which his organism has arisen, and of the wider periods within which his transitory existence falls. Ultimately such consciousness would seem to connect man cognitively with reality as a whole. Now it is to this universal or absolutist aspect of our consciousness, to its transcendence of the embodied and separate self, that Kant is seeking to do justice in his transcendental deductions, especially in his doctrine of the transcendental unity of apperception. For he views that apperception as conditioned by, and the correlate of, the consciousness of objectivity. It involves the consciousness of a single cosmical time and of a single cosmical space within which all events fall and within which they form a whole of causally interdependent existences. That is why he names it the *objective* unity of apperception. It is that aspect in which the self correlates with a wider reality, and through which it stands in fundamental contrast to the merely subjective states and to the individual conditions of its animal existence. The transcendental self, so far from being identical with the empirical self, would seem to be of directly opposite nature. The one would seem to point beyond the realm of appearance, the other to be in its existence merely natural. The fact that they are inextricably bound up with one another, and co-operate in rendering experience possible, only makes the more indispensable the duty of recognising their differing characters. Even should they prove to be inseparable aspects of sense-experience, without metaphysical implications, that would not obviate the necessity of clearly distinguishing them. The distinction remains, whatever explanation may be adopted of its speculative or other significance.

Now obviously in so fundamental an enquiry, dealing as it does with the most complicated and difficult problem in the entire field of metaphysics, no brief and compendious answer can cover all the various considerations which are relevant and determining. The problem of the deduction being what it is, the section dealing with it can hardly fail to be the most difficult portion of the whole *Critique*. The conclusions at which it arrives rest not merely upon the argument which it contains but also upon the results more or less independently reached in the other sections. The doctrine of the empirical object as appearance requires for its development the various discussions contained in the *Aesthetic*, in the sections on *Inner Sense* and on the *Refutation of Idealism*, in the chapters on *Phenomena and Noumena* and on the *Antinomies*. The metaphysical consequences and implications of Kant's teaching in regard to the transcendental unity of apperception are first revealed in the chapter on the *Paralogisms*. The view taken of productive imagination is expanded in the section on *Schematism*. In a word, the whole antecedent teaching of the *Critique* is focussed, and the entire subsequent development of the Critical doctrine is anticipated, in this brief chapter.

But there are, of course, additional causes of the difficulty and obscurity of the argument. One such cause has already been noted, namely, that the *Critique* is not a unitary work, developed from a previously thought-out standpoint, but in large part consists of manuscripts of very various dates, artificially pieced together by the addition of connecting links. In no part of the *Critique* is this so obvious as in the *Analytic of Concepts*. Until this is recognised all attempts to interpret the text in any impersonal fashion are doomed to failure. For this reason I have prefaced our discussion by a statement of Vaihinger's analysis. No one who can accept it is any longer in danger of underestimating this particular cause of the obscurity of Kant's deduction.

But the chief reason is one to which I have thus far made only passing reference, and to which we may now give the attention which its importance demands, namely, the tentative and experimental character of Kant's own final solutions. The arguments of the deduction are only intelligible if viewed as an expression of the conflicting tendencies to which Kant's thought remained subject. He sought to allow due

weight to each of the divergent aspects of the experience which he was analysing, and in so doing proceeded, as it would seem, simultaneously along the parallel lines of what appeared to be the possible, alternative methods of explanation. And to the end these opposing tendencies continued side by side, to the confusion of those readers who seek for a single unified teaching, but to the great illumination of those who are looking to Kant, not for clear-cut or final solutions, but for helpful analysis and for partial disentanglement of the complicated issues which go to constitute these baffling problems.

The two chief tendencies which thus conflicted in Kant's mind may be named the subjectivist and the phenomenalist respectively. This conflict remained, so to speak, underground, influencing the argument at every point, but seldom itself becoming the subject of direct discussion. As we shall find, it caused Kant to develop a twofold view of inner sense, of causality, of the object of knowledge, and of the unity of apperception. One of the few sections in the *Critique* where it seems on the point of emerging into clear consciousness is the section, added in the second edition, on the *Refutation of Idealism*. But this section owes its origin to polemical causes. It represents a position peculiar to the maturer portions of the *Analytic*; the rest of the *Critique* is not rewritten so as to harmonise with it, or to develop the consequences which consistent holding to it must involve.

I shall use the term *subjectivism* (and its equivalent *subjective idealism*) in the wide sense which makes it applicable to the teaching of Descartes and Locke, of Leibniz and Wolff, no less than to that of Berkeley and Hume. A common element in all these philosophies is the belief that subjective or mental states, "ideas" in the Lockean sense, are the objects of consciousness, and further are the sole possible objects of which it can have any direct or immediate awareness. Knowledge is viewed as a process entirely internal to the individual mind, and as carrying us further only in virtue of some additional supervening process, inferential, conjectural, or instinctive. This subjectivism also tends to combine with a view of consciousness as an ultimate self-revealing property of a merely individual existence. For Descartes consciousness is the very essence, both of the mind and of the self. It is indeed asserted to be exhaustive of the nature of both. Though the self is described as possessing a faculty of will as well as a power of thinking, all its activities are taken as being disclosed to the mind through the revealing power of its fundamental attribute. The individual mind is thus viewed as an existence in which everything takes place in the open light of an all-pervasive consciousness. Leibniz, it is true, taught the existence of subconscious perceptions, and so far may seem to have anticipated Kant's recognition of non-conscious processes; but as formulated by Leibniz that doctrine has the defect which frequently vitiates its modern counterpart, namely that it represents the subconscious as analogous in nature to the conscious, and as differing from it only in the accidental features of intensity and clearness, or through temporary lack of control over the machinery of reproductive association. The subconscious, as thus represented, merely enlarges the private content of the individual mind; it in no respect transcends it.

The genuinely Critical view of the generative conditions of experience is radically different from this Leibnizian doctrine of *petites perceptions*. It connects rather with Leibniz's mode of conceiving the origin of *a priori* concepts. But even that teaching it restates in such fashion as to free it from subjectivist implications. Leibniz's contention that the mind is conscious of its fundamental activities, and that it is by reflection upon them that it gains all ultimate *a priori* concepts, is no longer tenable in view of the conclusions established in the objective deduction. Mental processes, in so far as they are generative of experience, must fall outside the field of consciousness, and as activities dynamically creative cannot be of the nature of ideas or contents. They are not subconscious ideas but non-conscious processes. They are not the submerged content of experience, but its conditioning grounds. Their most significant characteristic has still, however, to be mentioned. They must no longer be interpreted in subjectivist terms, as originating in the separate existence of an individual self. In conditioning experience they generate the only self for which experience can vouch, and consequently, in the absence of full and independent proof, must not be conceived as individually circumscribed. The problem of knowledge,

properly conceived, is no longer how consciousness, individually conditioned, can lead us beyond its own bounds, but what a consciousness, which is at once consciousness of objects and also consciousness of a self, must imply for its possibility. Kant thus obtains what is an almost invariable concomitant of scientific and philosophical advance, namely a more correct and scientific formulation of the problem to be solved. The older formulation assumes the truth of the subjectivist standpoint; the Critical problem, when thus stated, is at least free from preconceptions of that particular brand. Assumptions which hitherto had been quite unconsciously held, or else, if reflected upon, had been regarded as axiomatic and self-evident, are now brought within the field of investigation. Kant thereby achieves a veritable revolution; and with it many of the most far-reaching consequences of the Critical teaching are closely bound up.

This new standpoint, in contrast to *subjective* idealism, may be named *Critical*, or to employ the term which Kant himself applies both to his transcendental deduction and to the unity of apperception, *objective* idealism. But as the distinction between appearance and reality is no less fundamental to the Critical attitude, we shall perhaps be less likely to be misunderstood, or to seem to be identifying Kant's standpoint with the very different teaching of Hegel, if by preference we employ the title *phenomenalism*.

In the transcendental deduction Kant, as above noted, is seeking to do justice to the universal or absolutist aspect of our consciousness, to its transcendence of the embodied and separate self. The unity of apperception is entitled *objective*, because it is regarded as the counterpart of a single cosmical time and of a single cosmical space within which all events fall. Its objects are not mental states peculiar to itself, nor even ideal contents numerically distinct from those in other minds. It looks out upon a common world of genuinely independent existence. In developing this position Kant is constrained to revise and indeed completely to recast his previous views both as to the nature of the synthetic processes, through which experience is constructed, and of the given manifold, upon which they are supposed to act. From the subjectivist point of view the synthetic activities consist of the various cognitive processes of the individual mind, and the given manifold consists of the sensations aroused by material bodies acting upon the special senses. From the objective or phenomenalist standpoint the synthetic processes are of a noumenal character, and the given manifold is similarly viewed as being due to noumenal agencies acting, not upon the sense-organs, which as appearances are themselves noumenally conditioned, but upon what may be called "outer sense." These distinctions may first be made clear.

Sensations, Kant holds, have a twofold origin, noumenal and mechanical. They are due in the first place to the action of things in themselves upon the noumenal conditions of the self, and also in the second place to the action of material bodies upon the sense-organs and the brain. To take the latter first. Light reflected from objects, and acting on the retina, gives rise to sensations of colour. For such causal interrelations there exists, Kant teaches, the same kind of empirical evidence as for the causal interaction of material bodies. Our sensational experiences are as truly events in time as are mechanical happenings in space. In this way, however, we can account only for the existence of our sensations and for the order in which they make their appearance in or to consciousness, not for our awareness of them. To state the point by means of an illustration. The impinging of one billiard ball upon another accounts causally for the motion which then appears in the second ball. But no one would dream of asserting that by itself it accounts for our consciousness of that second motion. We may contend that in an exactly similar manner, to the same extent, no more and no less, the action of an object upon the brain accounts only for the occurrence of a visual sensation as an event in the empirical time sequence. A sensation just as little as a motion can carry its own consciousness with it. To regard that as ever possible is ultimately to endow events in time with the capacity of apprehending objects in space. In dealing with causal connections in space and time we do not require to discuss the problem of knowledge proper, namely, how it is possible to have or acquire knowledge, whether of a motion in space or of a sensation in time. When we raise that further question we have to adopt a very different standpoint, and to take into account a much greater complexity of conditions.

Kant applies this point of view no less rigorously to feelings, emotions, and desires than to the sensations of the special senses. All of them, he teaches, are 'animal' in character. They are one and all conditioned by, and explicable only in terms of, the particular constitution of the animal organism. They one and all belong to the realm of appearance.

The term 'sensation' may also, however, be applied in a wider sense to signify the material of knowledge in so far as it is noumenally conditioned. Thus viewed, sensations are due, not to the action of physical stimuli upon the bodily organs, but to the affection by things in themselves of those factors in the noumenal conditions of the self which correspond to "sensibility." Kant is culpably careless in failing to distinguish those two very different meanings of the phrase 'given manifold.' The language which he employs is thoroughly ambiguous. Just as he frequently speaks as if the synthetic processes were conscious activities exerted by the self, so also he frequently uses language which implies that the manifold upon which these processes act is identical with the sensations of the special senses. But the sensations of the bodily senses, even if reducible to it, can at most form only part of it. The synthetic processes, interpreting the manifold in accordance with the fixed forms, space, time, and the categories, generate the spatial world within which objects are apprehended as causally interacting and as giving rise through their action upon the sense-organs to the various special sensations as events in time. Sensations, as mechanically caused, are thus on the same plane as other appearances. They depend upon the same generating conditions as the motions which produce them. As minor incidents within a more comprehensive totality they cannot possibly represent the material out of which the whole has been constructed. To explain the phenomenal world as constructed out of the sensations of the special senses is virtually to equate it with a small selection of its constituent parts. Such professed explanation also commits the further absurdity of attempting to account for the origin of the phenomenal world by means of events which can exist only under the conditions which it itself supplies. The manifold of the special senses and the primary manifold are radically distinct. The former is due to material bodies acting upon the material sense-organs. The latter is the product of noumenal agencies acting upon "outer sense," *i.e.* upon those noumenal conditions of the self which constitute our "sensibility"; it is much more comprehensive than the former; it must contain the material for all modes of objective existence, including many that are usually regarded as purely mental.

To turn, now, to the other aspect of experience. What are the factors which condition its form? What must we postulate in order to account for the existence of consciousness and for the unitary form in which alone it can appear? Kant's answer is again ambiguous. He fails sufficiently to insist upon distinctions which yet are absolutely vital to any genuine understanding of the new and revolutionary positions towards which he is feeling his way. The synthetic processes which in the subjective and objective deductions are proved to condition all experience may be interpreted either as conscious or as non-conscious activities, and may be ascribed either to the agency of the individual self or to noumenal conditions which fall outside the realm of possible definition. Now, though Kant's own expositions remain thoroughly ambiguous, the results of the Critical enquiry would seem — at least so long as the fundamental distinction between matter and form is held to and the temporally sequent aspect of experience is kept in view — to be decisive in favour of the latter alternative in each case. The synthetic processes must take place and complete themselves before any consciousness can exist at all. And as they thus precondition consciousness, they cannot themselves be known to be conscious; and not being known to be conscious, it is not even certain that they may legitimately be described as mental. We have, indeed, to conceive them on the analogy of our mental processes, but that may only be because of the limitation of our knowledge to the data of experience. Further, we have no right to conceive them as the activities of a noumenal self. We know the self only as conscious, and the synthetic processes, being the generating conditions of consciousness, are also the generating conditions of the only self for which our experience can vouch. Kant, viewing as he does the temporal aspect of human experience as fundamental, would

seem to be justified in naming these processes "synthetic." For consciousness in its very nature would seem to involve the carrying over of content from one time to other times, and the construction of a more comprehensive total consciousness from the elements thus combined. Kant is here analysing in its simplest and most fundamental form that aspect of consciousness which William James has described in the *Principles of Psychology*, and which we may entitle the telescoping of earlier mental states into the successive experiences that include them. They telescope in a manner which can never befall the successive events in a causal series, and which is not explicable by any scheme of relations derivable from the physical sphere.

Obviously, what Kant does is to apply to the interpretation of the noumenal conditions of our conscious experience a distinction derived by analogy from conscious experience itself — the distinction, namely, between our mental processes and the sensuous material with which they deal. The application of such a distinction may be inevitable in any attempt to explain human experience; but it can very easily, unless carefully guarded, prove a source of serious misunderstanding. Just as the synthetic processes which generate consciousness are not known to be themselves conscious, so also the manifold cannot be identified with the sensations of the bodily senses. These last are events in time, and are effects not of noumenal but of mechanical causes.

Kant's conclusion when developed on consistent Critical lines, and therefore in phenomenalist terms, is twofold: positive, to the effect that consciousness, for all that our analysis can prove to the contrary, may be merely a resultant, derivative from and dependent upon a complexity of conditions; and negative, to the effect that though these conditions may by analogy be described as consisting of synthetic processes acting upon a given material, they are in their real nature unknowable by us. Even their bare possibility we cannot profess to comprehend. We postulate them only because given experience is demonstrably not self-explanatory and would seem to refer us for explanation to some such antecedent generative grounds.

Kant, as we have already emphasised, obscures his position by the way in which he frequently speaks of the transcendental unity of apperception as the supreme condition of our experience. At times he even speaks as if it were the source of the synthetic processes. That cannot, however, be regarded as his real teaching. Self-consciousness (and the unity of apperception, in so far as it finds expression through self-consciousness) rests upon the same complexity of conditions as does outer experience, and therefore may be merely a product or resultant. It is, as he insists in the *Paralogisms*, the emptiest of all our concepts, and can afford no sufficient ground for asserting the self to be an abiding personality. We cannot by theoretical analysis of the facts of experience or of the nature of self-consciousness prove anything whatsoever in regard to the ultimate nature of the self.

Now Kant is here giving a new, and quite revolutionary, interpretation of the distinction between the subjective and the objective. The objective is for the Cartesians the independently real; the subjective is that which has an altogether different kind of existence in what is entitled the field of consciousness. Kant, on the other hand, from his phenomenalist standpoint, views existences as objective when they are determined by purely physical causes, and as subjective when they also depend upon physiological and psychological conditions. On this latter view the difference between the two is no longer a difference of kind; it becomes a difference merely of degree. Objective existences, owing to the simplicity and recurrent character of their conditions, are uniform. Subjective existences resting upon conditions which are too complex to be frequently recurrent, are by contrast extremely variable. But both types of existence are objective in the sense that they are objects, and immediate objects, for consciousness. Subjective states do not run parallel with the objective system of natural existences, nor are they additional to it. For they do not constitute our consciousness of nature; they are themselves part of the natural order which consciousness reveals. That they contrast with physical existences in being unextended and incapable of location in space is what Kant would seem by implication to assert, but he challenges Descartes' right to infer from this particular difference a complete diversity in their whole nature. Sensations, feelings,

emotions, and desires, so far as they are experienced by us, constitute the empirical self which is an objective existence, integrally connected with the material environment, in terms of which alone it can be understood. In other words, the distinction between the subjective and the objective is now made to fall within the system of natural law. The subjective is not opposite in nature to the objective, but is a subspecies within it.

The revolutionary character of this reformulation of Cartesian distinctions may perhaps be expressed by saying that what Kant is really doing is to substitute the distinction between appearance and reality for the Cartesian dualism of the mental and the material. The psychical is a title for a certain class of known existences, *i.e.* of appearances; and they form together with the physical a single system. But underlying this entire system, conditioning both physical and psychical phenomena, is the realm of noumenal existence; and when the question of the possibility of knowledge, that is, of the experiencing of such a comprehensive natural system, is raised, it is to this noumenal sphere that we are referred. Everything experienced, even a sensation or desire, is an event; but the experiencing of it is an act of awareness, and calls for an explanation of an altogether different kind.

Thus Kant completely restates the problem of knowledge. The problem is not how, starting from the subjective, the individual can come to knowledge of the independently real; but how, if a common world is alone immediately apprehended, the inner private life of the self-conscious being can be possible, and how such inner experience is to be interpreted. How does it come about that though sensations, feelings, etc., are events no less mechanically conditioned than motions in space, and constitute with the latter a single system conformed to natural law, they yet differ from all other classes of natural events in that they can be experienced only by a single consciousness. To this question Kant replies in terms of his fundamental distinction between appearance and reality. Though everything of which we are conscious may legitimately be studied in terms of the natural system to which it belongs, consciousness itself cannot be so regarded. In attempting to define it we are carried beyond the phenomenal to its noumenal conditions. In other words, it constitutes a problem, the complete data of which are not at our disposal. This is by itself a sufficient reason for our incapacity to explain why the states of each empirical self can never be apprehended save by a single consciousness, or otherwise stated, why each consciousness is limited, as regards sensations and feelings, exclusively to those which arise in connection with some one animal organism. It at least precludes us from dogmatically asserting that this is due to their being subjective in the dualistic and Cartesian sense of that term — namely, as constituting, or being states of, the knowing self.

A diagram may serve, though very crudely, to illustrate Kant’s phenomenalist interpretation of the cognitive situation.

ES^A = Empirical self of the conscious Being A.

ES^A = Empirical self of the conscious Being A.

ES^B = Empirical self of the conscious Being B.

NC^A = Noumenal conditions of the conscious Being A.

NC^B = Noumenal conditions of the conscious Being B.

l, m, n = Objects in space.

x, y, z = Sensations caused by objects l, m, n acting on the sense-organs of the empirical self A.

x, y, z= Sensations caused by 1, m, n acting on the sense-organs of the empirical self B.

NC^{EW} = Noumenal conditions of the empirical world.

Everything in this empirical world is equally open to the consciousness of both A and B, save only certain psychical events that are conditioned by physiological and psychological factors. x, y, z can be apprehended only by A; x, y, z can be apprehended only by B. Otherwise A and B experience one and the same world; the body of B is perceived by A in the same manner in which he perceives his own body. This is true *a fortiori* of all other material existences. Further, these material existences are known with the same immediacy as the subjective states. As regards the relation in which NC^A, NC^B, and NC^{EW} stand to one another, no assertions can be made, save, as above indicated, such conjectural statements as may precariously be derived through argument by analogy from distinctions that fall within our human experience.

Kant’s phenomenalism thus involves an objectivist view of individual selves and of their interrelations. They fall within the single common world of space. Within this phenomenal world they stand in external, mechanical relations to one another. They are apprehended as embodied, with known contents, sensations, feelings, and desires, composing their inner experience. There is, from this point of view, no problem of knowledge. On this plane we have to deal only with events known, not with any process of apprehension. Even the components of the empirical self, the subject-matter of empirical psychology, are not processes of apprehension, but apprehended existences. It is only when we make a regress beyond the phenomenal as such to the conditions which render it possible, that the problem of knowledge arises at all. And with this regress we are brought to the real crux of the whole question — the reconciliation of this phenomenalism with the conditions of our self-consciousness. For we have then to take into account the fundamental fact that each self is not only an animal existence within the phenomenal world, but also in its powers of apprehension coequal with it. The self known is external to the objects known; the self that knows is conscious of itself as comprehending within the field of its consciousness the wider universe in infinite space.

Such considerations would, at first sight, seem to force us to modify our phenomenalist standpoint in the direction of subjectivism. For in what other manner can we hope to unite the two aspects of the self, the known conditions of its finite existence and the consciousness through which it correlates with the universe as a whole? In the one aspect it is a part of appearance; in the other it connects with that which makes appearance possible at all.

Quite frequently it is the subjectivist solution which Kant seems to adopt. Objects known are “mere representations,” “states of the identical self.” Everything outside the individual mind is real; appearances are purely individual in origin. But such a position is inconsistent with the deeper implications of Kant’s Critical teaching, and would involve the entire ignoring of the many suggestions which point to a fundamentally different and much more adequate standpoint. The individual is himself known only as appearance, and cannot, therefore, be the medium in and through which appearances exist. Though appearances exist only in and through consciousness, they are not due to any causes which can legitimately be described as individual. From this standpoint Kant would seem to distinguish between the grounds and conditions of phenomenal existence and the special determining causes of individual consciousness. Transcendental conditions generate consciousness of the relatively permanent and objective world in space and time; empirical conditions within this space and time world determine the sensuous modes through which special portions of this infinite and uniform world appear diversely to different minds.

This, however, is a point of view which is only suggested, and, as we have already observed, the form in which it is outlined suggests many objections and difficulties. Consciousness of the objective world in space and time does not exist complete with one portion of it more specifically determined in terms of actual sense-perceptions. Rather the consciousness of the single world in space and time is gradually developed through and out of sense experience of limited portions of it. We have still to consider the

various sections in the *Analytic of Principles* (especially the section added in the second edition on the *Refutation of Idealism*) and in the *Dialectic*, in which Kant further develops this standpoint. But even after doing so, we shall be forced to recognise that Kant leaves undiscussed many of the most obvious objections to which his phenomenalism lies open. To the very last he fails to state in any really adequate manner how from the phenomenalist standpoint he would regard the world described in mechanical terms by science as being related to the world of ordinary sense-experience, or how different individual consciousnesses are related to one another. The new form, however, in which these old-time problems here emerge is the best possible proof of the revolutionary character of Kant's Critical enquiries. For these problems are no longer formulated in terms of the individualistic presuppositions which govern the thinking of all Kant's predecessors, even that of Hume. The concealed presuppositions are now called in question, and are made the subject of explicit discussion. But further comment must meantime be deferred.

TRANSCENDENTAL DEDUCTION OF THE CATEGORIES, IN THE SECOND EDITION

The argument of the second edition transcendental deduction can be reduced to the following eight points:

(1) It opens with the statement of a fundamental assumption which Kant does not dream of questioning and of which he nowhere attempts to offer proof. The representation of combination is the one kind of representation which can never be given through sense. It is not so given even in the pure forms of space and time yielded by outer and inner sense. It is due to an act of spontaneity, which as such must be performed by the understanding. As it is one and the same for every kind of combination, it may be called by the general name of synthesis. And as all combination, without exception, is due to this source, its dissolution, that is, analysis, which seems to be its opposite, always presupposes it.

(2) Besides the manifold and its synthesis a further factor is involved in the conception of combination, namely, *the representation of the unity* of the manifold. The combination which is necessary to and constitutes knowledge is *representation* of the synthetical unity of the manifold. This is a factor additional to synthesis and to the manifold synthesised. For such representation cannot arise out of any antecedent consciousness of synthesis. On the contrary, it is only through supervention upon the unitary synthesis that the conception of the combination becomes possible. In other words, the representation of unity conditions *consciousness* of synthesis, and therefore cannot be the outcome or product of it. This is an application, or rather generalisation, of a position which in the first edition is developed only in reference to the empirical process of recognition. Recognition preconditions consciousness, and therefore cannot be subsequent upon it.

(3) The unity thus represented is not, however, that which is expressed through the category of unity. The consciousness of unity which is involved in the conception of synthesis is that of apperception or transcendental self-consciousness. This is the highest and most universal form of unity, for it is a presupposition of the unity of all possible concepts, whether analytic or synthetic, in the various forms of judgment.

(4) A manifold though given is not for that reason also represented. It must be possible for the 'I think' to accompany it and all my other representations:

"...for otherwise something would be represented in me which could not be thought at all; and that is equivalent to saying that the representation would be impossible or at least would be nothing to me."

But to ascribe a manifold as my representations to the identical self is to comprehend them, as synthetically connected, in one apperception. Only what can be combined in one consciousness can be related to the 'I think.' The analytic unity of self-consciousness presupposes the synthetic unity of the manifold.

(5) The unity of apperception is analytic or self-identical. It expresses itself through the proposition, *I*

am I. But being thus pure identity without content of its own, it cannot be conscious of itself in and by itself. Its unity and constancy can have meaning only through contrast to the variety and changeableness of its specific experiences; and yet, at the same time, it is also true that such manifoldness will destroy all possibility of unity unless it be reconcileable with it. The variety can contribute to the conditioning of apperception only in so far as it is capable of being combined into a single consciousness. Through synthetic unifying of the manifold the self comes to consciousness both of itself and of the manifold.

(6) The transcendental original unity of apperception is an objective, not a merely subjective, unity. Its conditions are also the conditions in and through which we acquire consciousness of objects. An object is that in the conception of which the manifold of given intuitions is combined. (This point, though central to the argument, is more adequately developed in the first than in the second edition.) Such combination requires unity of consciousness. Thus the same unity which conditions apperception likewise conditions the relation of representations to an object. The unity of pure apperception may therefore be described as an *objective* unity for two reasons: first, because it can apprehend its own analytical unity only through discovery of unity in the given, and secondly, for the reason that such synthetical unifying of the manifold is also the process whereby representations acquire reference to objects.

(7) Kant reinforces this conclusion, and shows its further significance, by analysis of the act of judgment. The logical definition of judgment, as the representation of a relation between two concepts, has many defects. These, however, are all traceable to its initial failure to explain, or even to recognise, the nature of the assertion which judgment as such claims to make. Judgment asserts relations of a quite unique kind, altogether different from those which exist between ideas connected through association. If, for instance, on seeing a body the sensations of weight due to the attempt to raise it are suggested by association, there is nothing but subjective sequence; but if we form the judgment that the body is heavy, the two representations are then connected together *in the object*. This is what is intended by the copula 'is.' It is a relational term through which the objective unity of given representations is distinguished from the subjective. It indicates that the representations stand in objective relation under the pure unity of apperception, and not merely in subjective relation owing to the play of association in the individual mind. "Judgment is nothing but the mode of bringing cognitions to the objective unity of apperception," *i.e.* of giving to them a validity which holds independently of the subjective processes through which it is apprehended. Objective relations are not, of course, all necessary or universal; and a judgment may, therefore, assert a relation which is empirical and contingent. None the less the fundamental distinction between it and any mere relation of association still persists. The empirical relation is still in the judgment asserted to be objective. The subject and the predicate are asserted, in the particular case or cases to which the judgment refers, to be connected in the object and not merely in the mind of the subject. Or otherwise stated, though subject and predicate are not themselves declared to be necessarily and universally related to one another, their contingent relation has to be viewed as objectively, and therefore necessarily, grounded. Judgment always presupposes the existence of necessary relations even when it is not concerned to assert them. Judgment is the organ of objective knowledge, and is therefore bound up, indirectly when not directly, with the universality and necessity which are the sole criteria of knowledge. The judgment expressive of contingency is still judgment, and is therefore no less necessary in its conditions, and no less objective in its validity, than is a universal judgment of the scientific type. To use Kant's own terminology, judgment acquires objective validity through participation in the necessary unity of apperception. In so doing it is made to embody those principles of the objective determination of all representations through which alone cognition is possible.

(8) As judgment is nothing but the mode of bringing cognitions to the objective unity of apperception, it follows that the categories, which in the metaphysical deduction have been proved to be the possible functions in judging, are the conditions in and through which such pure apperception becomes possible. Apperception conditions experience, and the unity which both demand for their possibility is that of the

categories.

Before passing to the remaining sections of the deduction, which are supplementary rather than essential, I may add comment upon the above points. Only (7) and (8) call for special consideration. They represent a form of argument which has no counterpart in the first edition. As we noted, the first edition argument is defective owing to its failure to demonstrate that the categories constitute the unity which is necessary to knowledge. By introducing in the second edition this analysis of judgment, and by showing the inseparable connection between pure apperception, objective consciousness and judgment, this defect is in some degree removed. As the categories correspond to the possible functions of judgment, their objective validity is thereby established. By this means also the connection which in Kant's view exists between the metaphysical and the transcendental deductions receives for the first time proper recognition. The categories which in the former deduction are discovered and systematised through *logical* analysis of the *form* of judgment, are in the latter deduction, through *transcendental* analysis of the *function* of judgment, shown to be just those forms of relation which are necessary to the possibility of knowledge. It must, however, be noted that the transcendental argument is brought to completion only through assumption of the adequacy of the metaphysical deduction. No independent attempt is made to show that the particular categories obtained in the metaphysical deduction are those which are required, that there are no others, or that all the twelve are indispensable.

(7) is a development of an argument which first appears in the *Prolegomena*. The statement of it there given is, however, extremely confused, owing to the distinction which Kant most unfortunately introduces between judgments of experience and judgments of perception. That distinction is entirely worthless and can only serve to mislead the reader. It cuts at the very root of Kant's Critical teaching. Judgments of perception involve, Kant says, no category of the understanding, but only what he is pleased to call the "logical connection of perceptions in a thinking subject." What that may be he nowhere explains, save by adding that in it perceptions are "compared and conjoined in a consciousness of my state" (also spoken of by Kant as "empirical consciousness"), and not "in consciousness in general."

"All our judgments are at first mere judgments of perception; they hold good merely for us (that is, for the individual subject), and we do not till afterwards give them a new reference, namely, to an object.... To illustrate the matter: that the room is warm, sugar sweet, and wormwood bitter — these are merely subjectively valid judgments. I do not at all demand that I myself should at all times, or that every other person should, find the facts to be what I now assert; they only express a reference of two sensations to the same subject, to myself, and that only in my present state of perception. Consequently they are not intended to be valid of the object. Such judgments I have named those of perception. Judgments of experience are of quite a different nature. What experience teaches me under certain circumstances, it must teach me always and teach everybody, and its validity is not limited to the subject or to its state at a particular time."

The illegitimacy and the thoroughly misleading character of this distinction hardly require to be pointed out. Obviously Kant is here confusing assertion of contingency and contingency of assertion. A judgment of contingency, in order to be valid, must itself be necessary. Even a momentary state of the self is referable to an object in judgment only if that object is causally, and therefore necessarily, concerned in its production.

The distinction is repeated in § 22 as follows:

"Thinking is the combining of representations in one consciousness. This combination is either merely relative to the subject, and is contingent and subjective, or is absolute, and is necessary or objective. The combination of representations in one consciousness is judgment. Thinking, therefore, is the same as judging, or the relating of representations to judgments in general. Judgments, therefore, are either merely subjective, or they are objective. They are subjective when representations are related to a consciousness

in one subject only, and are combined in it alone. They are objective when they are united in a consciousness in general, that is, necessarily.”

To accept this distinction is to throw the entire argument into confusion. This Kant seems to have himself recognised in the interval between the *Prolegomena* and the second edition of the *Critique*. For in the section before us there is no trace of it. The opposition is no longer between subjective and objective judgment, but only between association of ideas and judgment which as such is always objective. The distinction drawn in the *Prolegomena* is only, indeed, a more definite formulation of the distinction which runs through the first edition of the *Critique* between the indeterminate and the determinate object of consciousness. The more definite formulation of it seems, however, to have had the happy effect of enabling Kant to realise the illegitimacy of any such distinction.

We may now proceed to consider the remaining sections. In section 21 Kant makes a very surprising statement. The above argument, which he summarises in a sentence, yields, he declares, “the *beginning* of a deduction of the pure concepts of understanding.” This can hardly be taken as representing Kant’s real estimate of the significance of the preceding argument, and would seem to be due to a temporary preoccupation with the problems that centre in the doctrine of schematism. So far, Kant adds in explanation, no account has been taken of the particular manner in which the manifold of empirical intuition is supplied to us. The necessary supplement, consisting of a very brief outline statement of the doctrine of schematism, is given in section 26. It differs from the teaching of the special chapter devoted to schematism in emphasising space equally with time. The doctrine of pure *a priori* manifolds is incidentally asserted. Section 26 concludes by consideration of the question why appearances must conform to the *a priori* categories. It is no more surprising, Kant claims, than that they should agree with the *a priori* forms of intuition. The categories and the intuitional forms are relative to the same subject to which the appearances are relative; and the appearances “as mere representations are subject to no law of connection save that which the combining faculty prescribes.”

The summary of the deduction given in section 27 discusses the three possible theories regarding the origin of pure concepts, viz. those of *generatio aequivoca* (out of experience), *epigenesis*, and *preformation*. The first is disproved by the deduction. The second is the doctrine of the deduction and fulfils all the requirements of demonstration. The proof that the categories are at once independent of experience and yet also universally valid for all experience is of the strongest possible kind, namely, that they make experience itself possible. The third theory, that the categories, while subjective and self-discovered, originate in faculties which are implanted in us by our Creator and which are so formed as to yield concepts in harmony with the laws of nature, lies open to two main objections. In the first place, this is an hypothesis capable of accounting equally well for any kind of *a priori* whatsoever; the predetermined powers of judgment can be multiplied without limit. But a second objection is decisive, namely, that on such a theory the categories would lack the particular kind of necessity which is required. They would express only the necessities imposed upon our thinking by the constitution of our minds, and would not justify any assertion of necessary connection *in the object*. Kant might also have added, that this hypothesis is metaphysical, and therefore offers in explanation of the *empirical* validity of *a priori* concepts a theory which rests upon and involves their *unconditioned* employment. That is a criticism which is reinforced by the teaching of the *Dialectic*.

To return now to the omitted sections 22 to 25. Section 22 makes no fresh contribution to the argument of the first edition. Its teaching in regard to pure intuition and mathematical knowledge has already been commented upon. In section 23 Kant dwells upon an interesting consequence of the argument of the deduction. The categories have a wider scope than the pure forms of sense. Since the argument of the deduction has shown that judgment is the indispensable instrument both for reducing a manifold to the unity of apperception and also for conferring upon representations a relation to an object, it follows that the categories which are simply the possible functions of unity in judgment are valid for any and every consciousness that is sensuously conditioned and whose knowledge is therefore acquired through synthesis of a given manifold. Though such consciousness may not intuit in terms of space and time, it must none the less apprehend objects in terms of the categories. The categories thus extend to *objects of sensuous intuition in general*. They are not, however, valid of objects as such, that is, of things in themselves. As empty relational forms they have *meaning* only in reference to a given matter; and as instruments for the reduction of variety to the unity of apperception their *validity* has been proved only for conscious and sensuous experience. Even if the possibility of a non-sensuous intuitive understanding, capable of apprehending things in themselves, be granted, we have no sufficient ground for asserting that the forms which such understanding will employ must coincide with the categories. These are points which will come up for discussion in connection with Kant's more detailed argument in the chapter on the distinction between phenomena and noumena.

The heading to section 24 is decidedly misleading. The phrase "objects of the senses in general" might be synonymous with "objects of intuition in general" of the preceding section. To interpret it, however, by the contents of the section, it means "objects of *our* senses." This section ought, therefore, to form part of section 26, which in its opening sentences supplies its proper introduction. (It may also be noted that the opening sentences of section 24 are a needless repetition of section 23. This would seem to show that it was not written in immediate continuation of it.) The first three paragraphs of section 24 expound the same doctrine of schematism as that outlined in section 26, save that time alone is referred to. The remaining paragraphs of section 24 deal with the connected doctrine of inner sense. Section 25 deals with certain consequences which follow from that doctrine of inner sense.

THE DOCTRINE OF INNER SENSE

We have still to consider a doctrine of great importance in Kant's thinking, that of inner sense. The significance of this doctrine is almost inversely proportionate to the scantiness and obscurity of the passages in which it is expounded and developed. Much of the indefiniteness and illusiveness of the current interpretations of Kant would seem to be directly traceable to the commentator's failure to appreciate the position which it occupies in Kant's system. Several of Kant's chief results are given as deductions from it, while it itself, in turn, is largely inspired by the need for a secure basis upon which these positions may be made to rest. The relation of the doctrine to its consequences is thus twofold. Kant formulates it in order to safeguard or rather to justify certain conclusions; and yet these conclusions have themselves in part been arrived at owing to his readiness to accept such a doctrine, and to what would seem to have been his almost instinctive feeling of its kinship (notwithstanding the very crude form in which alone he was able to formulate it) with Critical teaching. It was probably one of the earliest of the many new tenets which Kant adopted in the years immediately subsequent to the publication of the inaugural *Dissertation,* but it first received adequate statement in the second edition of the *Critique*. Kant took advantage of the second edition to reply to certain criticisms to which his view of time had given rise, and in so doing was compelled to formulate the doctrine of inner sense in a much more explicit manner. Hitherto he had assumed its truth, but had not, as it would seem, sufficiently reflected upon the various connected conclusions to which he was thereby committed. This is one of the many instances

which show how what is most fundamental in Kant's thinking is frequently that of which he was himself least definitely aware. Like other thinkers, he was most apt to discuss what he himself was inclined to question and feel doubt over. The sources of his insight as well as the causes of his failure often lay beyond the purview of his explicitly developed tenets; and only under the stimulus of criticism was he constrained and enabled to bring them within the circle of reasoned conviction. We may venture the prophecy that if Kant had been able to devote several years more to the maturing of the problems which in the face of so many difficulties he had brought thus far, the doctrine of inner sense, or rather the doctrines to which it gives expression, would have been placed in the forefront of his teaching, and their systematic interconnection, both in the way of ground and of consequence, with all his chief tenets would have been traced and securely established.

This would have involved, however, two very important changes. In the first place, Kant would have had to recognise the unsatisfactory character of the supposed analogy between inner and outer sense. As already remarked, no great thinker, except Locke, has attempted to interpret inner consciousness on the analogy of the senses; and the obscurities of Kant's argument are not, therefore, to be excused on the ground that "the difficulty, how a subject can have an internal intuition of itself, is common to every theory." Secondly, Kant would have had to define the relation in which he conceived this part of his teaching to stand to his theory of consciousness. But both these changes could have been made without requiring that he should give up the doctrines which are mainly responsible for his theory of inner sense, namely, that there can be no awareness of awareness, but only of existences which are objective, and that there is consequently no consciousness of the generative, synthetic processes which constitute consciousness on its subjective side. It is largely in virtue of these conclusions that Kant's phenomenalism differs from the subjective idealism of his predecessors. If we ignore or reject them, merely because of the obviously unsatisfactory manner in which alone Kant has been able to formulate them, we rule ourselves out from understanding the intention and purpose of much that is most characteristic of Critical teaching.

The doctrine of inner sense, as expounded by Locke, suffers from an ambiguity which seems almost inseparable from it, namely, the confusion between inner sense, on the one hand as a *sense* in some degree analogous in nature to what may be called outer sense, and on the other as consisting in self-conscious reflection. This same confusion is traceable throughout the *Critique*, and is, as we shall find, in large part responsible for Kant's failure to recognise, independently of outside criticism, the central and indispensable part which this doctrine is called upon to play in his system.

The doctrine is stated by Kant as follows. Just as outer sense is affected by noumenal agencies, and so yields a manifold arranged in terms of a form peculiar to it, namely, space, so inner sense is affected by the mind itself and its inner state. The manifold thereby caused is arranged in terms of a form peculiar to inner sense, namely, time. The content thus arranged falls into two main divisions. On the one hand we have feelings, desires, volitions, that is, states of the mind in the strict sense, subjective non-spatial existences. On the other hand we have sensations, perceptions, images, concepts, in a word, representations (*Vorstellungen*) of every possible type. These latter all refer to the external world in space, and yet, according to Kant, speaking from the limited point of view of a critique of *knowledge*, form the proper content of inner sense. "...the representations of the outer senses constitute the actual material with which we occupy our minds," "the whole material of knowledge even for our inner sense." (These statements, it may be observed, are first made in the second edition.) As Kant explains himself in B 67-8, he would seem to mean that the mind in the process of "setting" representations of outer sense in space affects itself, and is therefore constrained to arrange the given representations likewise in time. No new content, additional to that of outer sense, is thereby generated, but what previously as object of outer sense existed merely in space is now also subjected to conditions of time. The representations of outer sense are all by their very nature likewise representations of inner sense. To outer sense is due both their

content and their spatial form; to inner sense they owe only the additional form of time; their content remains unaffected in the process of being taken over by a second sense. This yields such explanation as is possible of Kant's assertion in A 33 that "time can never be a determination of outer appearances." He may be taken as meaning that time is never a determination of outer sense *as such*, but only of its contents as always likewise subject to the form of inner sense.

This is how Kant formulates his position from the extreme subjectivist point of view which omits to draw any distinction between representation and its object, between inner states of the self and appearances in space. All representations, he says, all appearances without exception, are states of inner sense, modifications of the mind. Some exist only in time, some exist both in space and in time; but all alike are modes of the identical self, mere representations (*blosse Vorstellungen*). Though appearances may exist outside one another in space, space itself exists only as representation, merely "in us."

Now without seeking to deny that this is a view which we find in the second edition of the *Critique* as well as in the first, and that even in passages which are obviously quite late in date of writing Kant frequently speaks in terms which conform to it, we must be no less insistent in maintaining that an alternative view more and more comes to the front in proportion as Kant gains mastery over the conflicting tendencies that go to constitute his new Critical teaching. From the very first he uses language which implies that *some* kind of distinction must be drawn between representations and objects represented, between subjective cognitive states in the proper sense of the term and existences in space.

"Time can never be a determination of outer appearances. It belongs neither to form nor position, etc. On the other hand it determines the relation of representations in our inner state."

Similarly in those very sentences in which he asserts all appearances to be *blosse Vorstellungen*, a distinction is none the less implied.

"Time is the formal *a priori* condition of all appearances in general. Space, as the pure form of all outer intuition, is as *a priori* condition limited exclusively (*bloss*) to outer appearances. On the other hand as all representations, *whether they have outer things as their object or not*, still in themselves belong, as determinations of the mind, to the inner state, and this inner state is subject to the formal condition of inner intuition, that is of time, time is an *a priori* condition of all appearance whatever. It is, indeed, the immediate condition of the inner appearance (of our souls), and thereby mediately likewise of outer appearances."

As the words which I have italicised show, Kant, even in the very sentence in which he asserts outer representations to be inner states, none the less recognises that appearances in space are not representations in the same meaning of that term as are subjective states. They are the *objects* of representation, not representation itself. The latter alone is correctly describable as a state of the mind. The former may be conditioned by representation, and may therefore be describable as appearances, but are not for that reason to be equated with representation. But before the grounds and nature of this distinction can be formulated in the proper Critical terms, we must consider the reasons which induced Kant to commit himself to this obscure and difficult doctrine of inner sense. As I shall try to show, it is no mere excrescence upon his system; on the contrary, it is inseparably bound up with all his main tenets.

One of the chief influences which constrained Kant to develop this doctrine is the conclusion, so essential to his position, that knowledge must always involve an intuitional manifold in addition to *a priori* forms and concepts. That being so, he was bound to deny to the mind all power of gaining knowledge by mere reflection. If our mental activities and states lay open to direct inspection, we should have to recognise in the mind a non-sensuous intuitional power. Through self-consciousness or reflection we should acquire knowledge independently of sense. Such apprehension, though limited to the mind's own operations and states, would none the less be *knowledge*, and yet would not conform to the conditions which, as the transcendental deduction has shown, are involved in all knowledge. In Kant's view the belief that we possess self-consciousness of this type, a power of reflection thus conceived, is

wholly illusory. To assume any such faculty would be to endow the mind with occult or mystical powers, and would throw us back upon the Leibnizian rationalism, which traces to such reflection our consciousness of the categories, and which rears upon this foundation the entire body of metaphysical science.

The complementary *negative* conclusion of the transcendental deduction is a no less fundamental and constraining influence in compelling Kant to develop a doctrine of inner sense. If all knowledge is knowledge of appearances, or if, as he states his position in the *Analytic of Principles*, our knowledge can extend no further than sense experience and inference from such experience, either knowledge of our inner states must be mediated, like our knowledge of outer objects, by sensation, or we can have no knowledge of them whatsoever. On Critical principles, consistently applied, there can be no middle course between acceptance of an indirect empirical knowledge of the mind and assertion of its unknowableness. Mental activities may perhaps be thought in terms of the pure forms of understanding, but in that case their conception will remain as purely problematic and as indeterminate as the conception of the thing in itself. It is impossible for Kant to admit *immediate* consciousness of the mind's real activities and states, and at the same time to deny that we can have knowledge of things in themselves. The *Aesthetic*, in proving that everything in space and time is appearance, implicitly assumes the impossibility of direct self-conscious reflection; and the transcendental deduction in showing that all knowledge involves as correlative factors both sense and thought, has reinforced this conclusion, and calls for its more explicit recognition, in reference to the more inward aspect of experience.

As we have already noted, Kant's doctrine of inner sense was probably adopted in the early 'seventies, and though it is not itself definitely formulated in the first edition, the chief consequence that follows from it is clearly recognised. Thus in the *Aesthetic* Kant draws the conclusion that, as time is the form of inner sense, everything apprehended in time, and consequently all inner states and activities, can be known only as appearances. The mind (meaning thereby the ultimate conditioning grounds of consciousness) is as indirectly known as is any other mode of noumenal existence. In the *Analytic*, whenever he is called upon to express himself upon this and kindred points, he continues to hold to this position; and in the section on the *Paralogisms* all the main consequences that follow from its acceptance are drawn in the most explicit and unambiguous manner. It is argued that as the inner world, the feelings, volitions and representations of which we are conscious, is a world constructed out of a given manifold yielded by inner sense, and is therefore known only as the appearance of a deeper reality which we have no power of apprehending, it possesses no superiority either of certainty or of immediacy over the outer world of objects in space. We have immediate consciousness of both alike, but in both cases this immediate consciousness rests upon the transcendental synthetic processes whereby such consciousness is conditioned and generated. The transcendental activities fall outside the field of empirical consciousness and therefore of knowledge.

Thus Kant would seem to be maintaining that the radical error committed by the subjective idealists, and with which all the main defects of their teaching are inseparably bound up, lies in their ascription to the mind of a power of direct self-conscious reflection, and consequently in their confusion of the transcendental activities which condition consciousness with the inner states and processes which such consciousness reveals. This has led them to ascribe priority and independence to our inner states, and to regard outer objects as known only by an inference from them. The Critical teaching insists on the distinction between appearance and reality, applies it to the inner life, and so restores to our consciousness of the outer world the certainty and immediacy of which subjective idealism would profess to deprive it. Such are the important conclusions at which Kant arrives in his various "refutations of idealism"; and it will be advisable to consider these refutations in full detail before attempting to complete our statement of his doctrine of inner sense.

KANT'S REFUTATIONS OF IDEALISM

Kant has in a number of different passages attempted to define his Critical standpoint in its distinction from the positions of Descartes and Berkeley. Consideration of these will enable us to follow Kant in his gradual recognition of the manifold consequences to which he is committed by his substitution of inner sense for direct self-conscious intuition or reflection, or rather of the various congenial tenets which it gives him the right consistently to defend and maintain. In Kant's Critical writings we find no less than seven different statements of his refutation of idealism: (I.) in the fourth *Paralogism* of the first edition of the *Critique*; (II.) in section 13 (*Anm.* ii. and iii.) of the *Prolegomena*; (III.) in section 49 of the *Prolegomena*; (IV.) in the second appendix to the *Prolegomena*; (V.) in sections added in the second edition at the conclusion of the *Aesthetic* (B 69 ff.); (VI.) in the "refutation of idealism" (B 274-8), in the supplementary section at the end of the section on the *Postulates* (B 291-4), and in the note to the new preface (B xxxix-xl); (VII.) in the "refutation of problematic idealism" given in the *Seven Small Papers* which originated in Kant's conversations with Kiesewetter. Consideration of these in the above order will reveal Kant's gradual and somewhat vacillating recognition of the new and revolutionary position which alone genuinely harmonises with Critical principles. But first we must briefly consider the various meanings which Kant at different periods assigned to the term idealism. Even in the *Critique* itself it is employed in a great variety of diverse connotations.

In the pre-Critical writings the term idealism is usually employed in what was its currently accepted meaning, namely, as signifying any philosophy which denied the existence of an independent world corresponding to our subjective representations. But even as thus used the term is ambiguous. It may signify either denial of a *corporeal* world independent of our representations or denial of an immaterial world "corresponding to" the represented material world, *i.e.* the denial of *Dinge an sich*. For there are traceable in Leibniz's writings two very different views as to the reality of the material world. Sometimes the monads are viewed as purely intelligible substances without materiality of any kind. The kingdom of the extended is set into the representing subjects; only the immaterial world of unextended purely spiritual monads remains as independently real. At other times the monads, though in themselves immaterial, are viewed as constituting through their coexistence an independent material world and a materially occupied space. Every monad has a spatial sphere of activity. The material world is an objective existence due to external relations between the monads, not a merely subjective existence internal to each of them. This alternation of standpoints enabled Leibniz's successors to deny that they were idealists; and as the more daring and speculative aspects of Leibniz's teaching were slurred over in the process of its popularisation, it was the second, less consistent view, which gained the upper hand. Wolff, especially in his later writings, denounces idealism; and in the current manuals, sections in refutation of idealism became part of the recognised philosophical teaching. Idealism still, however, continued to be used ambiguously, as signifying indifferently either denial of material bodies or denial of things in themselves. This is the dual meaning which the term presents in Kant's pre-Critical writings. In his *Dilucidatio* (1755) he refutes idealism by means of the principle that a substance cannot undergo changes unless it is a substance independent of other substances. Obviously this argument can at most prove the existence of an independent world, not that it is spatial or material. And as Vaihinger adds, it does not even rule out the possibility that changes find their source in a Divine Being. In the *Dreams of a Visionseer* (1766) Swedenborg is described as an idealist, but without further specification of the exact sense in which the term is employed. In the inaugural *Dissertation* (1770) idealism is again rejected, on the ground that sense-affection points to the presence of an intelligible object or *noumenon*.

In Kant's class lectures on metaphysics, which fall, in part at least, between 1770 and 1781, the term idealism is employed in a very different sense, which anticipates its use in the *Appendix* to the *Prolegomena*. The teaching of the *Dissertation*, that things in themselves are knowable, is now described as dogmatic, Platonic, mystical (*schwärmerischer*) idealism. He still rejects the idealism of Berkeley,

and still entitles it simply idealism, without limiting or descriptive predicates. But now also he employs the phrase "problematic idealism" as descriptive of his own new position. This is, of course, contrary to his invariable usage elsewhere, but is interesting as showing that about this time his repugnance to the term idealism begins to give way, and that he is willing to recognise that the relation of the Critical teaching to idealism is not one of simple opposition. He now begins to regard idealism as a factor, though a radically transformed factor, in his own philosophy.

Study of the *Critique* reinforces this conclusion. In the *Aesthetic* Kant teaches the "transcendental ideality" of space and time; and in the *Dialectic* (in the fourth *Paralogism*) describes his position as idealism, though with the qualifying predicate transcendental. But though this involves an extension of the previous connotation of the term idealism, and might therefore have been expected to increase the existing confusion, it has the fortunate effect of constraining Kant to recognise and discriminate the various meanings in which it may be employed. This is done somewhat clumsily, as if it were a kind of afterthought. In the introductory syllogism of the fourth *Paralogism* Descartes' position and his own are referred to simply as idealism and dualism respectively. The various possible sub-species of idealism as presented in the two editions of the *Critique* and in the *Prolegomena* may be tabulated as follows:

Idealism–

Material

Sceptical

Problematic (the position of Descartes).

Sceptical in the stricter and more usual sense (the position of Hume).

Dogmatic (the position of Berkeley).

Formal or Critical or Transcendental (Kant's own position).

The distinction between problematic idealism and idealism of the more strictly sceptical type is not clearly drawn by Kant. Very strangely Kant in this connection never mentions Hume: the reference in B xxxix *n*. is probably not to Hume but to Jacobi. Transcendental idealism is taken as involving an empirical realism and dualism, and is set in opposition to transcendental realism which is represented as involving empirical idealism. In B xxxix *n*. Kant speaks of "psychological idealism," meaning, as it would seem, material or non-Critical idealism.

In the second appendix to the *Prolegomena* Kant draws a further distinction, in line with that already noted in his lectures on metaphysics. Tabulated it is as follows:

Idealism–

Mystical, in the sense of belief in and reliance on a supposed human power of intellectual intuition. It is described as idealism in the strict (*eigentlich*) sense — the position of the Eleatics, of Plato and Berkeley.

Formal or Critical — Kant's own position.

This latter classification can cause nothing but confusion. The objections that have to be made against it from Kant's own critical standpoint are stated below.

Let us now consider, in the order of their presentation, the various refutations of idealism which Kant has given in his Critical writings.

I. Refutation of Idealism as given in First Edition of "Critique" (A 366-80). — This refutation is mainly directed against Descartes, who is mentioned by name in A 367. Kant, as Vaihinger suggests, was very probably led to recognise Descartes' position as a species of idealism in the course of a re-study of Descartes before writing the section on the *Paralogisms*. As already pointed out, this involves the use of the term idealism in a much wider sense than that which was usually given to it in Kant's own day. In the development of his argument Kant also wavers between two very different definitions of this idealism, as being denial of *immediate* certainty and as denial of all certainty. The second interpretation, which would make it apply to Hume rather than to Descartes, is strengthened in the minds of his readers by his further distinction between dogmatic and sceptical idealism, and the identification of the idealism under consideration with the latter. The title problematic which Kant in the second edition applies to Descartes' position suffers from this same ambiguity. As a matter of fact, Kant's refutation applies equally well to either position. The teaching of Berkeley, which coincides with dogmatic idealism as here defined by Kant, namely, as consisting in the contention that the conception of matter is inherently contradictory, is not dwelt upon, and the appended promise of refutation is not fulfilled.

Descartes' position is stated as follows: only our own existence and inner states are immediately apprehended by us; all perceptions are modifications of inner sense; and the existence of external objects can therefore be asserted only by an inference from the inner perceptions viewed as effects. In criticism, Kant points out that since an effect may result from more than one cause, this inference to a quite determinate cause, viz. objects as bodies in space, is doubtfully legitimate. The cause of our inner states may lie within and not without us, and even if external, need not consist in spatial objects. Further, leaving aside the question of a possible alternative to the assumption of independent material bodies, the assertion of the existence of such objects would, on Descartes' view, be merely conjectural. It could never have certainty in any degree equivalent to that possessed by the experiences of inner sense.

"By an idealist, therefore, we must not understand one who denies the existence of outer objects of the senses, but only one who does not admit that their existence is known through immediate perception, and who therefore concludes that we can never, by way of any possible experience, be completely certain of their reality."

No sooner is the term idealist thus clearly defined than Kant, in keeping with the confused character of the entire section, proceeds to the assertion (*a*) that there are idealists of another type, namely, transcendental idealists, and (*b*) that the non-transcendental idealists sometimes also adopt a dogmatic position, not merely questioning the immediacy of our knowledge of matter, but asserting it to be inherently contradictory. All this points to the composite origin of the contents of this section.

Transcendental idealism is opposed to empirical idealism. It maintains that phenomena are representations merely, not things in themselves. Space and time are the sensuous forms of our intuitions. Empirical idealism, on the other hand, goes together with transcendental realism. It maintains that space and time are given as real in themselves, in independence of our sensibility. (Transcendental here, as in the phrase "transcendental ideality," is exactly equivalent to transcendent.) But such a contention is inconsistent with the other main tenet of empirical idealism. For if our inner representations have to be taken as entirely distinct from their objects, they cannot yield assurance *even of the existence* of these objects. To the transcendental idealist no such difficulty is presented. His position naturally combines with empirical realism, or, as it may also be entitled, empirical dualism. Material bodies in space, being merely subjective representations, are immediately apprehended. The existence of matter can be established "without our requiring to issue out beyond our bare self-consciousness or to assume anything

more than the certainty of the representations in us, *i.e.* of the *cogito ergo sum*." Though the objects thus apprehended are outside one another in space, space itself exists only in us.

"Outer objects (bodies) are mere appearances, and are therefore nothing but a species of my representations, the objects of which are something only through these representations. Apart from them they are nothing. Thus outer things exist as well as I myself, and both, indeed, upon the immediate witness of my self-consciousness...."

The only difference is that the representation of the self belongs only to inner, while extended bodies also belong to outer sense. There is thus a dualism, but one that falls entirely within the field of consciousness, and which is therefore empirical, not transcendental. There is indeed a transcendental object which "in the transcendental sense may be outside us," but it is unknown and is not in question. It ought not to be confused with our representations of matter and corporeal things.

From this point the argument becomes disjointed and repeats itself, and there is much to be said in support of the contention of Adickes that the remainder of the section is made up of a number of separate interpolations. First, Kant applies the conclusion established in the *Postulates of Empirical Thought*, viz. that reality is revealed only in sensation. As sensation is an element in all outer perception, perception affords immediate certainty of real existence, Kant next enters upon a eulogy of sceptical idealism as "a benefactor of human reason." It brings home to us the utter impossibility of proving the existence of matter on the assumption that spatial objects are things in themselves, and so constrains us to justify the assertions which we are at every moment making. And such justification is, Kant here claims, only possible if we recognise that outer objects as mere representations are immediately known. In the next paragraph we find a sentence which, together with the above eulogistic estimate of the merits of idealism, shows how very far Kant, at the time of writing, was from feeling the need of differentiating his position from that of subjectivism. The sentence is this:

"We cannot be sentient of what is outside ourselves, but only of what is in ourselves, and the whole of our self-consciousness therefore yields nothing save merely our own determinations."

It is probable, indeed, that the paragraph in which this occurs is of very early origin, prior to the development of the main body of the *Analytic*; for in the same paragraph we also find the assertion, utterly at variance with the teaching of the *Analytic* and with that of the first and third *Paralogisms*, that "the thinking ego" is known phenomenally as *substance*. We seem justified in concluding that the various manuscripts which have gone to form this section on the fourth *Paralogism* were written at an early date within the Critical period.

We may note, in passing, two sentences in which, as in that quoted above, a distinction between representations and their objects is recognised in wording if not in fact.

"All outer perception furnishes immediate proof of something actual in space, or rather is the actual itself. To this extent empirical realism is beyond question, *i.e.* there corresponds to our outer perceptions something actual in space."

Again in A 377 the assertion occurs that "our outer senses, as regards the data from which experience can arise, have their actual corresponding objects in space." Certainly these statements, when taken together with the other passages in this section, form a sufficiently strange combination of assertion and denial. Either there is a distinction between representation and its object or there is not; if the former, then objects in space are not merely representations; if the latter, then the "correspondence" is merely that of a thing with itself.

This refutation of idealism will not itself stand criticism. For two separate reasons it entirely fails to attain its professed end. In the first place, it refutes the position of Descartes only by virtually accepting the still more extreme position of Berkeley. Outer objects, Kant argues, are immediately known because they are ideas merely. There is no need for inference, because there is no transcendence of the domain of

our inner consciousness. In other words, Kant refutes the problematic idealism of Descartes by means of the more subjective idealism of Berkeley. The "dogmatic" idealism of Berkeley in the form in which Kant here defines it, namely, as consisting in the assertion that the notion of an independent spatial object involves inherent contradictions, is part of his own position. For that reason he was bound to fail in his promise to refute such dogmatic idealism. Fortunately he never even attempts to do so. In the second place, Kant ignores the fact that he has himself adopted an "idealist" view of inner experience. Inner experience is not for him, as it was for Descartes, the immediate apprehension of genuine reality. As it is only appearance, the incorporation of outer experience within it, so far from establishing the reality of the objects of outer sense, must rather prove the direct contrary. No more is really established than Descartes himself invariably assumes, namely, the actual existence of mental representations of a corporeal world in space. Descartes' further assertion that the world of things in themselves can be inferred to be material and spatial, Kant, of course, refuses to accept. On this latter point Kant is in essential agreement with Berkeley.

It is by no means surprising that Kant's first critics, puzzled and bewildered by the obscurer and more difficult portions of the *Critique*, should have based their interpretation of Kant's general position largely upon the above passages; and that in combining the extreme subjective idealism which Kant there advocates with his doctrine that the inner life of ever-changing experiences is itself merely ideal, should have come to the conclusion that Kant's position is an extension of that of Berkeley. Pistorius objected that in making outer appearances relative to an inner consciousness which is itself appearance, Kant is reducing everything to mere illusion. Hamann came to the somewhat similar conclusion, that Kant, notwithstanding his very different methods of argument, is "a Prussian Hume," in substantial agreement with his Scotch predecessor.

II. "Prolegomena," Section 13, Notes II and III. — In the *Prolegomena* Kant replies to the criticism which the first edition of the *Critique* had called forth, that his position is an extension of the idealism of Descartes, and even more thoroughgoing than that of Berkeley. Idealism he redefines in a much narrower sense, which makes it applicable only to Berkeley

"...as consisting in the assertion that there are none but thinking beings, and that all other things which we suppose ourselves to perceive in intuition are nothing but representations in the thinking beings, to which no object external to them corresponds in fact."

In reply Kant affirms his unwavering belief in the reality of *Dinge an sich*

"...which though quite unknown to us as to what they are in themselves, we yet know by the representations which their influence on our sensibility procures us.... Can this be termed idealism? It is the very contrary."

Kant adds that his position is akin to that of Locke, differing only in his assertion of the subjectivity of the primary as well as of the secondary qualities.

"I should be glad to know what my assertions ought to have been in order to avoid all idealism. I suppose I ought to have said, not only that the representation of space is perfectly conformable to the relation which our sensibility has to objects (for that I have said), but also that it is completely similar to them — an assertion in which I can find as little meaning as if I said that the sensation of red has a similarity to the property of cinnabar which excites this sensation in me."

Kant is here very evidently using the term idealism in the narrowest possible meaning, as representing only the position of Berkeley, and as excluding that of Descartes and Leibniz. Such employment of the term is at variance with his own previous usage. Though idealism here corresponds to the "dogmatic idealism" of A 377, it is now made to concern the assertion or denial of things in themselves, not as previously the problem of the reality of material objects and of space. Kant is also ignoring the fact, which he more than once points out in the *Critique*, that his philosophy cannot prove that the cause of our sensations is without and not within us. His use of "body" as a name for the thing in itself is likewise

without justification. This passage is mainly polemical; it is hardly more helpful than the criticism to which it was designed to reply.

In Section 13, Note iii., Kant meets the still more extreme criticism (made by Pistorius), that his system turns all the things of the world into mere illusion (*Schein*). He distinguishes transcendental idealism from "the mystical and visionary idealism of Berkeley" on the one hand, and on the other from the Cartesian idealism which would convert mere representations into things in themselves. To obviate the ambiguities of the term transcendental, he declares that his own idealism may perhaps more fitly be entitled Critical. This distinction between mystical and Critical idealism connects with the contents of the second part of the Appendix, treated below.

III. "Prolegomena," Section 49. — This is simply a repetition of the argument of the fourth *Paralogism*. The Cartesian idealism, now (as in B 274) named material idealism, is alone referred to. The Cartesian idealism does nothing, Kant says, but distinguish external experience from dreaming. There is here again the same confusing use of the term "corresponds."

"That something actual without us not only corresponds but must correspond to our external perceptions can likewise be proved...."

IV. "Prolegomena," Second Part of the Appendix. — Kant here returns to the distinction, drawn in Section 13, Note iii., between what he now calls "idealism proper (*eigentlicher*)," *i.e.* visionary or mystical idealism, and his own.

"The position of all genuine idealists from the Eleatics to Bishop Berkeley is contained in this formula: 'All cognition through the senses and experience is nothing but mere illusion, and only in the ideas of pure understanding and Reason is there truth.' The fundamental principle ruling all my idealism, on the contrary, is this: 'All cognition of things solely from pure understanding or pure Reason is nothing but mere illusion and only in experience is there truth.'"

This mode of defining idealism can, in this connection, cause nothing but confusion. Its inapplicability to Berkeley would seem to prove that Kant had no first-hand knowledge of Berkeley's writings. As Kant's Note to the Appendix to the *Prolegomena* shows, he also had Plato in mind. But the definition given of "the fundamental principle" of his own idealism is almost equally misleading. It omits the all-essential point, that for Kant experience itself yields truth only by conforming to *a priori* concepts. As it is, he proceeds to criticise Berkeley for failure to supply a sufficient criterion of distinction between truth and illusion. Such criterion, he insists, is necessarily *a priori*. The Critical idealism differs from that of Berkeley in maintaining that space and time, though sensuous, are *a priori*, and that in combination with the pure concepts of understanding they

"...prescribe *a priori* its law to all possible experience: the law which at the same time yields the sure criterion for distinguishing within experience truth from illusion. My so-called idealism — which properly speaking is Critical idealism — is thus quite peculiar in that it overthrows ordinary idealism, and that through it all *a priori* cognition, even that of geometry, now attains objective reality, a thing which even the keenest realist could not assert till I had proved the ideality of space and time."

V. Sections added in Second Edition at the Conclusion of the Aesthetic. (B 69 ff.) — Kant here again replies to the criticism of Pistorius that all existence has been reduced to the level of illusion (*Schein*). His defence is twofold: first, that in naming objects appearances he means to indicate that they are independently grounded, or, as he states it, are "something actually given." If we *mis*interpret them, the result is indeed illusion, but the fault then lies with ourselves and not with the appearances as presented. Secondly, he argues that the doctrine of the ideality of space and time is the only secure safeguard against scepticism. For otherwise the contradictions which result from regarding space and time as independently real will likewise hold of their contents, and everything, including even our own existence, will be rendered illusory. "The good Berkeley [observing these contradictions] cannot, indeed, be blamed for reducing bodies to mere illusion." This last sentence may perhaps be taken as supporting the view that

notwithstanding the increased popularity of Berkeley in Germany and the appearance of new translations in these very years, Kant has not been sufficiently interested to acquire first-hand knowledge of Berkeley's writings. The epithet employed is characteristic of the rather depreciatory attitude which Kant invariably adopts in speaking of Berkeley.

VI. "Refutation of Idealism" in Second Edition of the "Critique." (B 274-9, supplemented by note to B xxxix.). — The refutation opens by equating idealism with material idealism (so named in contradistinction to his own "formal or rather Critical" teaching). Within material idealism Kant distinguishes between the problematic idealism of Descartes, and the dogmatic idealism of Berkeley. The latter has, he says, been overthrown in the *Aesthetic*. The former alone is dealt with in this refutation. This is the first occurrence in the *Critique* of the expression "problematic idealism": it is nowhere employed in the first edition. Problematic idealism consists in the assertion that we are incapable of having experience of any existence save our own; only our inner states are immediately apprehended; all other existences are determined by inference from them. The refutation consists in the proof that we have experience, and not mere imagination of outer objects. This is proved by showing that inner experience, unquestioned by Descartes, is possible only on the assumption of outer experience, and that this latter is as immediate and direct as is the former.

Thesis. — The empirically determined consciousness of my own existence proves the existence of objects in space outside me.

Proof. — I am conscious of my own existence as determined in time. Time determination presupposes the perception of something permanent. But nothing permanent is intuitable in the empirical self. On the cognitive side (*i.e.* omitting feelings, etc., which in this connection are irrelevant), it consists solely of representations; and these demand a permanent, distinct from ourselves, in relation to which their changes, and so my own existence in the time wherein they change, may be determined. Thus perception of this permanent is only possible through a thing outside, and not through the mere representation of a thing outside. And the same must hold true of the determination of my existence in time, since this also depends upon the apprehension of the permanent. That is to say, the consciousness of my existence is at the same time an immediate awareness of the existence of other things outside me.

In the note to the *Preface* to the second edition occurs the following emphatic statement.

"Representation of something permanent in existence is not the same as permanent representation. For though the representation [of the permanent] may be very changing and variable like all our other representations, not excepting those of matter, it yet refers to something permanent. This latter must therefore be an external thing distinct from all my representations, and its existence must be included in the determination of my own existence, constituting with it but a single experience such as would not take place even internally if it were not also at the same time, in part, external. How this should be possible we are as little capable of explaining further as we are of accounting for our being able to think the abiding in time, the coexistence of which with the variable generates the conception of change."

The argument of this note varies from that of B 274 ff. only in its use of an ambiguous expression which is perhaps capable of being taken as referring to things in themselves, but which does not seem to have that meaning. "I am just as certainly conscious that there are things outside me which relate to my sense...."

In B 277-8 Kant refers to the empirical fact that determination of time can be made only by relation to outer happenings in space, such as the motion of the sun. This is a point which is further developed in another passage which Kant added in the second edition.

"...in order to understand the possibility of things in conformity with the categories, and so to demonstrate the objective reality of the latter, we need not merely intuitions, but intuitions that are in all cases outer intuitions. When, for instance, we take the pure concepts of relation, we find firstly that in order to obtain something *permanent* in intuition corresponding to the concept of substance, and so to

demonstrate the objective reality of this concept, we require an intuition in space (of matter). For space alone is determined as permanent, while time, and therefore everything that is in inner sense, is in constant flux. Secondly, in order to exhibit *change* as the intuition corresponding to the concept of *causality*, we must take as our example motion, *i.e.* change in space. Only in this way can we obtain the intuition of changes, the possibility of which can never be comprehended through any pure understanding. For change is combination of contradictorily opposed determinations in the existence of one and the same thing. Now how it is possible that from a given state of a thing an opposite state should follow, not only cannot be conceived by any reason without an example, but is actually incomprehensible to reason without intuition. The intuition required is the intuition of the movement of a point in space. The presence of the point in different spaces (as a sequence of opposite determinations) is what first yields to us an intuition of change. For in order that we may afterwards make inner changes likewise thinkable, we must represent time (the form of inner sense) figuratively as a line, and the inner change through the drawing of this line (motion), and so in this manner by means of outer intuition make comprehensible the successive existence of ourselves in different states. The reason of this is that all change, if it is indeed to be perceived as change, presupposes something permanent in intuition, and that in inner sense no permanent intuition is to be met with. Lastly, the possibility of the category of *community* cannot be comprehended through mere reason alone. Its objective reality is not to be understood without intuition and indeed outer intuition in space."

In this passage Kant is modifying the teaching of the first edition in two very essential respects. In the first place, he is now asserting that consciousness of both space and motion is necessary to consciousness of time; and in the second place, he is maintaining that the *categories* can acquire meaning only by reference to outer appearances. Had Kant made all the necessary alterations which these new positions involve, he would, as we shall find, have had entirely to recast the chapters on *Schematism* and on the *Principles of Understanding*. Kant was not, however, prepared to make such extensive alterations, and these chapters are therefore left practically unmodified. This is one of the many important points in which the reader is compelled to reinterpret passages of earlier date in the light of Kant's later utterances. There is also a further difficulty. Does Kant, in maintaining that the categories can *acquire* significance only in reference to outer perception, also mean to assert that their subsequent employment is limited to the mechanical world of the material sciences? This is a point in regard to which Kant makes no quite direct statement; but indirectly he would seem to indicate that that was not his intention. He frequently speaks of the states of inner sense as mechanically conditioned. Sensations, feelings, and desires, are, he would seem to assert, integral parts of the unitary system of phenomenal existence. Such a view is not, indeed, easily reconcilable with his equating of the principle of substance with the principle of the conservation of matter. There are here two conflicting positions which Kant has failed to reconcile: the traditional dualistic attitude of Cartesian physics and the quite opposite implications of his Critical phenomenalism. When the former is being held to, Kant has to maintain that psychology can never become a science; but his Critical teaching consistently developed seems rather to support the view that psychology, despite special difficulties peculiar to its subject matter, can be developed on lines strictly analogous to those of the material sciences.

We may now return to Kant's main argument. This new refutation of idealism in the second edition differs from that given in the fourth *Paralogism* of the first edition, not only in method of argument but also in the nature of the conclusion which it seeks to establish. Indeed it proves the *direct opposite* of what is asserted in the first edition. The earlier proof sought to show that, as regards immediacy of apprehension and subjectivity of existence, outer appearances stand on the same level as do our inner experiences. The proof of the second edition, on the other hand, argues that though outer appearances are immediately apprehended they must be existences distinct from the subjective states through which the mind represents them. The two arguments agree, indeed, in establishing immediacy, but as that which is

taken as immediately known is in the one case a subjective state and in the other is an independent existence, the immediacy calls in the two cases for entirely different methods of proof. The first method consisted in viewing outer experiences as a subdivision within our inner experiences. The new method views their relation as not that of including and included, but of conditioning and conditioned; and it is now to outer experience that the primary position is assigned. So far is outer experience from being possible only as part of inner experience, that on the contrary inner experience, consciousness of the flux of inner states, is only possible in and through experience of independent material bodies in space. A sentence from each proof will show how completely their conclusions are opposed.

"Outer objects (bodies) are mere appearances, and are therefore nothing but a species of my representations, the objects of which are something only through these representations. Apart from them they are nothing." "Perception of this permanent is possible only through a *thing* outside me, and not through the mere *representation* of a thing outside me."

The one sentence asserts that outer objects are representations; the other argues that they must be existences distinct from their representations. The one inculcates a subjectivism of a very extreme type; the other results in a realism, which though ultimately phenomenalist, is none the less genuinely objective in character. This difference is paralleled by the nature of the idealisms to which the two proofs are opposed and which they profess to refute. The argument of the *Paralogism* of the first edition is itself Berkeleian, and refutes only the problematic idealism of Descartes. The argument of the second edition, though formally directed only against Descartes, constitutes a no less complete refutation of the position of Berkeley. In its realism it has kinship with the positions of Arnauld and of Reid, while, in attempting to combine this realism with due recognition of the force and validity of Hume's sceptical philosophy, it breaks through all previous classifications, formulates a profoundly original substitute for the previously existing theories, and inaugurates a new era in the theory of knowledge.

As already pointed out, Kant restates the distinction between the subjective and the objective in a manner which places the problem of knowledge in an entirely new light. The subjective is not to be regarded as opposite in nature to the objective, but as a subspecies within it. It does not proceed parallel with the sequence of natural existences, but is itself part of the natural system which consciousness reveals. Sensations, in the form in which they are consciously apprehended by us, do not constitute our consciousness of nature, but are themselves events which are possible only under the conditions which the natural world itself supplies. The Cartesian dualism of the subjective and the objective is thus subordinated to the Critical distinction between appearance and reality. Kant's phenomenalism is a genuine alternative to the Berkeleian teaching, and not, as Schopenhauer and so many others have sought to maintain, merely a variant upon it.

The striking contradiction between Kant's various refutations of idealism has led some of Kant's most competent critics to give a different interpretation of the argument of the second edition from that given above. These critics take the independent and permanent objects which are distinguished from our subjective representations to be things in themselves. That is to say, they interpret this refutation as based upon Kant's semi-Critical doctrine of the transcendental object (in the form in which it is employed for the solution of the *Antinomies*), and so as agreeing with the refutation given in the *Prolegomena*. Kant is taken as rejecting idealism because of his belief in things in themselves. This is the view adopted by Benno Erdmann, Sidgwick, A. J. Balfour.

As Vaihinger, Caird, and Adamson have shown, such an interpretation is at complete variance with the actual text. This is, indeed, so obvious upon unbiassed examination that the only point which repays discussion is the question, why Benno Erdmann and those who follow him should have felt constrained to place so unnatural an interpretation upon Kant's words. The explanation seems to lie in Erdmann's convinced belief, plainly shown in all his writings upon Kant, that the *Critique* expounds a single consistent and uniform standpoint. If such belief be justified, there is no alternative save to interpret

Kant's refutation of idealism in the manner which Erdmann adopts. For as the subjectivism of much of Kant's teaching is beyond question, consistency can be obtained only by sacrifice of all that conflicts with it. Thus, and thus alone, can Erdmann's rendering of the refutation of the second edition be sustained; the actual wording, taken in and by itself, does not support it. Kant here departs from his own repeated assertion, in the second hardly less than in the first edition of the *Critique*, of the subjectivity of outer appearances. But, as Vaihinger justly contends, Kant was never greater than in this violation of self-consistency, "never more consistent than in this inconsistency." Tendencies, previously active but hitherto inarticulate, are at last liberated. If the chrysalis stage of the intense brooding of the twelve years of Critical thinking was completed in the writing of the first edition of the *Critique*, the philosophy which then emerged only attains to mature stature in those extensions of the *Critique*, scattered through it from *Preface* to *Paralogisms*, which embody this realistic theory of the independent existence of material nature. For this theory is no mere external accretion, and no mere reversal of subordinate tenets, but a ripening of germinal ideas to which, even in their more embryonic form, the earlier Critical teaching owed much of its inspiration, and which, when consciously adopted and maturely formulated, constitute such a deepening of its teaching as almost amounts to transformation. The individual self is no longer viewed as being the bearer of nature, but as its offspring and expression, and as being, like nature, interpretable in its twofold aspect, as appearance and as noumenally grounded. The bearer of appearance is not the individual subject, but those transcendental creative agencies upon which man and nature alike depend. Both man and nature transcend the forms in which they are apprehended; and nothing in experience justifies the giving of such priority to the individual mind as must be involved in any acceptance of subjectivist theory. Though man is cognisant of space and time, comprehending them within the limits of his consciousness, and though in all experience unities are involved which cannot originate within or be explained by experience, it is no less true that man is himself subject to the conditions of space and time, and that the synthetic unities which point beyond experience do not carry us to a merely individual subject. If man is not a part or product of nature, neither is nature the product of man. Kant's transcendentalism, in its maturest form, is genuinely phenomenalist in character. That is the view which has already been developed above, in the discussion of Kant's transcendental deduction. I shall strive to confirm it by comparison of the teaching of the two editions of the *Critique* in regard to the reality of outer appearances.

Schopenhauer, to whom this new development of the Critical teaching was altogether anathema, the cloven hoof of the Hegelian heresies, denounced it as a temporary and ill-judged distortion of the true Critical position, maintaining that it is incapable of combination with Kant's central teaching, and that it finds no support in the tenets, pure and unperverted, of the first edition. Kant, he holds, is here untrue to himself, and temporarily, under the stress of polemical discussion, lapses from the heights to which he had successfully made his way, and upon which he had securely established, in agreement with Plato and in extension of Berkeley, the doctrine of all genuine philosophical thinking, the doctrine of the *Welt als Vorstellung*.

We may agree with Schopenhauer in regarding those sections of the first edition of the *Critique* which were omitted in the second edition as being a permanently valuable expression of Kantian thought, and as containing much that finds no equally adequate expression in the passages which were substituted for them; and yet may challenge his interpretation of both editions alike. If, as we have already been arguing, we must regard Kant's thinking as in large degree tentative, that is, as progressing by the experimental following out of divergent tendencies, we may justly maintain that among the most characteristic features of his teaching are the readiness with which he makes changes to meet deeper insight, and the persistency with which he strives to attain a position in which there will be least sacrifice or blurring of any helpful distinction, and fullest acknowledgment of the manifold and diverse considerations that are really essential. Recognising these features, we shall be prepared to question the legitimacy of Schopenhauer's

opposition between the teaching of the two editions. We shall rather expect to find that the two editions agree in the alternating statement and retraction of conflicting positions, and that the later edition, however defective in this or that aspect as compared with the first edition, none the less expresses the maturer insight, and represents a further stage in the development of ideas that have been present from the start. It may perhaps for this very reason be more contradictory in its teaching; it will at least yield clearer and more adequate formulation of the diverse consequences and conflicting implications of the earlier tenets. It will be richer in content, more open-eyed in its adoption of mutually contradictory positions, freer therefore from unconscious assumptions, and better fitted to supply the data necessary for judgment upon its own defects. Only those critics who are blind to the stupendous difficulties of the tasks which Kant here sets himself, and credulous of their speedy and final completion, can complain of the result. Philosophical thinkers of the most diverse schools in Germany, France, and England, have throughout the nineteenth century received from the *Critique* much of their inspiration. The profound influence which Kant has thus exercised upon succeeding thought must surely be reckoned a greater achievement than any that could have resulted from the constructing of a system so consistent and unified, that the alternative would lie only between its acceptance and its rejection. Ultimately the value of a philosophy consists more in the richness of its content and the comprehensiveness of its dialectic, than in the logical perfection of its formal structure. The latter quality is especially unfitted to a philosophy which inaugurated a new era, and formulated the older problems in an altogether novel manner. Under such conditions fertility of suggestion and readiness to modify or even recast adopted positions, openness to fuller insight acquired through the very solutions that may at first have seemed to satisfy and close the issues, are more to be valued than the power to remove contradictions and attain consistency. This is the point of view which I shall endeavour to justify in reference to the matters now before us. In particular there are two points to be settled: first, whether and how far the argument of the second edition is prefigured in the first edition; and secondly, whether and to what extent it harmonises with, and gives expression to, all that is most central and genuinely Critical in both editions.

In the first place we must observe that the fourth *Paralogism* occurs in a section which bears all the signs of having been independently written and incorporated later into the main text. It is certainly of earlier origin than those sections which represent the third and fourth layers of the deduction of the first edition, and very possibly was composed in the middle ‘seventies. Indeed, apart from single paragraphs which may have been added in the process of adapting it to the main text, it could quite well, so far as its refutation of idealism is concerned, be of even earlier date. The question as to the consistency of the refutation of the second edition with the teaching of the first edition must therefore chiefly concern those parts of the *Analytic* which connect with the later forms of the transcendental deduction, that is to say, with the transcendental deduction itself, with the *Analogies* and *Postulates*, and with particular paragraphs that have been added in other sections. We have already noted how Kant from the very first uses terms which involve the drawing of a distinction between representations and their objects. Passages in which this distinction occurs can be cited from both the *Aesthetic* and the *Analytic*, and two such occur in the fourth *Paralogism* itself. Objects, he says, “correspond” to their representations. A variation in expression is found in such passages as the following:

“...the objects of outer perception also actually exist (*auch wirklich sind*) in that very form in which they are intuited in space....”

Such language is meaningless, and could never have been chosen, if Kant had not, even in the earlier stages of his thinking, postulated a difference between the existence of an object and the existence of its representation. He must at least have distinguished between the representations and their content. That, however, he could have done without advancing to the further assertion of their independent existence. Probably he was not at all clear in his own mind, and was too preoccupied with the other complexities of his problem, to have thought out his position to a definite decision. When, however, as in the fourth

Paralogism, he made any attempt so to do, he would seem to have felt constrained to adopt the extreme subjectivist position. Expressions to that effect are certainly very much more common than those above mentioned. This is what affords Schopenhauer such justification, certainly very strong, as he can cite for regarding subjectivism as the undoubted teaching of the first edition.

When, however, we also take account of the very different teaching which is contained in the important section on the *Postulates of Empirical Thought*, the balance of evidence is decisively altered. The counter-teaching, which is suggested by certain of the conflicting factors of the transcendental deduction and of the *Analogies*, here again receives clear and detailed expression. This is the more significant, as it is in this section that Kant sets himself formally to define what is to be understood by empirical reality. It thus contains his, so to speak, official declaration as to the mode of existence possessed by outer appearances. The passage chiefly relevant is as follows:

"If the existence of the thing is bound up with some perceptions according to the principles of their empirical connection (the Analogies), we can determine its existence antecedently to the perception of it, and consequently, to that extent, in an *a priori* manner. For as the existence of the thing is bound up with our perceptions in a possible experience, we are able in the series of possible perceptions, and under the guidance of the Analogies, to make the transition from our actual perception to the thing in question. Thus we discover the existence of a magnetic matter pervading all bodies from the perception of the attracted iron filings, although the constitution of our organs cuts us off from all immediate perception of that matter. For in accordance with the laws of sensibility and the connection of our perceptions in a single experience, we should, were our senses more refined, actually experience it in an immediate empirical intuition. The grossness of our senses does not in any way decide the form of possible experience in general."

Now it cannot, of course, be argued that the above passage is altogether unambiguous. We can, if we feel sufficiently constrained thereto, place upon it an interpretation which would harmonise it with Kant's more usual subjectivist teaching, namely as meaning that in the progressive construction of experience, or in the ideal completion which follows upon assumption of more refined sense-organs, possible empirical realities are made to become, or are assumed to become, real, but that until the possible experiences are thus realised in fact or in ideal hypothesis, they exist outwardly only in the form of their noumenal conditions. And as a matter of fact, this is how Kant himself interprets the teaching of this section in the process of applying it in solution of the antinomies.

"Accordingly, if I represent to myself the aggregate of all objects of the senses existing in all time and all places, I do not set them, antecedently to experience, in space and time. The representation is nothing but the thought of a possible experience in its absolute completeness. Since the objects are mere representations, only in such a possible experience are they given. To say that they exist prior to all my experience, can only be taken as meaning that they will be met with, if, starting from actual perception, I advance to that part of experience to which they belong. The cause of the empirical conditions of this advance (that which determines what members I shall meet with, or how far I can meet with any such in my regress) is transcendental, and is therefore necessarily unknown to me. We are not, however, concerned with this transcendental cause, but only with the rule of progression in that experience in which objects, that is to say, appearances, are given. Moreover, in outcome it is a matter of indifference whether I say that in the empirical progress in space I can meet with stars a hundred times farther removed than the outermost now perceptible to me, or whether I say that they are perhaps to be met with in cosmical space even though no human being has ever perceived or ever will perceive them. For though they might be given as things in themselves, without relation to possible experience, they are still nothing to me, and therefore are not objects, save in so far as they are contained in the series of the empirical regress."

But though this is a possible interpretation of the teaching of the *Postulates*, and though further it is

Kant's own interpretation in another portion of the *Critique*, it is not by any means thereby decided that this is what the section itself actually teaches. Unbiassed study of the section, in independence of the use to which it is elsewhere put, can find within it no such limitation to its assertion of the actual independent existence of non-perceived bodies. We have to remember that the doctrine and solution of the *Antinomies* was completed prior to the writing of the central portions of the *Critique*. The section treating of their *solution* seems, indeed, in certain parts to be later than the other main portions of the chapter on the *Antinomies*, and must have been at least recast after completion of the *Postulates*. But the subjectivist solution is so much simpler in statement, so much more fully worked out, and indeed so much more capable of definite formulation, and also so much more at one with the teaching developed in the preceding chapter on the *Paralogisms*, that even granting the doctrine expounded in the section on the *Postulates* to be genuinely phenomenalist, it is not surprising that Kant should have been unwilling to recast his older and simpler solution of the *Antinomies*. In any case we are not concerned to argue that Kant, even after formulating the phenomenalist view, yields to it an unwavering adherence. As I have already insisted, his attitude continues to the very last to be one of alternation between two opposed standpoints.

But the most significant feature of Kant's treatment of the argument of the *Postulates* still remains for consideration. It was in immediate succession to the paragraph above quoted that Kant, in the second edition, placed his "*Refutation of Idealism*" with the emphatic statement that this (not as in the first edition in connection with the *Paralogisms*) was its "correct location." It is required, he says, as a reply to an objection which the teaching of the *Postulates* must at once suggest. The argument of the second edition in proof of the independent reality of material bodies, and in disproof of subjectivism, is thus given by Kant as a necessary extension and natural supplement of the teaching of the first edition.

There is therefore reason for concluding that the same preconception which has led to such radical misinterpretation of Kant's *Refutation of Idealism* has been at work in inducing a false reading of Kant's argument in the *Postulates*, namely the belief that Kant's teaching proceeds on consistent lines, and that it must at all costs be harmonised with itself. Finding subjectivism to be emphatically and unambiguously inculcated in all the main sections of the *Critique*, and the phenomenalist views, on the other hand, to be stated in a much less definite and somewhat elusive manner, commentators have impoverished the Critical teaching by suppression of many of its most subtile and progressive doctrines. Kant's experimental, tentative development of divergent tendencies is surely preferable to this artificial product of high-handed and unsympathetic emendation.

INNER SENSE AND APPERCEPTION

We are now in position to complete our treatment of inner sense. When the inner world of feelings, volitions, and representations is placed on the same empirical level as the outer world of objects in space, when the two are correlated and yet also at the same time sharply distinguished, when, further, it is maintained that objects in space exist independently of their representations, and that in this independence they are necessary for the possibility of the latter, the whole aspect of the Critical teaching undergoes a genial and welcome transformation. Instead of the forbidding doctrine that the world in space is merely my representation, we have the very different teaching that only through consciousness of an independent world in space is consciousness of the inner subjective life possible at all, and that as each is "external" to the other, neither can be reduced to, or be absorbed within, the other. The inner representations do not produce or generate the spatial objects, do not even condition their existence, but are required only for the individual's empirical consciousness of them. Indeed the relations previously holding between them are now reversed. It is the outer world which renders the subjective representations possible. The former is prior to the latter; the latter exist in order to reveal the former. The outer world in space must, indeed, be

regarded as conditioned by, and relative to, the noumenal conditions of its possibility; but these, on Kant's doctrine of outer and inner sense, are distinct from all experienced contents and from all experienced mental processes. This will at once be recognised as holding of the noumenal conditions of the given manifold. But it is equally true, Kant maintains, in regard to the noumenal conditions of our mental life. We have no immediate knowledge of the transcendental syntheses that condition all consciousness, and in our complete ignorance of their specific nature they cannot legitimately be equated with any individual or personal agent. As the empirical self is only what it is known as, namely, appearance, it cannot be the bearer of appearance. This function falls to that which underlies both inner and outer appearances equally, and which within experience gains twofold expression for itself, in the conception of the thing in itself = *x* on the one hand, and in the correlative conception of a transcendental subject, likewise = *x*, on the other.

But with mention of the transcendental subject we are brought to a problem which in the second edition invariably accompanies Kant's discussion of inner sense. The 'I think' of apperception can find expression only in an empirical judgment, and yet, so far from being the outcome of inner sense, preconditions its possibility. What then is its relation to inner sense? Does not its recognition conflict with Kant's denial of the possibility of self-conscious reflection, of direct intuitive apprehension by the self of itself? The pure apperception, 'I think,' is equivalent, Kant declares, to the judgment 'I am,' and therefore involves the assertion of the subject's existence. Does not this conflict on the one hand with the Critical doctrine that knowledge of existence is only possible in terms of sense, and on the other with the Critical limitation of the categories to the realm of appearance? How are such assertions as that the 'I think' of pure apperception refers to a non-empirical reality, and that it predicates its existence, to be reconciled with the doctrine of inner sense as above stated?

As we have already observed, Kant's early doctrine of the transcendental object was developed in a more or less close parallelism with that of the transcendental unity of apperception. They were regarded as correlative opposites, the dual centres of noumenal reference for our merely subjective representations. Kant's further examination of the nature of apperception, as embodied in alterations in the second edition, was certainly, as we shall find, inspired by the criticisms which the first edition had called forth. His replies, however, are merely more explicit statements of the distinction which he had already developed in the first edition between the transcendental and the empirical self, and that distinction in turn was doubtless itself largely determined by his own independent recognition of the untenability of his early view of the transcendental object. Though it is much more difficult to differentiate between the empirical and the transcendental self than to distinguish between the empirical object and the thing in itself, both distinctions are from a genuinely Critical standpoint equally imperative, and rest upon considerations that are somewhat similar in the two cases.

One of the chief and most telling criticisms directed against the teaching of the first edition was that Kant's doctrine of a transcendental consciousness of the self's existence, *i.e.* of the existence of a noumenal being, "this I or he or it (the thing) which thinks," is inconsistent with the teaching of the *Postulates of Empirical Thought*. In that section, as also later in the section on the theological *Ideal*, Kant had declared most emphatically that existence is never discoverable in the content of any mere concept. It is revealed in perception, and in perception alone, in virtue of the element of sensation contained in the latter.

"...to know the *actuality* of things demands *perception*, and therefore sensation.... For that the concept precedes perception, signifies the concept's mere possibility; the perception which supplies the content [*Stoff*] to the concept, is the sole criterion [*Charakter*] of actuality."

Yet Kant had also maintained that the 'I think' is equivalent to 'I am,' and that in this form, as an intellectual consciousness of the self's existence, it precedes all experience. The teaching of the *Postulates* is, however, the teaching of the *Critique* as a whole, and such critics as Pistorius seemed therefore to be justified in maintaining that Kant, in reducing the experiences of inner sense to mere

appearance, destroys the possibility of establishing reality in any form. Appearance, in order to be appearance, presupposes the reality not only of that which appears, but also of the mental process whereby it is apprehended. But if reality is given only in sensation, and yet all experience that involves sensation is merely appearance, there is no self by which appearance can be conditioned; and only illusion (*Schein*), not appearance (*Erscheinung*), is left. To quote Pistorius' exact words:

"[If our inner representations are not things in themselves but only appearances] there will be nothing but illusion (*Schein*), for nothing remains to which anything can appear."

Kant evidently felt the force of this criticism, for in the second edition he replies to it on no less than seven different occasions. In three of these passages the term *Schein* is employed, and in the note to B xxxix the term *Erdichtung* appears. This shows very conclusively that it is such criticism as the above that Kant has in mind. The most explicit passage is B 428:

"The proposition, 'I think,' or 'I exist thinking,' is an empirical proposition. Such a judgment, however, is conditioned by empirical intuition, and the object that is thought therefore underlies it as appearance. It would consequently seem that on our theory the soul is completely transformed, even in thinking [*selbst im Denken*], into appearance, and that in this way our consciousness itself, as being a mere illusion [*Schein*], must refer in fact to nothing."

Kant, in his reply, is unyielding in the contention that the 'I think,' even though it involves an empirical judgment, is itself intellectual. "This representation is a thinking, not an intuiting," or as he adds, "The 'I think' expresses the *actus* whereby I determine my existence." Existence is therefore already given thereby. Kant also still maintains that the self thus revealed is not "appearance and still less illusion."

"I am conscious of myself ..., not as I appear to myself, nor as I am in myself, but only that I am." "I thereby represent myself to myself neither as I am nor as I appear to myself. I think myself only as I do any object in general from whose mode of intuition I abstract."

Kant's method of meeting the criticism, while still holding to these positions, is twofold. It consists in the first place in maintaining that the 'I think,' though intellectual, can find expression only in empirical judgments — in other words, that it is in and by itself formal only, and presupposes as the occasion of its employment a given manifold of inner sense; and secondly, by the statement that the 'existence' which is involved in the 'I think' is not the category of existence. Let us take in order each of these two points.

Kant's first method of reply itself appears in two forms, a stronger and a milder. The milder mode of statement is to the effect that though the representation 'I am' already immediately involves the *thought* of the existence of the subject, it yields no knowledge of it. Knowledge would involve intuition, namely, consciousness of inner determinations in time, which in turn would itself presuppose consciousness of outer objects. As a merely intellectual representation,

"...this 'I' has not the least predicate of intuition which, in its character of permanence, could, somewhat after the manner of impenetrability in the empirical intuition of matter, serve as correlate of time determination in inner sense."

The stronger and more definite mode of statement is that the 'I think' is an empirical proposition. Though it involves as one factor the intellectual representation, 'I think,' it is none the less empirical.

"Without some empirical representation supplying the material for thought, the *actus*, 'I think,' would not take place...."

The empirical is indeed "only the condition of the application or employment of the pure intellectual faculty," but as such is indispensable. This is repeated in even clearer terms in B 429.

"The proposition, 'I think,' in so far as it amounts to the assertion, 'I exist thinking,' is no mere logical function but determines the subject (which is then at the same time object) in respect of existence, and cannot take place without inner sense...."

This admission is the more significant in that it follows immediately upon a passage in which Kant has been arguing that thinking, taken in and by itself, is a merely logical function.

The real crux lies in the question as to the legitimacy of Kant's application of the predicate existence to the transcendental subject. Its employment in reference to the empirical self in time is part of the problem of the *Refutation of Idealism* in the second edition; and the answer there given is clear and definite. Consciousness of the empirical self as existing in time involves consciousness of outer objects in space. But as Kant recognises that a transcendental ego, not in time, is presupposed in all consciousness of the empirical self, the question whether the predicate of existence is also applicable to the transcendental self cannot be altogether avoided, and is indeed referred to in B 277. The attitude to be taken to this latter question is not, however, defined in that section.

In the first edition Kant has insisted that the categories as pure forms of the understanding, in isolation from space and time, are merely logical functions "without content." Interpreted literally, this would signify that they are devoid of meaning, and therefore are incapable of yielding the thought of any independent object or existence. As merely logical forms of relation, they presuppose a material, and that is supplied only through outer and inner sense. Such is not, however, the way in which Kant interprets his own statement. It is qualified so as to signify only that they are without *specific* or *determinate* content. They are taken as yielding the conception of object in general. Passages in plenty can be cited from the first edition — passages allowed to remain in the second edition — in which Kant teaches that the pure forms of understanding, as distinct from the schematised categories, yield the conception of things in themselves. This view is, indeed, a survival from his earlier doctrine of the transcendental object. In all passages added in the second edition the consequences of his argument are more rigorously drawn, and the doctrine of the transcendental object is entirely eliminated. It is now unambiguously asserted that the pure forms of understanding, the "*modes* of self-consciousness in thinking," are not intellectual concepts of *objects*. They "yield no object whatsoever." The only object is that given through sense. And since in thinking the transcendental subject we do, by Kant's own account, think an "object," he is led to the conclusion, also explicitly avowed, that the notion of existence involved in the 'I think' is not the category of the same name. So also of the categories of substance and causality.

"If I represent myself as *subject* of thoughts or as *ground* of thinking, these modes of representation do not signify the categories of substance or of cause...."

The notion of the self, like the notion of things in themselves, is a concept distinct from all the categories.

This conclusion is reinforced by means of an argument which is employed in the section of the first edition on *Paralogisms*. Apperception is the ground of the possibility of the categories, and these latter on their side represent only the synthetic unity which that apperception demands. Self-consciousness is therefore the representation of that which is the condition of all unity, and which yet is itself unconditioned.

"...it does not represent itself through the categories, but knows the categories and through them all objects in the absolute unity of apperception, and so through itself. Now it is, indeed, very evident that I cannot know as an object that which I must presuppose in order to know any object...."

This argument recurs in B 422.

"The subject of the categories cannot by thinking the categories acquire a conception of itself as an object of the categories. For, in order to think them, its pure self-consciousness, which is what was to be accounted for, must itself be presupposed."

It is extremely difficult to estimate the value and cogency of this argument. Many objections or rather qualifications must be made before it can be either accepted or rejected. If it be taken only as asserting that the unity of self-consciousness is not *adequately* expressible through any of the categories, it is undoubtedly valid. If, further, the categories be identified with the schemata, it is also true that they are not applicable in any degree or manner. The schemata are applicable only to natural existences in space and time. Self-consciousness can never be reduced to a natural existence of that type. On the other hand, if it is

not self-consciousness as such, but the self-conscious *subject*, which on Kant's view is always noumenal — "this I or he or it (the thing) which thinks" — that is referred to, and if we distinguish between the categories strictly so called, that is, the pure forms of understanding, and the schemata, it is not at all evident that the self-conscious subject may not be described as being an existence that is always a subject and never a predicate, and as being related to experience as a ground or condition. These indefinite assertions leave open alternative possibilities. They do not even decide whether the self is "I or he or it." In so far as they advance beyond the mere assertion that the self rests upon noumenal conditions they are, indeed, incapable of proof, but by no Critical principle can they be shown to be inapplicable. When, therefore, Kant may seem to extract a more definite conclusion from the above argument, he advances beyond what it can be made to support.

Kant is here influenced by the results of the ethical enquiries with which in the period subsequent to 1781 he was chiefly preoccupied. He believed himself to have proved that the self, as a self-conscious being, is a genuinely noumenal existence. That being so, he was bound to hold that the categories, even as pure logical forms, are inadequate to express its real determinate nature. But he confounds this position with the assertion that they are not only inadequate, but in and by themselves are likewise inapplicable. That is not a legitimate conclusion, for even if the self is more than mere subject or mere ground, it will at least be so much. When ethical considerations are left out of account, the only proper conclusion is that the applicability of the categories to the self-conscious subject is capable neither of proof nor of disproof, but that when the distinction between appearance and reality (which as we shall find is ultimately based upon the Ideas of Reason) has been drawn, the categories can be employed to define the possible difference between self-conscious experience and its unknown noumenal conditions. Any other conclusion conflicts with the teaching of the section on the *Paralogisms*.

It is important to observe — a point ignored by such critics as Caird and Watson — that in the sections under consideration Kant most explicitly declares self-consciousness to be merely "the *representation* of that which is the condition of all unity." He maintains that this representation, as standing for "the determining self (the thinking), is to be distinguished from the self which we are seeking to determine (the subject which thinks) as knowledge from its object," or in other words, that, without special proof, unattainable on theoretical grounds, "the unity of thought" may not be taken as equivalent to the unity of the thinking subject. They may be as diverse as unity of representation and unity of object represented are frequently found to be. We may never argue from simplicity in a representation to simplicity in its object.

But to return to the main thesis, it may be observed that these arguments, with the exception of that which we have just been considering from the nature of self-consciousness, lead to the conclusion that the categories are as little applicable to the thing in itself as to the transcendental subject. Even the argument from the necessary and invariable presence of self-consciousness in each and every act of judgment is itself valid only from a point of view which regards self-consciousness in the manner of Kant's early semi-Critical view of the transcendental subject as an ultimate. But if, as is maintained in the section in which this argument occurs, viz. that on the *Paralogisms*, self-consciousness may be complexly conditioned, and may indeed have conditions similar in nature to those which underlie outer experience, the categories may be just as applicable, or as inapplicable, to its noumenal nature as to the nature of the thing in itself. It is noticeable that in the second edition, doubtless under the influence of preoccupation with ethical problems, some of Kant's utterances betray a tendency to relax the rigour of his thinking, and to bring his theoretical teaching into closer agreement with his ethical results than the theoretical analysis in and by itself at all justifies. This tendency was, of course, reinforced by the persisting influence of that view of the transcendental subject which he had held in the middle 'seventies, and from which he never completely emancipated either his language or his thinking. Indeed in several of the passages added in the second edition Kant even goes so far as to adopt language which if taken quite literally would mean that the 'I think' is an immediate consciousness of the mind's purely intellectual activity — a view which, as

we have seen, is altogether alien to the Critical position. It would, as he argues so forcibly elsewhere, involve a kind of experience which does not conform to Critical requirements, and which would lie open to the attacks of sceptics such as Hume.

In B 157-8 the difficulties of Kant's position are again manifest. Speaking of the representation of the self, he declares that "I am conscious of myself ..., not as I appear to myself, nor as I am in myself, but only that I am." This may seem to imply that existence is predicable of the transcendental self. He adds that though the determination, *i.e.* specification in empirical form, of my existence (*mein eigenes Dasein*) is possible only in inner sensuous intuition, it is "not appearance and still less mere illusion." But in the appended note it is urged that my existence (*Dasein*) as self-active being is represented in purely indeterminate fashion. Only my existence *as sensuous*, and therefore as appearance, can be known, *i.e.* can be made determinate.

The problem is more directly and candidly faced in the note to B 422. That note is interesting for quite a number of reasons. It reveals Kant in the very act of recasting his position, and in the process of searching around for a mode of formulation which will enable him to hold to a transcendental consciousness of the self's existence and at the same time not to violate the definition of existence given in the *Postulates*, *i.e.* both to posit the transcendental self as actual and yet to deny the applicability to it of any of the categories. After stating that the 'I think' is an empirical proposition in which my existence is immediately involved, he proceeds further to describe it as expressing "an undetermined empirical intuition, *i.e.* perception," and so as showing that sensation underlies its assertion of existence. Kant does not, however, mean by these words that the existence asserted is merely that of the empirical self; for he proceeds:

"...existence is here not a category, which as such does not apply to an indeterminately-given object.... An indeterminate perception here signifies only something real that is given, given indeed to thought in general, and so not as appearance, nor as thing in itself (*Noumenon*), but as something which actually [*in der That*] exists, and which in the proposition, I think, is denoted [*bezeichnet*] as such."

The phrases here employed are open to criticism on every side. Kant completely departs from his usual terminology when he asserts that through an "indeterminate perception" the self is given, and "given to thought in general" as "something real." The contention, that the existence asserted is not a category, is also difficult to accept. It is equally surprising to read that its reality is given "neither as appearance nor as thing [*Sache*] in itself (*Noumenon*)"; for hitherto no such alternative form of real existence has been recognised.

But to press such criticisms is to ignore the spirit for the sake of the letter. Kant here breaks free from all his habitual modes of expression for the very good and sufficient reason that he is striving to develop a position more catholic and comprehensive than any previously adopted. He is seeking to formulate a position which, without in any way justifying or encouraging the transcendent employment of the categories, will yet retain for thought the capacity of self-limitation, that is, of forming concepts which will reveal the existence of things in themselves and so will enable the mind to apprehend the radical distinction between things in themselves and things experienced. But he has not yet discovered that in so doing he is committing himself to the thesis that the distinction is mediated, not by the understanding, but by Reason, not by categories, but by Ideas. As I have already indicated, this tendency is crossed by another derived from his preoccupation with moral problems, namely, the desire to defend, in a manner which his Critical teaching does not justify, the noumenal existence of the self as a *thinking* being.

THE TRANSCENDENTAL ANALYTIC

Book II

THE ANALYTIC OF PRINCIPLES

The distinction which Kant here introduces for the first time between understanding (now viewed as the faculty only of concepts) and the faculty of judgment (*Urtheilskraft*) is artificial and extremely arbitrary. As we have seen, his own real position involves a complete departure from the traditional distinction between conceiving, judging, and reasoning, as separate processes. All thinking without exception finds expression in judgment. Judgment is the fundamental activity of the understanding. It is “an act which contains all its other acts.” Kant is bent, however, upon forcing the contents of the *Critique* into the external framework supplied by the traditional logic, viewed as an architectonic; and we have therefore no option save to take account of his exposition in the actual form which he has chosen to give to it. Since general logic develops its teaching under three separate headings, as the logic of conception, the logic of judgment, and the logic of reasoning, the *Critique* has to be made to conform to this tripartite division. The preceding book is accordingly described as dealing with concepts, and this second book as dealing with judgments or principles; while understanding and the faculty of judgment, now viewed as independent, are redefined to meet the exigencies of this new arrangement, the former as being “the faculty of rules,” and the latter as being “the faculty of subsuming under rules, *i.e.* of distinguishing whether something does or does not stand under a given rule (*casus datae legis*).”

The reader need not strive to discover any deep-lying ground or justification for these definitions. Architectonic, that ‘open sesame’ for so many of the secrets of the *Critique,* is the all-sufficient spell to resolve the mystery. As a matter of fact, Kant is here taking advantage of the popular meaning of the term judgment in the sense in which we speak of a man of good judgment; and in order that judgment and understanding may be distinguished he then imposes an artificial limitation upon the meaning in which the latter term is to be employed.

As formal logic abstracts from all content, it cannot, Kant maintains, supply rules for the exercise of “judgment.” It is otherwise with transcendental logic, which in the pure forms of sensibility possesses a content enabling it to define in an *a priori* manner the specific cases to which concepts must be applicable. The *Analytic of Principles* is thus able to supply “a canon for the faculty of judgment, instructing it how to apply to appearances the concepts of understanding which contain the condition of *a priori* rules.” This will involve (1) the defining of the sensuous conditions under which the *a priori* rules may be applied — the problem of the chapter on schematism; and (2) the formulating of the rules in their sensuous, though *a priori,* concreteness — the problem of the chapter on “the system of all principles of pure understanding.”

Such is Kant’s own very misleading account of the purposes of these two chapters. There are other and sounder reasons why they should be introduced. In the *Analytic of Concepts*, as we have seen, the transcendental deduction only succeeds in proving that *a priori* forms of unity are required for the possibility of experience. No proof is given that the various categories are just the particular forms required, and that they are one and all indispensable. This omission can be made good only by a series of proofs, directed to showing, in reference to each separate category, its validity within experience and its indispensableness for the possibility of experience. These proofs are given in the second of the two chapters. The chapter on schematism is preparatory in character; it draws attention to the importance of the temporal aspect of human experience, and defines the categories in the form in which they present themselves in an experience thus conditioned by *a priori* intuition.

CHAPTER I

THE SCHEMATISM OF PURE CONCEPTS OF UNDERSTANDING

The more artificial aspect of Kant's argument again appears in the reason which he assigns for the existence of a problem of schematism, namely, that pure concepts, and the sensuous intuitions which have to be subsumed under them, are completely opposite in nature. No such explanation can be accepted. For if category and sensuous intuition are really heterogeneous, no subsumption is possible; and if they are not really heterogeneous, no such problem as Kant here refers to will exist. The heterogeneity which Kant here asserts is merely that difference of nature which follows from the diversity of their functions. The category is formal and determines structure; intuition yields the content which is thereby organised. Accordingly, the "third thing," which Kant postulates as required to bring category and intuition together, is not properly so describable; it is simply the two co-operating in the manner required for the possibility of experience. Kant's method of stating the problem of schematism is, however, so completely misleading, that before we can profitably proceed, the various strands in his highly artificial argument must be further disentangled. This is an ungrateful task, but has at least the compensating interest of admirably illustrating the kind of influence which Kant's logical architectonic is constantly exercising upon his statement of Critical principles.

The architectonic has in this connection two very unfortunate consequences. It leads Kant to describe schematism as a process of *subsumption*, and to speak of the transcendental schema as "a *third thing*." Neither assertion is legitimate. Schematism, properly understood, is not a process of subsumption, but, as Kant has already recognised in A 124, of synthetic interpretation. Creative synthesis, whereby contents are apprehended in terms of functional relations, not subsumption of particulars under universals that are homogeneous with them, is what Kant must ultimately mean by the schematism of the pure forms of understanding. A category, that is to say, may not be viewed as *a predicate* of a possible judgment, and as being applied to a subject independently apprehended; its function is to articulate the judgment as a whole. The category of substance and attribute, for instance, is the *form* of the categorical judgment, and may not be equated with any one of its single parts.

Thus the criticisms which we have already passed upon Kant's mode of formulating the distinction between formal and transcendental logic, are no less applicable to the sections now before us. The terminology which Kant is here employing is borrowed from the traditional logic, and is out of harmony with his Critical principles.

Kant's description of the schema as a third thing, additional to category and intuition, and intermediate between them, is also a result of his misleading mode of formulating his problem. What Kant professes to do is to interpret the relation of the categories to the intuitional material as analogous to that holding between a class concept and the particulars which can be subsumed under it. This is implied in his use of the plate and circle illustration. But as the relation holding between categories and the material of sense is that of form and matter, structure and content, the analogy is thoroughly misleading. As *all* content, strictly so called, falls on the side of the intuitional material, there is no content, *i.e.* no quality or attribute, which is common to both. And thus it happens that the *inappropriateness* of the analogy which Kant is seeking to enforce is ultimately the sole ground which he is able to offer in support of his description of the schema as "a third thing."

"Now it is clear [!] that there must be a third thing, which is homogeneous on the one hand with the category and on the other with the appearance, and which thus makes the application of the one to the other possible."

On the contrary, the true Critical teaching is that category and intuition, that is to say, form and content, mutually condition one another, and that the so-called schema is simply a name for the latter as apprehended in terms of the former.

But there is a further complication. Kant, as we have already observed, defines judgment as being

"...the faculty of subsuming under *rules*, *i.e.* of distinguishing whether something does or does not stand under a given rule (*casus datae legis*)."

Now this view of judgment really connects with the syllogism, not with the proposition. As Kant states in his *Logic*, there are

"...three essential elements in all inference: (1) a universal rule which is entitled the major premiss; (2) the proposition which subsumes a cognition under the condition of the universal rule, and which is entitled the minor premiss; and lastly, (3) the conclusion, the proposition which asserts or denies of the subsumed cognition the predicate of the rule."

Regarded in this way, as the application of a *rule*, subsumption is more broadly viewed and becomes a more appropriate analogy for the relation of category to content. And obviously it is this comparison that Kant has chiefly in mind in these introductory sections. For only when the subsumption is that of a particular instance under a universal *rule*, can the necessity of a *mediating* condition be allowed.

Such, then, are the straits to which Kant is reduced in the endeavour to hold loyally to his architectonic. He has to identify the two very different kinds of subsumption which find expression in the proposition and in the syllogism respectively; and when his analogy between logical subsumption, thus loosely interpreted, and synthetic interpretation, proves inapplicable, he uses the failure of the analogy as an argument to prove the necessity of "a third thing." On his own Critical teaching, as elsewhere expounded, no such third thing need be postulated. Even the definitions which he proceeds to give of the various schemata do not really support this description of them.

But though Kant's method of introducing and expounding the argument of this chapter is thus misleading, the contents themselves are of intrinsic value, and have a threefold bearing: (*a*) on the doctrine of productive imagination; (*b*) on the relation holding between image and concept; and (*c*) on the nature of the categories in their distinction from the pure forms of understanding.

(*a*) Kant gives definite and precise expression to the two chief characteristics of the productive imagination, namely, that it deals with an *a priori* manifold of pure intuition and that it exercises a "hidden art in the depths of the human soul." Kant's description of the schema as "a third thing," *at once intellectual and sensuous*, seems to be in large part due to the transference to it of predicates already applied to the faculty which is supposed to be its source. The distinction between the transcendental schema and the particularised image is also given as analogous to that between the pure and the empirical faculties of imagination. In A 141-2 = B 180-1, Kant speaks of the *empirical* faculty of *productive* imagination, and so is led, to the great confusion of his exposition, though also to the enrichment of his teaching, to allow of empirical as well as of transcendental schemata, and thus contrary to his own real position to recognise schemata of such empirical objects as dog or horse — a view which empirical psychology has since adopted in its doctrine of the schematic image. This passage was doubtless written at the time when he was inclining to the view that the empirical processes run parallel with the transcendental. Kant's final view is that empirical imagination is always reproductive. This brings us, however, to our second main point.

(*b*) Kant makes a statement which serves as a valuable corrective of his looser assertions in other parts of the *Critique*. Five points set after one another, thus,....., form an image of the number five. The schema of the number five is, however, of very different nature, and must not be identified with any such image. It is

"...rather *the representation of a method* whereby a multiplicity [in this case five] may be represented in an image in accordance with a certain concept, than this image itself...."

This becomes more evident in the case of large numbers, such as a thousand. The thought or schema of the number remains just as clear and definite as in the case of smaller numbers, but cannot be so adequately embodied and surveyed in a concrete image.

"This representation of a general procedure of imagination in providing its image for a concept, I name the schema to this concept."

But even in the simplest cases an image can never be completely adequate to the concept. The image of a triangle, for instance, is always some particular triangle, and therefore represents only a part of the total connotation. As the schema represents a universal rule of production in accordance with a concept, it resembles the concept in its incapacity to subsist in an objective form. Images become possible only through and in accordance with schemata, but can never themselves be identified with them. Schemata, therefore, and not images — such is the implied conclusion — form the true subject-matter of the mathematical sciences. Images are always particular; schemata are always universal. Images represent existences; schemata represent methods of construction.

There are three criticisms which must be passed upon this position. In the first place, the selection of the triangle as an illustration tends to obscure the main point of Kant's argument. As there are three very different species of triangle, the concept triangle is a class concept in a degree and manner which is not to be found in the concepts, say, of the circle or of the number five. So that while Kant may seem to be chiefly insisting upon the *inadequacy* of the image to represent more than a part of the connotation of the corresponding concept, his real intention is to emphasise that the schema expresses the conceptual rule whereby, even in images that cover the whole connotation, the true meaning of the image can alone be determined.

Secondly, the above definition of the schema as being "the representation of a general procedure of imagination in providing an image for a concept" is obviously bound up with Kant's view of it as "a third thing," additional to the concept, and as intermediate between it and the image. But as we have already found occasion to note, in discussing Kant's doctrine of the "construction" of mathematical concepts, this threefold distinction is out of harmony with his Critical principles. It results from his retention of the traditional view of the concept as in all cases a mere concept, *i.e.* an abstracted or class concept. In defining the schema Kant is defining the true nature of the concept as against the false interpretation of it in the traditional class-theory; he misrepresents the logic of his own standpoint when he interpolates a third kind of representation intermediate between the concept and the image. The concept 'triangle,' *as a concept*, is (to employ Kant's own not very satisfactory terms) the representation of the method of constructing a certain type of object; and the only other mode of representing this kind of object is the image. There may, indeed, as Kant has himself suggested, be a species of image that may be entitled schematic; but if that be identified with a blurred or indeterminate or merely symbolic form of representation, it can have nothing in common with the *transcendental* or *conceptual* schema, save the name.

Thirdly, the entire discussion of the nature of the schemata of "sensuous concepts" and of their relation to the sense image, is out of order in this chapter; and however valuable in itself, bewilders the reader who very properly assumes for it a relevancy which it does not possess. The pure concepts of the understanding, whose schemata Kant is endeavouring to define, are altogether different in nature from sensuous representations, and can never be reduced in any form or degree to an image. They are wholly transcendental, representing pure syntheses unified through categories in accordance with the form of inner sense. This, however, brings us to our last main point.

(*c*) Kant's manner of employing the term category is a typical example of his characteristic carelessness in the use of his technical terms. Sometimes it signifies the pure forms of understanding. But more frequently it stands for what he now, for the first time, entitles schemata, namely, the pure conceptual

forms as modified through relation to time. To take as examples the two chief categories of relation. The first category of relation, viewed as a form of the pure understanding, is the merely logical conception of that which is always a subject and never a predicate. The corresponding schema is the conception of that which has permanent existence in time; it is not the logical notion of *subject*, but the transcendental conception of *substance*. The pure logical conception of ground and consequence is similarly distinguished from the transcendental schema of cause and effect.

This contrast is of supreme importance in the Critical philosophy, and ought therefore to have been marked by a careful distinction of terms. Had Kant restricted the term category to denote the pure forms, and invariably employed the term schemata to signify their more concrete counterparts, many ambiguities and confusions would have been prevented. The table of categories, in its distinction from the table of logical forms, would then have been named the table of schemata, and the definitions given in this chapter would have been appended to it, as the proper supplement to the metaphysical deduction, completing it by a careful definition of each separate schema. For what Kant usually means when he speaks of the categories *are* the schemata; and the chapter before us therefore contains their delayed definitions. As Kant has constantly been insisting, and as he again so emphatically teaches in this chapter, the pure forms of understanding, taken in and by themselves, apart from the forms of intuition, have no relation to any object, and are mere logical functions without content or determinate meaning.

From this point of view the misleading influence of Kant's architectonic may again be noted. It forces him to preface his argument by introductory remarks which run entirely counter to the very point which he is chiefly concerned to illustrate and enforce, namely, the inseparability of conception and intuition in all experience and knowledge. He does, indeed, draw attention to the fact that the conditions which serve to realise the pure concepts of understanding also at the same time restrict them, but it is with their empirical employment that he is here chiefly concerned.

Caird's mode of expounding Kant's doctrine of schematism may serve as an example of the misleading influence of Kant's artificial method of introducing his argument. As Caird accepts Kant's initial statements at their face value, he is led to read the entire chapter in accordance with them, and so to interpret it as being a virtual recantation of the assumptions which underlie the statement of its problem. The truer view would rather seem to be that the introduction is demanded by the exigencies of Kant's architectonic, and therefore yields no true account either of the essential purpose of the chapter or of its actual contents. Cohen not unjustly remarks that

"...recent writers are guilty of a very strange misreading of Kant when they maintain, as if in opposition to him, a thought to which his doctrine of schematism gives profound expression, namely, that intuition and conception do not function independently, and that thought, and still more knowledge, is and must always be intuitive."

Cohen fails, however, to draw attention to the cause of the misunderstanding for which Kant must certainly share the blame. Riehl, while adopting a somewhat similar view to that here given, traces Kant's misleading mode of stating the problem to his holding a false view of the universality of the concept. Such criticism of Kant, like that passed by Caird, is in many respects justified, but the occasion upon which the admonition is made to follow would none the less seem to be ill-chosen.

It may be asked why Kant in this chapter so completely ignores space. No really satisfactory answer seems to present itself. It is true that time is the one universal form of all intuition, of outer as well as of inner experience. It is also true that, as Kant elsewhere shows, consciousness of time presupposes consciousness of space for its own possibility, and so to that extent may be regarded as including the latter form of consciousness within itself. Nevertheless Kant's concentration on the temporal aspect of experience is exceedingly arbitrary, and results in certain unfortunate consequences. Owing to the manner in which Kant envisages his problem he is bound, indeed, to lay the greater emphasis upon time, but that need not have involved so exclusive a recognition of its field and function. Possibly Kant's very natural

preoccupation with his new and revolutionary doctrines of inner sense and productive imagination has something to do with the matter.

Though the definitions given of the various schemata, especially of those of reality and existence, raise many difficulties, consideration of them must be deferred. They can be properly discussed only in connection with the principles which Kant bases upon them. Only one further point calls for present remark. Kant does not give a schema for each of the categories. In the first two groups of pure conceptual forms, those of quantity and of quality, he gives a schema only for the third category in each case. Number is strictly not the schema of quantity as such, but of *totality*. The schema of quality is a definition only of *limitation*. This departure from the demands of strict architectonic is made without comment or explanation of any kind. Kant delights to insist upon the confirmation given to his teaching by the fulfilment of architectonic requirements; he is for the most part silent when they fail to correspond. This architectonic was a hobby sufficiently serious to yield him keen pleasure in its elaboration, but was not so vital to his main purposes as to call for stronger measures when shortcomings occurred.

In concluding this chapter Kant draws attention to the fact that the sensuous conditions which serve to realise the pure concepts also at the same time restrict their meaning. Their wider meaning is, however, of merely logical character. Their function, as pure concepts, lies solely in establishing unity of representation; they do not therefore suffice to yield knowledge of any object. Objective application "comes to them solely from sensibility." In these statements Kant expounds one of his fundamental doctrines, but in a manner which does less than justice to the independent value of pure thought. As he elsewhere teaches, it is not sense that sets limits to understanding; it is the pure forms of thought that enable the mind to appreciate the limited and merely phenomenal character of the world experienced.

CHAPTER II

SYSTEM OF ALL PRINCIPLES OF PURE UNDERSTANDING

The introductory remarks to this important chapter are again dictated by Kant's architectonic, and set its actual contents in an extremely false light. Kant would seem to imply that as the *Analytic of Concepts* has determined all the various conceptual elements constitutive of experience, and has proved that they serve as predicates of possible judgments, it now remains to show in an *Analytic of Principles* what *a priori* synthetic judgments, or in other words what principles, can actually be based upon them. Though this is a quite misleading account of the relation holding between the two books of the *Analytic*, it has been accepted by many commentators. For several reasons it must be rejected. The pure forms of understanding are not predicates for possible judgments. They underlie judgment as a whole, expressing the relation through which its total contents are organised. Thus in the proposition "cinnabar is heavy" the category of substance and attribute is not in any sense the predicate; it articulates the entire judgment, interpreting the experienced contents in terms of the dual relation of substance and attribute. Judgment, its nature and conditions, is the real problem of the misnamed *Analytic of Concepts*. As already indicated, the two main divisions of the *Analytic* deal with one and the same problem. But while doing so, they differ in two respects. In the first place, as above noted, the *Analytic of Concepts* supplies no proof of the validity of particular categories, but only a quite general demonstration that forms of unity, such as are involved in all judgment, are demanded for the possibility of apperception. The proofs of the indispensableness of *specific* categories are first given in the *Analytic of Principles*. Secondly, in the *Analytic of Concepts* the temporal aspect of experience falls somewhat into the background, whereas in the *Analytic of Principles* it is emphasised.

From these two fundamental points of difference there arises a third distinguishing feature. When the categories, or rather schemata, are explicitly defined, and receive individual proof, they are found to be just those principles that are demanded for the possibility of the positive sciences. This is, from Kant's point of view, no mere coincidence. Scientific knowledge is possible only in so far as experience is grounded on *a priori* conditions; and the conditions of *sense*-experience are also the conditions of its conceptual interpretation. But while the *Analytic of Concepts* deals almost exclusively with ordinary experience, in the *Analytic of Principles* the physical sciences receive their due share of consideration.

First and Second Sections. The Highest Principles of Analytic and Synthetic Judgments. — These two sections contain nothing not already developed earlier in the *Critique*. Though the principle of non-contradiction is a merely negative test of truth, it can serve as a universal and completely adequate criterion in the case of all judgments that are analytic of given concepts. The principle of synthetic judgments, on the other hand, is the principle whereby we are enabled to advance beyond a given concept so as to attach a predicate which does not stand to it in the relation either of identity or of contradiction. This principle is the principle of the possibility of experience. Though *a priori* synthetic judgments cannot be *logically* demonstrated as following from higher and more universal propositions, they are capable of a *transcendental* proof, that is, as being conditions of sense-experience.

"The possibility of experience is what gives objective reality to all our *a priori* knowledge." "Although we know *a priori* in synthetic judgments a great deal regarding space in general and the figures which productive imagination describes in it, and can obtain such judgments without actually requiring any experience; yet even this knowledge would be nothing but a playing with a mere figment of the brain, were it not that space has to be regarded as a condition of the appearances which constitute the material for outer experience...."

In the first part of the last sentence, as in the page which precedes it, Kant would seem to be inculcating his doctrine of a pure *a priori* manifold, but the latter part of the statement would not be affected by the admission that space is not an independent intuition but only the form of outer sense.

Third Section. Systematic Representation of all the Synthetic Principles of Understanding. — Kant is not concerned in this section with the fundamental propositions of mathematical science, since, on his view, they rest upon the evidence of intuition. He claims, however, that their objective validity depends upon two principles, which, though not themselves mathematical in the strict sense, may conveniently be so described from the transcendental standpoint — the principle of the "axioms of intuition," and the principle of the "anticipations of experience." The physicist, who takes the legitimacy of applied mathematics for granted, has no occasion to formulate these principles. That he none the less presupposes them is shown, however, by his unquestioning assumption that nature conforms to the strict requirements of pure mathematics. And since the principles involve pure concepts, the one embodying the schema of number, and the other the schema of quality, they fall outside the scope of the *Transcendental Aesthetic*, and call for a deduction similar to that of the other categories.

As already indicated, Kant's procedure is extremely arbitrary, and is due to the perverting influence of his architectonic. Proof of the validity of applied mathematics has already been given in the *Aesthetic* of the first edition — a proof which is further developed in the *Prolegomena*, and recast in the second edition so as to constitute a separate "transcendental exposition." As Kant teaches in these passages, the objective validity of applied mathematics rests upon proof that space and time are the *a priori* forms of outer and inner sense. The new deductions of the schemata of number and quality, which he now proceeds to formulate, are quite unnecessary, and also are by no means conclusive in the manner of their proof. This, however, is more than compensated by the extremely valuable proofs of the schematised categories of relation which he gives in the section on the *Analogies of Experience*. The section on the *Postulates of Empirical Experience*, which deals with the principles of modality, also contains matter of very real importance.

The principles with which this chapter has to deal can thus be arranged according to the fourfold division of the table of categories: (1) *Axioms of Intuition*, (2) *Anticipations of Perception*, (3) *Analogies of Experience*, (4) *Postulates of Empirical Thought*. And following the distinction already drawn in the *Analytic of Concepts*, Kant distinguishes between the Axioms and Anticipations on the one hand, and the Analogies and Postulates on the other. The former determine the conditions of intuition in space and time, and may therefore be called mathematical and constitutive. They express what is necessarily involved in every intuition as such. The latter are dynamical. They are principles according to which we must think the existence of an object as determined in its relation to others. While, therefore, the first set of principles can be intuitively verified, the second set have only an indirect relation to the objects experienced. Whereas a relation of causality can never be intuited as holding between two events, but only thought into them, spatial and temporal relations are direct objects of the mind. Similarly, the relation of substance and attribute cannot be intuited; it can only be thought into what is intuited. The mathematical principles thus acquire an immediate (though, be it remembered, merely *de facto*) evidence; the *a priori* certainty, equally complete, of the dynamical principles can be verified only through the circuitous channel of transcendental proof.

The composite constitution of these sections finds striking illustration in the duplicated account of this distinction which precedes and follows the table of principles. The two accounts can hardly have been written in immediate succession to one another. The earlier in location is probably the later in date. It would seem to rest upon some such uncritical distinction as that drawn in the *Prolegomena* between judgments of perception and judgments of experience. The second and briefer account is not open to this objection.

In A 178-80 = B 220-3 Kant develops a further point of difference between the mathematical and the

dynamical principles, or rather explains what he means by his all too brief and consequently ambiguous reference in the first of the above accounts to “existence” (*Dasein*). The mathematical principles are *constitutive*; the dynamical are *regulative*. That is to say, the mathematical principles lay down the conditions for the generation or construction of appearances. The dynamical only specify rules whereby we can define the relation in which existences contingently given are connected. As existence can never be constructed *a priori*, we are limited to the determination of the interrelations between existences all of which must be given. Thus the principle of causality enables us to predict *a priori* that for every event there must exist some antecedent cause; but only through empirical investigation can we determine which of the particular given antecedents may be so described. That is to say, the principle defines conditions to which experience must conform, but does not enable us to construct it in advance. This distinction is inspired by the contrast between mathematical and physical science, and is valuable as defining the empirically regulative function of the *a priori* dynamical principles; but its somewhat forced character becomes apparent when we bear in mind Kant’s previous distinction between the principles of pure mathematical science and the transcendental principles which justify their application to experience. Those latter principles concern existence as apprehended through schematised categories, and are consequently, as regards certainty and method of proof, in exactly the same position as the dynamical principles. This is sufficiently evident from his own illustration of sunlight. There is as little possibility of “constructing” its intensity as of determining *a priori* the cause of an effect.

I. THE AXIOMS OF INTUITION

All appearances are in their intuition extensive magnitudes. Or as in the second edition: *All intuitions are extensive magnitudes*.

‘Extensive’ is here used in a very wide sense to include temporal as well as spatial magnitude. Kant bases this principle upon the schema of number, and the proof which he propounds in its support is therefore designed to show that apprehension of an object of perception, whether spatial or temporal, is only possible in so far as we bring that schema into play. But though this is the professed purpose of the argument, number is itself never even mentioned; and the reason for the omission is doubtless Kant’s consciousness of the obvious objections to any such position. That aspect of the argument is therefore, no doubt without explicit intention, kept in the background. But even as thus given, the argument must have left Kant with some feeling of dissatisfaction. Loyalty to his architectonic scheme prevents such doubt and disquietude from finding further expression.

The argument, in its first-edition statement, starts from the formulation of a view of space and time directly opposed to that of the *Aesthetic*:

“I entitle a magnitude extensive when the representation of the parts makes possible, and therefore necessarily precedes, the representation of the whole. I cannot represent to myself a line, however small, without drawing it in thought, *i.e.* generating from a point all its parts one after another, and thus for the first time recording this intuition.”

Similarly with even the smallest time. And as all appearances are intuited in space or time, every appearance, so far as intuited, is an extensive magnitude, that is to say, can be apprehended only through successive generation of its parts. All appearances are “aggregates, *i.e.* manifolds of antecedently given parts.”

This definition of extensive magnitude involves an assumption which Kant also employs elsewhere in the *Critique*, but which he nowhere attempts to establish by argument; namely, that it is impossible to apprehend a manifold save in succession. This assumption is, of course, entirely false (at least as applied to our empirical consciousness), as has since been amply demonstrated by experimental investigation.

Kant adopted it in the earlier subjectivist stage of his teaching, before he had come to recognise that consciousness of space is involved in consciousness of time. But even after he had done so, the earlier view still tended to gain the upper hand whenever the doctrines of inner sense and of productive imagination were under consideration. For in regard to the transcendental activities of productive imagination, which are essentially synthetic, Kant continued to treat time as more fundamental than space. But, as already noted, a directly opposite view of the interrelations of space and time is expounded in passages added in the second edition.

The two central paragraphs are very externally connected with the main argument, and are probably later interpolations. In the first of these two paragraphs Kant ascribes the synthetic activity involved in the "generation of figures" to the productive imagination, and maintains that geometry is rendered possible by this faculty. In the other paragraph Kant deals with arithmetic, but makes no reference to the productive imagination. Its argument is limited to the contention that propositions expressive of numerical relation, though synthetic, are not universal. They are not axioms, but numerical formulae. This distinction has no very obvious bearing on the present argument, and serves only to indicate Kant's recognition that no rigid parallelism can be established between geometry and arithmetic. There are, it would seem, no arithmetical axioms corresponding to the axioms of Euclid.

The concluding paragraph is a restatement of the argument of the *Aesthetic* and of § 13, *Note* i. of the *Prolegomena*. Appearances are not things in themselves. They are conditioned by the pure intuitional forms, and are therefore subject to pure mathematics "in all its precision." Were we compelled to regard the objects of the senses as things in themselves, an applied science of geometry (again taken, in Kant's habitual manner, as typically representing the mathematical disciplines) would not be possible. The only new element in the argument is the reference to synthesis as presupposed in all apprehension.

The additional proof with which in the second edition Kant prefaces the entire argument calls for no special comment. It may, however, be noted that though in the argument of the first edition the need of synthesis in all apprehension is clearly taught, the term synthesis is not itself employed except in the central and final paragraphs. In the proof given in the second edition both the term and what it stands for are allowed due prominence.

2. THE ANTICIPATIONS OF PERCEPTION

In all appearances sensation and the real which corresponds to it in the object (realitas phaenomenon) has an intensive magnitude or degree. Or as in the second edition: *In all appearances the real, which is an object of sensation, has intensive magnitude or degree.*

We may first analyse the total section. The first paragraph explains the term anticipation. The second and third paragraphs give a first proof of the principle. Paragraphs four to ten treat of continuity in space, time and change, and of the impossibility of empty space, and also afford Kant the opportunity to develop his dynamical theory of matter, and so to indicate the contribution which transcendental philosophy is able to make towards a more adequate understanding of the principles of physical science. The eleventh and twelfth paragraphs, evidently later interpolations, give a second proof of the principle which in one important respect varies from the first proof. In the second edition a third proof akin to this second proof, but carrying it a stage further, is added in the form of a new first paragraph.

Kant's reason for changing the formulation of the principle in the second edition is evidently the unsatisfactoriness of the phrase "sensation *and* the real." The principle, properly interpreted, applies not, as the first edition title and also the second proof would lead us to expect, to sensation itself, but to its object, *realitas phaenomenon*. It is phenomenalist in its teaching. The emphatic term "anticipation" is adopted by Kant to mark that in this principle we are able in *a priori* fashion to determine something in regard to what in itself is purely empirical. Sensation as such, being the matter of experience, can never

be known *a priori*. Its quality, as being a colour or a taste, depends upon factors which are for us, owing to the limitations of our knowledge, wholly contingent. None the less in one particular respect we can predetermine the object of all sensation, and so can *anticipate* experience, even in its material aspect.

The first proof is as follows. Apprehension, so far as it takes place through a sensation, occupies only a single moment; it does not involve any successive synthesis proceeding from parts to the complete representation. That which is apprehended cannot, therefore, possess extensive magnitude. But, as already stated in the chapter on *Schematism*, reality is that in appearance which corresponds to a sensation. It is *realitas phaenomenon*. The absence of it is negation = 0. Now every sensation is capable of diminution; between reality in the appearance and negation there is a continuous series of many possible intermediate sensations, the difference between any two of which is always smaller than the difference between the given sensation and zero. That is to say, the real in appearance has intensive magnitude or degree. The argument is from capability of variation in the intensity of sensation to existence of degree in its object or cause. For the most part this reality is spoken of as that which is apprehended in sensation, but Kant adds that if it be

"...viewed as cause either of sensation or of other reality in appearance, such as change, the degree of its reality ... is then entitled a moment, as for instance the moment of gravity."

The obscurity of what in itself is a very simple and direct argument would seem to be traceable to the lack of clearness in Kant's own mind as to what is to be signified by reality. The implied distinction between sensation and its object has not been clearly formulated. Definitions have, indeed, been given of reality in the chapter on *Schematism*; but they are extremely difficult to decipher. Kant never varies from the assertion that reality is "that which corresponds to sensation in general." Our difficulty is with the additional qualifications. This reality, he further declares, is

"...that, the concept of which in itself points to an existence [*Sein*] in time."

The words 'in time' would seem to show that what is referred to is reality *in the realm of appearance*, the *realitas phaenomenon* of the *Anticipations*. But immediately below we find the following sentence:

"As time is only the form of intuition, and consequently of objects as appearances, what corresponds in them to sensation is the transcendental matter of all objects *as things in themselves*, thinghood [*Sachheit*], reality."

The teaching of the first sentence is phenomenalist; that of the other is subjectivist.

Now in the section on *Anticipations of Perception* the phenomenalist tendencies of Kant's thought are decidedly the more prominent. The implied distinction is threefold, between sensation as subjective state possessing intensive magnitude, spatial realities that possess both intensive and extensive magnitude, and the thing in itself. Objects as appearances are regarded as causes of sensation and as producing changes in one another.

The explanation of the phenomenalist character of this section is not far to seek. Kant's chief purpose in it, as we shall find, is to develop the dynamical theory of matter to which he had long held, and which, as he was convinced, would ultimately be substituted for the mechanistic view to which almost all physicists then adhered. We can easily understand how in this endeavour the realist tendencies of his thinking should at once come to the surface, and why he should have been constrained to develop a position more precise and less ambiguous than that expressed in the definitions of reality and degree given in the chapter on *Schematism*. With these preliminary explanations we may pass to Kant's second proof of his principle.

A link of connection between the two proofs may be found in the reason which Kant in the first proof gives for his assertion that sensation cannot possess extensive magnitude — the reason, namely, that as its apprehension takes place in a single moment, it involves no element of synthesis. In his second proof Kant modifies this contention, and maintains that we can abstract from the extensive magnitude of the appearance, and yet can recognise a synthesis as being involved.

"The real which corresponds to sensations in general, as opposed to negation = 0, represents only something the very conception of which contains an existence [*ein Sein*], and signifies nothing but the synthesis in an empirical consciousness in general."

Kant adds that in a single moment we can represent to ourselves as involved in the bare sensation

"...a synthesis of the uniform progression from zero to the given empirical consciousness."

These statements are far from clear; but it is hardly necessary to criticise them in detail. Since Kant is endeavouring to prove that a schema, that of reality or limitation, is involved in the apprehension of sensation, he is bound in consistency to maintain, in accordance with the teaching of his deduction of the categories, that the application of the schema demands some species of synthesis.

The third proof, added in the second edition, is somewhat more explicit, and represents a further and last stage in Kant's vain endeavour to harmonise the teaching of this section with his general principles. In the empirical consciousness of sensation there is

"...a synthesis of the different quantities involved in the generation of a sensation from its beginning in pure intuition = 0 to its particular required magnitude."

Or again, apprehension of magnitude is apprehension

"...in which the empirical consciousness can in a certain time increase from zero up to its given measure."

Here, again, what Kant asserts as occurring in our awareness of sensation calls for much more rigorous demonstration. Like the argument of the second proof, it is not independently established; it is a mere corollary to the general principles of his deduction of the categories.

Thus Kant's thesis, that the apprehension of sense qualities as intensive magnitudes presupposes a synthesis according to an *a priori* schema, is both obscure in statement, and unconvincing in argument; and some of the assertions made, especially in reference to the occurrence of synthesis, would seem to be hardly less arbitrary than the connection which Kant professes to trace between logical "quality," as affirmation or negation, and the dynamical intensity of sensuous qualities. For, as already indicated, logical "quality" and intensive magnitude have nothing in common save the name.

Kant next proceeds to a discussion of the general problem of continuity. The connection is somewhat forced. But if we overlook the artificial ordering of the argument and are content to regard what is given as in the nature of parenthetical comment, we find in the middle paragraph of this section an excellent statement of his view of the nature of continuity and a very clear statement of his dynamical theory of matter.

Kant develops the conception of continuity (*a*) in reference to space and time, and (*b*) in its application to the intensity of sensations and of their causes.

(*a*) Kant's own words require no comment:

"Space and time are *quanta continua* because no part of them can be given, save as enclosed between limits (points or moments), and therefore as being itself a space or a time. Space therefore consists only of spaces, time only of times. Points and moments are only limits, i.e. mere positions that limit space and time. But positions always presuppose the intuitions which they limit or are intended to limit; and out of mere positions, viewed as constituents capable of being given prior to space and time, neither space nor time can be constructed. Such magnitudes may also be called *flowing*, since the synthesis of productive imagination involved in their production is a progression in time, and the continuity of time is ordinarily denoted by the expression *flowing*."

(*b*) When Kant proceeds to apply the principle of continuity to intensive magnitude, his conclusion rests upon a somewhat different basis. He argues that appearances must be continuous owing to the fact that they are apprehended in space and time. So far as they are extended in space and enduring in time that may perhaps be true; but Kant's assertion has a wider sweep. It implies that sensations and the physical

conditions of sensation, as for instance the sensation of red or the force of gravity, are capable of existing in every possible degree between zero and any given intensity. This affords the key to his method of formulating his second and third proofs of the principle of *Anticipations of Perception*, which, in the form in which he interprets it, contains this further implication of continuity. These proofs are inspired by the desire to make all apprehension, even that of simple sensation, a temporal process, and by that indirect means to establish for sensuous intensity and its objective conditions a continuity similar to that of space and time. The proof is, however, as we have seen, inconclusive. This application of continuity must be regarded as more in the nature of a mere hypothesis than Kant is willing to recognise. As regards sensations, it would seem to have been positively disproved by the results of experimental psychology.

From his supposed proof of the continuity of all intensive magnitudes Kant draws two further conclusions: first, that experience can never be made to yield proof of the void in either space or time. For if all reality can exist in innumerable degrees, and if each sense has a determinate degree of receptivity, the complete absence of reality can never be itself experienced. Inference to such absence is also impossible for a second reason, namely, that one and the same extensive magnitude may be completely occupied by an infinite number of different intensive degrees, indefinitely approximating to, and yet also indefinitely differing from, zero. Kant is here referring to the dynamical theory of matter which he had long held, and which he expounds in opposition to the current mechanistic view. The mechanistic theory rests, he contends, upon an assumption purely metaphysical and therefore wholly dogmatic, that the real in space has no internal differences, but is uniform like the empty space in which it exists. In accordance with this assumption physicists infer that all qualitative differences in our sensations must be due to merely quantitative differences in their material causes, and ultimately to differences in the number and distribution of the constituent parts of material bodies. If two bodies of the same volume differ in weight or in inertia, the variation must be traced to differences in the amount of matter, or, otherwise stated, to differences in the amount of unoccupied space, in the two bodies. To this view Kant opposes his own hypothesis — for it is in this more modest form that it is presented in these paragraphs — namely, that matter occupies space by intensity and not by mere bulk, and that it may therefore be diminished indefinitely in degree without for that reason ceasing completely to fill the same extensive area. Thus an expanded force such as heat, filling space without leaving the smallest part of it empty, may be indefinitely diminished in degree, and yet may still with these lesser degrees continue to occupy that space as completely as before. This may not, Kant admits, be the true explanation of physical differences, but it at least has the merit of freeing the understanding from metaphysical preconceptions, and of demonstrating the possibility of an alternative to the current view. If matter has intensity as well as extensity, and so can vary in quality as well as in quantity, physical science may perhaps be fruitfully developed on dynamical lines.

3. THE ANALOGIES OF EXPERIENCE

The principle of the *Analogies* is: *Experience is possible only through the representation of a necessary connection of perceptions.*

Kant introduces the three analogies with the statement of an underlying principle, which corresponds to the central thesis of the transcendental deduction. In the second edition this general principle is reformulated, and a new proof is added. These alterations do not seem, however, to be of any special significance. The two proofs repeat the main argument of the transcendental deduction, but with special emphasis upon the temporal aspect of experience. The categories of relation, as schematised, yield the *Analogies*, which acquire objective validity in so far as they render experience possible. The first proof (given in the second paragraph of the first edition) maintains that they are indispensable for apperception, and the second proof (that of the second edition) that they are indispensable for knowledge of objects. The

references to time in the second proof are too condensed to be intelligible save in the light of the more explicit arguments given in support of the three *Analogies*.

The first paragraph in the first edition must be a later interpolation, as its assertion that simultaneity is a mode of time conflicts with the proof given of the first *Analogy*, but agrees with what must be regarded as a later interpolated passage introductory to that proof. This paragraph is also peculiar in another respect. Hitherto Kant has traced the existence of the three analogies to the three categories of relation, each of which conditions a separate schema. But in this paragraph he bases their threefold form on the fact that time has three modes, duration, sequence, and coexistence, and that there is therefore a threefold problem: first, what is involved in consciousness of duration; secondly, what is involved in consciousness of succession; and thirdly, what is involved in consciousness of coexistence. This is not, however, a satisfactory mode of stating the matter, for it might seem to imply that the three aspects of time can be separately apprehended, and that each has its own independent conditions. What Kant really proves is that all three involve one another. We can only be conscious of duration in contrast to succession, and of succession in contrast to the permanent, while both involve consciousness of coexistence. The three analogies thus treat of three aspects of the same problem, the first connecting with the category of substance, the second with that of causality, and the third with that of reciprocity.

The only point that calls for further comment concerns Kant's adoption of the term *Analogy* as a title for the three principles of "relation." The term is employed in contra-distinction to constitutive principle or axiom; and Kant points out that this usage of the term must be carefully distinguished from the other or mathematical. "In philosophy analogy is not the likeness of two quantitative but of two qualitative relations." In mathematical analogy a fourth term can be discovered from three given terms; but in an 'analogy of experience' we possess a rule that suffices only for the determination of the *relation* to a term not given, never for knowledge of this term itself. Thus if we are informed that 15 is to x as 5 is to 10, the value of x can be determined as 30. But if it be stated that a given event stands to an antecedent event as effect to cause, only the relation holding between the events can be specified, not the actual cause itself. The principle of causality thus serves only as a regulative principle, directing us to search for the cause of an event among its antecedents.

Riehl has suggested a very different explanation of the term, namely, as signifying that the categories of relation are employed only on the analogy of the corresponding, pure logical forms.

"In so far as I know matter in terms of its empirical properties as the substance of outer experiences, I do not gain knowledge of the nature of matter but only of its relation to my thinking. In all judgments upon outer things I employ matter as the *subject*. That knowledge is therefore nothing but an *analogy* to the conceptual relation of a subject to its predicates. Matter is related to its properties and effects in the realm of appearance as the subject of a categorical judgment is related to its predicates. In so far as an antecedent is entitled the cause of an event, we do not gain knowledge of its nature but only of the analogy of the relation of cause and effect with that of antecedent and consequent in a hypothetical proposition; the connection of the changes is analogous to the conceptual relation of ground and consequence; the principle of the sufficient ground of changes is an *analogy of experience*."

This explanation may at first sight seem to be supported by Kant's own statement in the concluding paragraph of the section before us.

"Through these principles we are justified in combining appearances only according to an analogy with the logical and general unity of concepts ..."

This assertion is, however, incidental to Kant's explanation that the analogies are not principles of "transcendental" (*i.e.* transcendent), but only of empirical application — an explanation itself in turn occasioned by his desire to connect his present argument with the chapter on *Schematism*. This interpretation of the term analogy is probably, therefore, of the nature of an afterthought. Having adopted the term on the grounds above stated in A 179-80 = B 222, he finds in it an opportunity to reinforce his

previous assertion of the restricting character of the time condition through which categories are transformed into schemata. The entire paragraph is probably, as Adickes remarks, a later interpolation. But there are further reasons why we cannot accept this passage as representing the real origin of the term analogy. It would involve adoption of the subjectivist standpoint from which Riehl, despite his otherwise realistic reading of Kant, interprets Kant's phenomenalist doctrines. For it implies that it is only in the noumenal, and not also in the phenomenal sphere, that substantial existences and genuinely dynamical activities are to be found. It would also seem to imply, what is by no means Kant's invariable position, the absolute validity of the logical forms. And lastly, it would involve the priority of the logical to the real use of the categories, a violation of Critical principles of which Kant is himself occasionally guilty, but never, as it would seem, in this exaggerated form.

A. First Analogy. — *All appearances contain the permanent (substance) as the object itself, and the changeable as its mere determination, i.e. as a mode in which the object exists.* Or as in the second edition: *In all change of appearances substance is permanent; its quantum in Nature neither increases nor diminishes.*

The second paragraph is of composite character. Its first part (consisting of the first three sentences) and its second part give separate proofs, involving assertions directly contradictory of one another. The one asserts change and simultaneity to be modes of time; the other denies this. They cannot, therefore, be of the same date. The first would seem to be the later; it connects with the first paragraph of the preceding section.

In the first edition the principle is defined as expressing the schema of the dual category of substance and attribute. In the second edition it is reformulated in much less satisfactory form, as being the scientific principle of the conservation (*i.e.* indestructibility) of matter. This second formulation emphasises the weaker side of the argument of the first edition, and is largely due to the perverting influence of Kant's method of distinguishing between the *Analytic of Concepts* and the *Analytic of Judgments*. It reveals Kant's growing tendency to contrast the two divisions of the *Analytic*, as dealing, the one with ordinary experience, and the other with its scientific reorganisation.

The first proof in the first edition gives explicit expression to a presupposition underlying this entire section, namely, that all apprehension is necessarily successive, or in other words that it is impossible to apprehend a manifold save in succession. From this assumption it follows that if such succession is not only to occur but is to be apprehended as occurring, and if we are to be able to distinguish between the successive order of all our apprehensions and the order of coexisting independent existences, a permanent must be thought into the succession, that is to say, the successive experiences must be interpreted into an objective order in terms of the category of abiding substance and changing attributes. Kant neither here nor elsewhere makes any attempt to explain how this position is to be reconciled with his doctrine that space can be intuited as well as time; and there is equal difficulty in reconciling it with the doctrine developed in his second proof (in the second division of this same paragraph) that time itself does not change but only the appearances in it.

As above shown, there are two tendencies in Kant's treatment of time, each of which carries with it its own set of connected consequences. There is the view that consciousness of time *as a whole* preconditions consciousness of any part of it. This tends to recognition of simultaneity as a mode of time and of the simultaneous as apprehended in a single non-successive act of apprehension. On the other hand, there is the counter-view that consciousness of time is only possible through the successive combination of its parts. This leads to the assertion that simultaneity is not a mode of time, and that time itself cannot be apprehended save as the result of synthesis in accordance with unifying categories. Through the categories there arises consciousness of objectivity, and so for the first time consciousness of a distinction between the subjective which exists invariably and exclusively in succession, and the objective which may exist either as successive or as permanent, and in whose existence both elements

are, indeed, inseparably involved.

To turn now to Kant's second proof of the principle; it is as follows. All our perceptions are in time, and in time are represented as either coexistent or successive. Time itself cannot change, for only as in it can change be represented. Time, however, cannot by itself be apprehended. As such, it is the mere empty form of our perceptions. There must be found in the objects of perception some abiding substrate or substance which will represent the permanence of time in consciousness, and through relation to which coexistence and succession of events may be perceived. And since only in relation to this substrate can time relations be apprehended, it must be altogether unchangeable, and may therefore be called substance. And being unchangeable it can neither increase nor diminish in quantity. Kant, without further argument, at once identifies this substance with matter.

This proof may be restated in briefer fashion. The consciousness of events in time involves the dating of them in time. But that is only possible in so far as we have a representation of the time in which they are to be dated. Time, however, not being by itself experienced, must be represented in consciousness by an abiding substrate in which all change takes place, and since, as the substrate of *all* change, it will necessarily be unchangeable, it may be called substance.

The argument, in both proofs, is needlessly abstract, and as already remarked, the reason of this abstractness is that Kant here, as in the chapter on *Schematism*, unduly ignores space, limiting his analysis to inner sense. He defines the schema of substance as the permanence of the real in time, *i.e.* as the representation of the real which persists while all else changes. As the second edition of the *Critique* shows, Kant himself came to recognise the inadequacy of this definition, and therefore of the proof of the first *Analogy*. Consciousness is only possible through the representation of objects in *space*. Only in outer sense is a permanent given in contrast to which change may be perceived. The proof ought therefore to have proceeded in the following manner. Time can be conceived only as motion, and motion is perceivable only against a permanent background in space. Consciousness of time therefore involves consciousness of a permanent in space. He might have added that consciousness of relative time involves consciousness of change in relation to something relatively permanent, and that the scientific conception of all changes as taking place in a single absolute time involves the determining of change through relation to something absolutely permanent, this ultimate standard being found in the heavenly bodies. By the permanent is not meant the immovable, but only that which is uniform and unchanging in its motions. The uniform motions of the heavenly bodies constitute our ultimate standard of time. The degree of their uniformity is the measure of our approximation to an absolute standard. A marginal note upon this *Analogy* in Kant's private copy of the *Critique* reveals Kant's late awakened recognition of the necessity of this mode of restating the argument.

"Here the proof must be so developed as to apply only to substances as phenomena of outer sense, and must therefore be drawn from space, which with its determinations exists at all times. In space all change is motion...."

That the new argument of the second edition still proceeds on the same lines as the second argument of the first edition is probably due, as Erdmann remarks, to Kant's unwillingness to make the extensive alterations which would have been called for in the chapter on *Schematism* as well as in the statement of this *Analogy*.

A second serious objection to Kant's treatment of the first *Analogy* follows at once from the above. Kant identifies the permanent which represents time in consciousness with matter, and seeks to prove by means of this identification the principle of the conservation of matter. That principle is not really capable of transcendental proof. It is not a presupposition of possible experience, but merely a generalisation empirically grounded. Kant is here confounding a particular theory as to the manner in which the element of permanence, necessary to possible experience, is realised, with the much more general conclusion which alone can be established by transcendental methods. His argument also conflicts with his own

repeated assertion that the notion of change, in so far as it is distinct from that of temporal succession or of motion in space, is empirical, and consequently falls outside the scope of transcendental enquiry. By the conservation of matter we mean the constancy of the weight of matter throughout all changes. But the only permanent which can be postulated as necessary to render our actual consciousness of time possible, consists of spatial objects sufficiently constant to act as a standard by comparison with which motions may be measured against one another. And as this first *Analogy*, properly understood, thus deals solely with spatial changes of bodies, the principle of the conservation of matter has no real connection with it.

Then thirdly, and lastly, Kant takes this first *Analogy* as showing the indispensable function performed in experience by the category of substance and attribute. Substance, he argues, corresponds to the time in which events happen, and its attributes correspond to the changing events. Just as all events are only to be conceived as happening in time, so too all changes are only to be conceived as changes in an abiding substance. These, he would seem to hold, are simply two ways of making one and the same assertion. Now Kant may perhaps be right in insisting that all change is change in, and not of, time. Unity of consciousness would seem to demand consciousness of a single time in which all events happen. But this relation of time to its events does not justify the same assertion being made of substance. Substance may be what corresponds to time in general, and may represent it in consciousness, but we cannot for that reason say that changes are also only in and not of it. To regard the changes in this way as attributes inhering in substance directly contradicts the view developed in the second *Analogy*. For the notion of substance is there treated as an implication of the principle of causality. Substance, Kant there insists, is not a bare static existence in which changes take place, but a dynamic energy which from its very nature is in perpetual necessitated change. Change is not change in, but change of, substance.

Even in the passage in which Kant identifies the notion of the permanent in change with that of substance and attribute, he shows consciousness of this difficulty. We must not, he says, separate the substance from its accidents, treating it as a separate existence. The accidents are merely the special forms of its existence. But all the same, he adds, withdrawing the words which he has just uttered, such a separation of the changing accidents from the abiding substance is "*unavoidable, owing to the conditions of the logical employment of our understanding*." Kant is here so hard pressed to account for the use of the category of substance and attribute in experience, and to explain the contradictions to which it gives rise, that the only way he sees out of the difficulty is to refer the contradictions involved in the category to the constitution of our understanding in its *logical* employment. Yet as such employment of understanding is, according to his own showing, secondary to, and dependent upon, its "real" employment, the category of substance and attribute can hardly have originated in this way.

We must, then, conclude that Kant offers no sufficient deduction or explanation of the category of substance and attribute, and as he does so nowhere else, we are driven to the further conclusion that he is unable to account for its use in experience, or at least to reconcile it in any adequate fashion with the principle of causality.

B. Second Analogy. — *Everything that happens, i.e. begins to be, presupposes something on which it follows according to a rule*. Or as in the second edition: *All changes take place in conformity with the law of the connection of cause and effect*.

This section, as Kant very rightly felt, contains one of the most important and fundamental arguments of the entire *Critique*; and this would seem to be the reason why he has so multiplied the proofs which he gives of the *Analogy*. Within the limits of the section no less than five distinct proofs are to be found, and still another was added in the second edition. As Adickes argues, it is extremely unlikely that Kant should have written five very similar proofs in immediate succession. The probability is that they are of independent origin and were later combined to constitute this section; or, if we hold with Adickes that Kant first composed a "brief outline," we may conclude that he combined the one or more proofs, which that outline contained, with others of earlier or of later origin. The first to the fourth paragraphs of the first

edition contain a first proof; the fifth to the seventh a second proof (a repetition of the first proof but in indirect form); the eighth to the tenth a third proof (almost identical with the first); the eleventh to the thirteenth a fourth proof (different in character from all the others); the fourteenth a fifth proof (probably the latest in time of writing; an anticipation of the argument in the second edition). The paragraph added in the second edition (the second paragraph in the text of the second edition) gives a sixth and last proof.

We may first state the central argument, deferring treatment of such additional points as arise in connection with Kant's varying formulations of it in his successive proofs. The second *Analogy*, though crabbedly, diffusely, and even confusedly stated, is one of the finest and most far-reaching pieces of argument in the whole *Critique*. It is of special historical importance as being Kant's answer to Hume's denial of the validity of the causal principle. Hume had maintained that we can never be conscious of anything but mere succession. Kant in reply seeks to prove that consciousness of succession is only possible through consciousness of a necessity that determines the order of the successive events.

Kant, we must bear in mind, accepts much of Hume's criticism of the category of causality. The general principle that every event must have an antecedent cause is, Kant recognises, neither intuitively certain nor demonstrable by general reasoning from more ultimate truths. It is not to be accounted for by analytic thought, but like all synthetic judgments *a priori* can only be proved by reference to the contingent fact of actual experience. Secondly, Kant makes no attempt, either in this *Analogy* or elsewhere in the *Critique*, to explain the nature and possibility of causal connection, that is, to show how one event, the cause, is able to give rise to another and different event, the effect. We can never by analysis of an effect discover any reason why it must necessarily be preceded by a cause. Thirdly, the principle of causality, as deduced by Kant and shown to be necessarily involved in all consciousness of time, is the quite general principle that every event must have *some* cause in what immediately precedes it. What in each special case the cause may be, can only be empirically discovered; and that any selected event is really the cause can never be absolutely certain. The particular causal laws are discovered from experience, not by means of the general principle but only in accordance with it, and are therefore neither purely empirical nor wholly *a priori*. As even J. S. Mill teaches, the general principle is assumed in every inference to a causal law, and save by thus assuming the general principle the particular inference to causal connection cannot be proved. But at the same time, since the proof of causal connection depends upon satisfaction of those empirical tests which Mill formulates in his inductive methods, such special causal laws can be gathered only from experience.

The starting-point of Kant's analysis is our consciousness of an *objective* order in time. This is for Kant a legitimate starting-point since he has proved in the *Transcendental Deduction* that only through consciousness of the objective is consciousness of the subjective in any form possible. The independent argument by which it is here supported is merely a particular application of the general principle of that deduction. When we apprehend any very large object, such as a house, though we do so by successively perceiving the different parts of it, we never think of regarding these successive perceptions as representing anything successive in the house. On the other hand, when we apprehend successive events in time, such as the successive positions of a ship sailing down stream, we do regard the succession of our experiences as representing objective succession in what is apprehended. Kant therefore feels justified in taking as fact, that we have the power of distinguishing between subjective and objective succession, *i.e.* between sequences which are determined by the order of our attentive experience and sequences which are given as such. It is this fact which affords Kant a precise method of formulating the problem of the second *Analogy*, viz. *how consciousness of objective change, as distinguished from subjective succession, is possible*?

Schopenhauer, owing to the prominence in his system of the principle of sufficient reason, has commented upon this second *Analogy* in considerable detail; and we may here employ one of his chief criticisms to define more precisely the general intention of Kant's argument. The succession in our

experiences of the parts of a house and of the positions of a ship is, Schopenhauer maintains, in both cases of genuinely objective character. In both instances the changes are due to the position of two bodies relatively to one another. In the first example one of these bodies is the body of the observer, or rather one of his bodily organs, namely the eye, and the other is the house, in relation to the parts of which the position of the eye is successively altered. In the second example the ship changes its position relatively to the stream. The motion of the eye from roof to cellar is one event; its motion from cellar to roof is a second event; and both are events of the same nature as the sailing of the ship. Had we the same power of dragging the ship upstream that we have of moving the eye in a direction opposite to that of its first movement, the positions of the ship could be reversed in a manner exactly analogous to our reversal of the perceptions of the house.

This criticism is a typical illustration of Schopenhauer's entire failure to comprehend the central thesis of Kant's Critical idealism. The *Analytic*, so far as the main argument of its objective deduction is concerned, was to him a closed book; and as this second analogy is little else than a special application of the results of the deduction, he was equally at a loss in its interpretation. Kant was himself, of course, in large part responsible for the misunderstanding. The distinction which would seem to be implied by Kant's language between sequence that is objective and sequence that is *merely* subjective is completely inconsistent with Critical principles, and is as thoroughly misleading as that other distinction which he so frequently employs between the *a priori* and the merely empirical. Schopenhauer, however, regarded these distinctions as valid, and accordingly applies them in the interpretation of Kant's method of argument. If inner and outer experience are to be contrasted as two kinds of experience, there is, as Schopenhauer rightly insists, no sufficient ground for regarding changes due to movements of the eye as being subjective and those that are due to movements of a ship as being objective. That is not, however, Kant's intention in the employment of these illustrations. He uses them only to make clear the fairly obvious fact that while in certain cases the order of our perceptions is subjectively initiated, in other cases we apprehend the subjective order of our experiences as corresponding to, and explicable only through, the objective sequence of events. In holding to this distinction Kant is not concerned to deny that even in the order which is determined by the subject's purposes or caprice objective factors are likewise involved. The fact that the foundations of a house support its roof, and will therefore determine what it is that we shall apprehend when we turn the eye upwards, does not render the order of our apprehensions any the less subjective in character. But that this order is *purely* subjective, Kant could never have asserted. His Critical principles definitely commit him to the view that even sensations and desires are integral parts of the unitary system of natural law. Kant, as we shall find, is maintaining that some such distinction between subjective and objective sequence as is illustrated in the above contrasted instances must be present from the very start of our experience — must, indeed, be constitutive of experience as such. Out of a consciousness of the purely subjective the notion of the objective can never arise. Or otherwise stated, consciousness of a time order, even though subjective, must ultimately involve the application of some non-subjective standard.

"I shall be obliged ... to derive the subjective sequence of apprehension from the objective sequence of appearances, because otherwise the former is entirely undetermined, and does not distinguish any one appearance from any other."

We interpret the subjective order in terms of an objective system; consciousness of the latter is the necessary presupposition of all awareness. It is as necessary to the interpretation of what is apprehended through the rotating eyeballs as to the apprehension of a moving ship. So far from refusing to recognise that the subjective order of our experiences is objectively conditioned, Kant is prepared to advance to the further assertion that it is only apprehensible when so conceived.

In the third *Analogy* Kant proceeds to the connected problem, how we can apprehend the parts of a house as simultaneous notwithstanding the sequent relation of our perceptions of them, and what

justification we have for thus interpreting the subjectively sequent experiences as representing objective coexistence. Just as Kant in this second *Analogy* does not argue that irreversibility is by itself proof of causal relation, but only that the consciousness of such irreversibility demands the employment of the conception of causality, so in the third *Analogy* he does not attempt to reduce the consciousness of coexistence to the consciousness of reversibility, but to prove that only through the application of the conception of reciprocity can the reversibility be properly interpreted. In each case the category conditions the empirical consciousness; the latter is an apprehension of determinate order only in so far as it presupposes the category. Though Kant's treatment of the third *Analogy* has less historical importance, and perhaps less intrinsic interest, than the proof of the second *Analogy*, it is even more significant of the kind of position which he is endeavouring to establish, and I may therefore forewarn the reader that he must not spare himself the labour of mastering its difficult, and somewhat illusive, argument. The doctrines which it expounds at once reinforce and extend the results of the second *Analogy*, while the further difficulties which it brings to view, but which it is not itself capable of meeting, indicate that the problems of the *Analytic* call for reconsideration in the light of certain wider issues first broached in the *Dialectic*.

We may now return to Kant's main argument. His problem, as we have found, is how consciousness of objective change, as distinguished from subjective succession, is possible. The problem, being formulated in this particular way, demands, Kant felt, careful definition of what is meant by the term 'objective,' upon which so much depends. To apply the illustration above used, the house as apprehended is not a thing in itself but only an appearance to the mind. What, then, do we mean by the house, as distinguished from our subjective representations of it, when that house is nothing but a complex (*Inbegriff*) of representations? The question and Kant's answer to it are stated in subjectivist fashion, in terms of his earlier doctrine of the transcendental object. To contrast an object with the representations through which we apprehend it, is only possible if these representations stand under a rule which renders necessary their combination in some one particular way, and so distinguishes this one particular mode of representation as the only true mode from all others. The origin, therefore, of our distinction between the subjectively successive and the succession which is also objective must be due in the one case to the presence of a rule compelling us to combine the events in some particular successive order, and in the other to the absence of such a rule. Our apprehension of the house, for instance, may proceed in any order, from the roof downwards or *vice versa*, and as the order may always be reversed there is no compulsion upon the mind to regard the order of its apprehension as representing objective sequence. But since in our apprehension of an event B in time, the apprehension of B follows upon the apprehension of a previous event A, and we cannot reverse the order, the mind is compelled to view the order of succession, in terms of the category of causality, as necessitated, and therefore as objective. The order is a necessary order not in the sense that A must always precede B, that A is the cause of B, but that the order, if we are to apprehend it correctly, must in this particular case be conceived as necessary. The succession, that is, need not be conceived as a causal one, but in order to be conceived as objective succession it must be conceived as rendered necessary by connections that are causal.

Having, in this general fashion, shown the bearing of his previous analysis of objective experience upon the problem in hand, Kant proceeds to develop from it his proof of the special principle of causality. The schema of causality is necessary succession in time, and it is through this, its time aspect, that Kant approaches the principle. It has to do with the special case of *change*. To be conscious of change we must be conscious of an *event*, that is, of something as happening at a particular point in time. The change, in other words, requires to be dated, and as we are not conscious of time in general, it must be dated by reference to other events, and obviously in this case in relation to the preceding events, in contrast to which it is apprehended *as change*. But according to the results of our analysis of what constitutes objective experience, it can be fixed in its position in objective time only if it be conceived as related to

the preceding events according to a necessary law; and the law of necessary connection in time is the law of causality. In order, then, that something which has taken place may be apprehended as having occurred, that is, as being an objective change, it must be apprehended as necessarily following upon that which immediately precedes it in time, *i.e.* as causally necessary.

The principle of causality thus conditions consciousness of objective succession, and Hume, in asserting that we are conscious of the succession of *events*, therefore admits all that need be assumed in order to prove the principle. The reason why Hume failed to recognise this, is that he ignored the distinction between consciousness of the subjective order of our apprehensions and consciousness of the objective sequence of events. Yet that is a distinction upon which his own position rested. For he teaches that determination of causal laws, sufficiently certain to serve the purposes alike of practical life and of natural science, can be obtained through observation of those sequences which remain constant. Such is also the position of all empiricists. They hold that causal relation is discovered by comparison of *given* sequences. Kant's contention is that the apprehension of change as change, and therefore ultimately the apprehension even of an arbitrarily determined order of subjective succession, presupposes, and is only possible through, an application of the category of causality. The primary function of the understanding does not consist in the clarification of our representation of an event, but in making such representation possible at all. The primary field of exercise for the understanding lies not in the realm of reflective comparison, but in the more fundamental sphere of creative synthesis. In determining the nature of the given it predetermines the principles to which all reflection upon the given must conform. The discursive activities of scientific reflection are secondary to, and conditioned by, the transcendental processes which generate the experience of ordinary consciousness. Only an experience which conforms to the causal principle can serve as foundation either for the empirical judgments of sense experience, or for that ever-increasing body of scientific knowledge into which their content is progressively translated. The principle of causality is applicable to everything experienced, for the sufficient reason that experience is itself possible only in terms of it. This conclusion finds its most emphatic and adequate statement in the *Methodology*.

"...through concepts of understanding pure reason establishes secure principles, not however directly from concepts, but always only indirectly through relation of these concepts to something altogether contingent, namely, *possible experience*. For when such experience (*i.e.* something as object of possible experience) is presupposed, the principles are apodictically certain, though by themselves (directly) *a priori* they cannot even be recognised at all. Thus no one can acquire insight into the proposition that everything which happens has its cause, merely from the concepts involved. It is not, therefore, a dogma, although from another point of view, namely, from that of the sole field of its possible employment, *i.e.* experience, it can be proved with complete apodictic certainty. But though it needs proof, it should be entitled a *principle,* not a *theorem,* because *it has the peculiar character that it makes possible the very experience which is its own ground of proof, and in this experience must always itself be presupposed*."

Before making further comment upon Kant's central argument, it is advisable to consider the varying statements which Kant has given of it. We may take his successive proofs in the order in which they occur in the first edition.

First Proof. — The argument is developed in terms of Kant's early doctrine of the transcendental object. The only points specially characteristic of the statement here given of that doctrine consist (*a*) in the emphasis with which it is asserted that representations can be experienced only in succession to one another, and that they can never stand in the relation of coexistence, and (*b*) in the almost complete ignoring of the transcendental object as source or ground of the rule in terms of which the successive representations are organised. (*a*) This is a point common to the arguments of all three *Analogies*. In the first and third the problem is how, from representations merely successive, permanence and coexistence

can be determined. In the second *Analogy* the problem is how from representations invariably successive a distinction can be drawn between the subjectively determined order of our apprehensions and the objective sequence of events. Or in other words: how under such conditions we can recognise an order as given, and so as prescribing the order in which it must be apprehended. Or to state the same point in still another manner: how we can distinguish between an arbitrary or reversible order and an imposed or fixed order, and so come to apprehend the subjective order of our apprehensions as in certain cases controlled by, and explicable only through, the objective sequence of events.

(*b*) The reason why the transcendental object, as source of the determinate and prescribed order of the given events, falls into the background in this passage is that Kant is concerned only with the general principle or category by means of which the order is apprehended as necessary. That principle has a subjective origin even though the particular sequences of concrete events have by means of that concept to be conceived as inexorably determined by their noumenal conditions. The principle accounts for the *comprehension* of the order as objective, and that is the only point with which Kant is here immediately concerned. That the assertion of the subjective origin of the category is not inconsistent with recognition of the imposed order of the given has already been shown above. Kant's own illustration, in this section, of the ship sailing down stream shows that he was prepared to assume without question that they are compatible. His argument is, however, obscure, owing to his failure to distinguish between the two senses in which the term 'rule' may be employed. The term may signify either the universal and merely formal principle that every event must have a cause, or it may be used to denote the fixed order in which concrete events are presented to sense-perception. The latter order need not represent a series the members of which are causally connected *with one another*, but only one that is due to causal necessities. Thus the successive positions of a ship sailing down stream are not interrelated as cause and effect, and yet in order to be apprehended as objectively successive must be conceived as causally conditioned. The term 'rule' has very different meanings in the two cases. 'Rule' in the first sense is of subjective origin. It is *formal*, and can never be given. It is read into the given. 'Rule' in the second sense is given merely, and being due to noumenal conditions constitutes the *material* element in natural science, the empirical content of some particular causal law. Owing to Kant's failure explicitly to distinguish between these two very different connotations of the term, such a sentence as the following is ambiguous: "That in appearance which contains the condition of this necessary rule of apprehension is the object." Kant may mean that the prescribed order of the concrete events is due to the transcendental object; but in that case it is not given as *necessary*. Necessity, as he constantly insists, is the one thing that can never be given. The sentence is also misleading through its use of the term 'appearance.' That term has no legitimate place in a passage inspired by the doctrine of the transcendental object; there can be no such middle term between subjective representations and the thing in itself. As Kant himself states, appearance defined in terms of that doctrine is "nothing save a complex of representations."

There is a very essential difference in the view which Kant takes of the causal relation according as he is proceeding upon subjectivist or upon phenomenalist lines. From the one point of view appearances are representations merely, and accordingly are entirely devoid of causal efficacy. They are not causes and effects of one another. They have not the independence or self-persistence necessary for the exercise of dynamical energy or even for the reception of modifications. Being "states of the identical self," all causal relation, dynamically conceived, must lie solely in their noumenal conditions. Causality reduces to the thought of necessitated (not necessitating) sequence. It is, as Kant has suggested in A 181 = B 224, a mere 'analogy' in terms of which we apply the logical relation of ground and consequence to the interpretation of our subjective representations, and so view them as grounded not in one another but exclusively in the thing in itself. Causality in the strict sense, *i.e.* dynamical agency, can be looked for only in the noumenal sphere.

Caird, while adopting this explanation of the term 'analogy,' is, as might be expected from his Hegelian

standpoint, extremely indefinite and non-committal as to whether or not empirical objects can be genuine causes. Riehl, notwithstanding his professedly realistic interpretation of Kant, adopts the above subjectivist view of natural causation. So also do Benno Erdmann and Paulsen. The latter speaks with no uncertain voice.

"Causality in the phenomenal world signifies for Kant, as for Hume, nothing but regularity in the sequence of phenomena. Real causal efficiency cannot of course occur here, for phenomena are ideational products. As such they can no more produce an effect than concepts can."

The corresponding phenomenalist view of the causal relation receives no quite definite formulation either in this section or elsewhere in the *Critique*, but may be gathered from the general trend of Kant's phenomenalist teaching. It is somewhat as follows. The term 'analogy' is viewed as having a meaning very different from that above suggested. The causal relation is not a mere analogy from the logical relation of ground and consequence; it is the representation of genuinely dynamical activities in the objects apprehended. Those objects are not mere states of the self, subjective representations. They are part of an independent order which in the form known to us is a phenomenalist transcript of a deeper reality. If the causal relation is the analogy of anything distinguishable from itself, it is an analogon or interpretation of dynamical powers exercised by things in themselves, not of the merely logical relation between premisses and conclusion. The objects of representation may exercise powers which representations as such can never be conceived as possessing. Between the individual's subjective states and things in themselves stands the phenomenal world of the natural sciences. Its function, whether as directly experienced through sense-perception or as conceptually reconstructed through scientific hypothesis, is to stand as the representative in human consciousness of that noumenal realm in which all existence is ultimately rooted. The causal interactions of material bodies in space are as essentially constitutive of those bodies as are any of their quantitative properties. Causal relation, even in the phenomenal sphere, must not be identified with mere conformity to law. The true and complete purpose of the natural sciences is not to be found in the Berkeleian or sceptical ideal of simplification, but in the older and sounder conception of causal explanation. That, at least, is the view which Kant invariably defends whenever he has occasion to discuss the principles of physical science.

Second Proof. — The argument of the first proof is here developed in indirect fashion. In the *absence* of any rule prescribing necessary sequence, no distinction can be made between subjective and objective succession. The justification for such a rule lies therefore, not in an inductive inference from repeated experience, but in its necessity for the possibility of experience. It is an expression of the synthetic unity in which experience consists.

Third Proof. — This is for the most part merely a restatement of the first proof. It differs from it in making rather more explicit that the objective reference involved in the notion of the transcendental object is one that carries the mind beyond all representations to the thought of something which determines their order according to a rule. Otherwise the ambiguities of the terms employed are identical with those of the first proof. Its concluding paragraph, however, is a much clearer statement of the difficult argument of A 192-3 = B 238-9.

Fourth Proof. — This proof differs from all the others. It argues from the characteristics of pure time to the properties necessary to the empirical representation of the time-series. As time cannot be experienced in and by itself, all its essential characteristics must be capable of being represented in terms of appearance. "Only in appearances can we empirically recognise continuity in the connection of times." The primary function of the understanding is to make such recognition possible, and it does so by "transferring the time order to the appearances and their existence." It is a necessary law of time that we can only advance to the succeeding through the preceding. Each moment of time is the indispensable condition of the existence of that which follows it. We can pass to the year 1915 only by way of the preceding year 1914. And since, as just noted, time is not cognisable by itself but only as the form of our

perceptions, this law must be applicable to them. We can only be conscious of all times as successively conditioning one another in one single time, and that means in one single *objective* time, if we are conscious of all the phenomena perceived as conditioning one another in their order in time.

It is somewhat difficult to understand how Kant came to formulate the argument in this form. The explanation may perhaps be found in his preoccupation with the doctrine of a transcendental activity of the productive imagination and with the connected doctrine of a pure *a priori* manifold. For this proof would seem to rest upon the assumption that the characteristics of time are known purely *a priori* and therefore with complete certainty, independently of sense experience. The unusual and somewhat scholastic character of the proof also appears in Kant's substitution of the principle of sufficient reason for the principle of causality. But despite the artificial character of the standpoint, the argument serves to bring prominently forward Kant's central thesis, viz. that the principle of causality is presupposed in all consciousness of time, even of the subjectively successive. Also, by emphasising that time in and by itself can never be "an object of perception," and that the relating of appearances to "absolute time" is possible only through the determining of them in their relations to one another, it supplies the data for correction of its own starting-point.

Fifth Proof. — This proof is probably later than the preceding proofs. Though its essential content coincides with that of the opening proof, its formulation would seem to be a first attempt at statement of the sixth proof, *i.e.* of the argument which Kant added in the second edition. Adickes considers this proof to be earlier in date than the first four proofs, but the reason which he assigns for so regarding it, viz. that Kant here postulates a synthesis of the imagination independent of the categories as preceding a synthesis of apprehension in terms of the categories, seems to be based upon a much too literal reading of Kant's loose mode of statement. The argument rather appears to be, as in the sixth proof, that synthesis of the imagination may be either subjective or objective; and the term "apprehension" would seem to be used as signifying that the manifold synthesised is *given* to the imagination through actual sense experience, and that as thus given it has a determinate order of its own. The argument concludes with the statement (more definite than any to be found in the preceding arguments), that the proof of the principle of causality consists in its indispensableness as a condition of all empirical judgments, and so of experience as such. As a ground of the possibility of experience it must be valid of all the objects of experience.

Sixth Proof. — The argument of the fifth proof is here more clearly stated. All synthesis is due to "the faculty of imagination which determines inner sense in respect of the time relation." Such synthesis may, however, yield the consciousness either of subjective succession or of succession "in the object." In the latter form it presupposes the employment of a pure concept of the understanding, that of the relation of cause and effect. And the conclusion reached is again that only so is empirical knowledge possible. This mode of stating the argument is far from satisfactory. It tends to obscure Kant's central thesis, that only through consciousness of an objective order is consciousness of subjective sequence possible, and that the principle of causality is therefore a conditioning factor of all consciousness. The misleading distinction drawn in the *Prolegomena* between judgments of perception and judgments of experience also crops out in Kant's use of the phrase "mere perception."

We may again return to Kant's central argument. For we have still to consider certain objections to which it may seem to lie open, and also to comment upon Kant's further explanations in the remaining paragraphs of the section. Kant's imperfect statement of his position has suggested to Hutchison Stirling and others a problem which is largely artificial, namely, how the mind is enabled to recognise the proper occasions upon which to apply the category of causality. On the one hand sequence as such cannot be the criterion, since many sequences are not causal, and on the other hand the absence of sequence does not appear to debar its application, since cause and effect would frequently seem to be co-existent. This difficulty arises from failure to appreciate the central thesis upon which Kant's proof of the principle of

causality ultimately rests. Kant's diffuse and varying mode of statement may conceal but never conflicts with that thesis, which consists in the contention that the category of causality is a necessary and invariable factor in all consciousness. Nothing can be apprehended save in terms of it. It prescribes an interpretation which the mind has no option save to apply in the consciousness of each and every event, of the coexistent no less than of the sequent. Whether two changes are coexistent or are successive, each must be conceived as possessing an antecedent cause. The only difference is that in the case of sequent events one of them (*i.e.* the antecedent change) may, upon empirical investigation, be found to be itself the cause of the second and subsequent event, whereas with coexistent events this can never be possible. As the principle of causality is that every event must have an antecedent cause, it follows that where there is no sequence there can be no causation. But when Kant states that sequence is "the sole empirical criterion" of the causal relation, he does less than justice to the position he is defending. The empirical criteria are manifold in number, and are such as John Stuart Mill has attempted to formulate in his inductive methods.

Schopenhauer has objected that Kant's argument proves too much, since it would involve that all objective sequences, such as that of night and day or of the notes in a piece of music, are themselves causal sequences. This criticism has been replied to by Stadler in the following terms:

"When Schopenhauer adduces the sequence of musical notes or of day and night, as objective sequences which can be known without the causal law, we need only meet him with the question, Where in these cases is the substance that changes? So soon as he is forced to put his objection into the form required to bring it into relation to the question of the possibility of knowledge, his error becomes obvious. His instances must then be expressed thus: — The instrument passes from one state of sound into another; the earth changes from the measure of enlightenment which makes day, to that which makes night. Of such changes no one will say that they are not referred to a cause. And we may quote in this reference the appropriate saying of Kant himself, 'Days are, as it were, the children of Time, since the following day with that which it contains is the product of the previous day.'"

Night and day, in so far as they are sequent events, must be conceived in terms of causality, not in the sense that night causes day, but as being determined by causes that account not only for each separately, but also for the alternating sequence of the one upon the other. Such causes are found by the astronomer to lie in the changing positions of the earth relatively to the sun.

Schopenhauer adds a further objection of a more subtle nature, which has again been excellently stated and answered by Stadler:

"Schopenhauer points out that what we call chance is just a sequence of events which do not stand in causal connexion. 'I come out of the house and a tile falls from the roof which strikes me; in such a case there is no causal connexion between the falling of the tile and my coming out of the house, yet the succession of these two events is objectively determined in my apprehension of them.' How have we to criticise this case from the transcendental point of view? We know that successions become necessary, *i.e.* objective, for our consciousness, when we regard them as changes of a substance which are determined by a cause. But it is shown here that there are successions in which the single members are changes of different substances. If substance S changes its state A into B on account of the cause X, and substance S´ changes its state A´ into B´ on account of the cause X´, and if I call the first change V and the second V´, the question arises how the objectivity of the succession V V´ is related to the law of causality. Sequences such as V V´ are very frequent, and our consciousness of the objectivity is certain. Do we owe this consciousness to the same rule as holds good in other cases? Certainly. The distinction is not qualitative, but rests only on the greater complication of the change in question. The sequence V V´ can become objective only if I think it as a necessary connexion. It must be so determined that V can only follow V´ in 'consciousness in general'; there must be a U, the introduction of which is the cause that V´ follows V. To be convinced of this, I do not need actually to know U. I know that on every occasion U

causes the succession V V´. Of course, this presupposes that all data of the states considered, A and A´, remain identical. But whether these data are very simple or endlessly complex, whether they are likely to combine to the given result frequently or seldom, is indifferent for the objectifying of the event; it is not the perception of U, but the presupposition of it, which makes the change necessary and so objective for us."

To turn now to the other difficulty which Kant himself raises in A 202-3 = B 247-8, viz. that cause and effect would frequently seem to be coexistent, and the "sole empirical criterion" to be therefore absent. It may from this point of view be maintained that the great majority of causes occur simultaneously with their effects, and that such time sequence as occurs is due solely to the fact that the cause cannot execute itself in one single instant. Kant has little difficulty in disposing of this objection. Causality concerns only the *order*, not the *lapse*, of time; and the sequence relation must remain even though there is no interval between the two events. If a leaden ball lies upon a cushion it makes a depression in it. The ball and the depression are coexistent. None the less, when viewed in their dynamical relation, the latter must be regarded as sequent upon the former. If the leaden ball is placed upon a smooth cushion a hollow is at once made, but if a hollow exists in a cushion a ball need not appear. In other words, the criteria for the determination of specific causal relations are neither the presence nor the absence of sequence, but are empirical considerations verifiable only upon special investigation. The observer is called upon to disentangle the complicated web of given appearances under the guidance of the quite general and formal principle that every event is due to some antecedent cause. He must do so as best he can through the application of his acquired insight, and, when necessary, by means of the requisite experimental variation of conditions.

In the two following paragraphs (A 204-5 = B 249-51) Kant raises points which he later discussed more fully in the *Metaphysical First Principles of Natural Science*. As adequate explanation of the argument would be a very lengthy matter, and not of any very real importance for the understanding of the general Critical position, we may omit all treatment of it. In the sections of the *Metaphysical First Principles* just cited, the reader will find the necessary comment and explanation. Such bearing as these two paragraphs have upon Kant's view of the nature of the causal relation has been noted above.

In the section on *Anticipations of Perception* Kant has stated that the principle of the continuity of change involves empirical factors, and therefore falls outside the limits of transcendental philosophy. To this more correct attitude Kant, unfortunately, did not hold. In A 207-11 = B 252-6 he professes to establish the principle in *a priori* transcendental fashion as a necessary consequence of the nature of time. This proof is indeed thrice repeated with unessential variations, thereby clearly showing that these paragraphs also are of composite origin. The argument in all three cases consists in inferring from the continuity of time the continuity of all changes in time. As the parts of time are themselves times, of which no one is the smallest, so in all generation in time, the cause must in its action pass through all the degrees of quantity from zero to that of the final effect.

"Every change has a cause which evinces its causality in the whole time in which the change takes place. This cause, therefore, does not engender the change suddenly (at once or in one moment), but in a time, so that, as the time increases from its initial moment *a* to its completion in *b*, the quantity of the reality (*b*-*a*) is in like manner generated through all lesser degrees which are contained between the first and the last."

This argument is inconclusive. As Kant himself recognises in regard to space, we may not without special proof assume that what is true of time must be true of the contents of time. If time, change, and causation can be equated, what is true of one will be true of all three. But the assumption upon which the argument thus rests has not itself been substantiated.

In the third proof the argument is stated in extreme subjectivist terms which involve the further assumption that what is true of apprehension is *ipso facto* true of everything apprehended. The possibility

of establishing the law of dynamical continuity follows, Kant declares, as a consequence of its being a law of our subjective apprehension.

"We anticipate only our own apprehension, the formal condition of which, inasmuch as it inheres in the mind prior to all given appearances, must certainly be capable of being known *a priori*."

Kant's attitude towards the physical principle of continuity underwent considerable change. In his *New Doctrine of Motion and Rest* (1758) he maintains that it cannot be proved, and that physicists may rightly refuse to recognise it even as an hypothesis. It is in the Essay on *Negative Quantity* (1763) that Kant first adopts the attitude of the *Critique*, and rejects the "speculative" objections raised against the mathematical conception of the infinitely small. In the *Metaphysical First Principles of Natural Science* the principle of continuity is defended and developed, but only in its application to material existence, not in its relation to the causal process.

C. Third Analogy. — *All substances, in so far as they are coexistent, stand in thoroughgoing communion, i.e. in reciprocity with one another.* Or, as in the second edition: *All substances, so far as they can be perceived to coexist in space, are in thoroughgoing reciprocity.*

This section contains four separate proofs. The first three paragraphs in the text of the first edition contain the first proof. The fourth paragraph supplies a second proof, and the fifth paragraph a third. In the second edition Kant adds a fourth proof (the first paragraph of the text of the second edition).

We may lead up to these proofs by first formulating (*a*) the fundamental assumption upon which they proceed, and (*b*) the thesis which they profess to establish. (*a*) The argument involves the same initial assumption as the preceding *Analogies*, viz. that representations exist exclusively in succession, or stated in phenomenalist terms, that the objectively coexistent can be apprehended only in and through representations that are sequent to one another in time. Upon this assumption the problem of the third *Analogy* is to explain how from representations all of which are in succession we can determine the objectively coexistent. (*b*) In the *Dissertation* Kant had maintained that though the possibility of dynamical communion of substances is not necessarily involved in their mere existence, such interaction may be assumed as a consequence of their common origin in, and dependence upon, a Divine Being. In the *Critique* no such metaphysical speculations are any longer in order, and Kant recognises that as regards things in themselves it is not possible to decide whether dynamical interaction is, or is not, necessarily involved in coexistence. The problem of this third *Analogy* concerns only appearances, which as such must be subject to the conditions of unitary experience; and one such condition is that they be apprehended as belonging to a single objective order of nature, and therefore as standing in reciprocal relations of interaction. *The apprehension of substances as reciprocally determining one another is,* Kant contends, *an indispensable condition of their being known even as coexistent*. Such is Kant's thesis. The proof may first be stated in what may be called its typical or generic form. Kant's four successive proofs can then be related to it as to a common standard.

Two things, A and B, can be apprehended as coexistent only in so far as we can experience them in either order, *i.e.* when the order of our perceptions of them is reversible. If they existed in succession, this could never be possible. The earlier member of a time series is past when the succeeding member is present, and what belongs to the past can never be an object of perception. The fact that the order in which things can be perceived is reversible would thus seem to prove that they do not exist successively to one another in time. That, however, is not the case. By itself such experience does not really suffice to yield consciousness of coexistence. It can yield only consciousness of an alternating succession. A further factor, namely, interpretation of the reversibility of our perceptions as due to their being conditioned by objects which stand in the relation of reciprocal determination, must first be postulated. If these objects mutually determine one another to be what they are, no one of them can be antecedent to or subsequent upon the others; and by their mutual reference each will date the others as simultaneous with itself. In other words, the perception of the coexistence of objects involves the conception of them as mutually

determining one another. The principle of communion or reciprocity conditions the experience of coexistence, and is therefore valid for objects apprehended in that manner.

Kant also maintains, more by implication than by explicit statement, that as A and B need not stand in any direct relation, the apprehension of them as coexistent involves the conception of an all-embracing order of nature within which they fall and which determines them to be what they are. If any one of them, even the most minute and insignificant, were conceived as altered, corresponding simultaneous variations would have to be postulated for all the others. The unity of the phenomenal world is the counterpart of the unity of apperception. Unity of experience involves principles which prescribe a corresponding unity in the natural realm. Dynamical *communion* is the sufficient and necessary fulfilment of this demand. It carries to completion the unity demanded by the preceding *Analogies* of *substance* and *causality*. Kant sums up his position in a note to A 218 = B 265.

"The unity of the world-whole, in which all appearances have to be connected, is evidently a mere consequence of the tacitly assumed principle of the communion of all substances which are coexistent. For if they were isolated, they would not as parts constitute a whole. And if their coexistence alone did not necessitate their connection (the reciprocal action of the manifold) we could not argue from the former, which is a merely ideal relation, to the latter, which is a real relation. We have, however, in the proper context, shown that communion is really the ground of the possibility of an empirical knowledge of coexistence, and that therefore the actual inference is merely from this empirical knowledge to communion as its condition."

To turn now to Kant's successive proofs. The first calls for no special comment. It coincides with the above. The second proof is an incompletely stated argument, which differs from the first only in its more concrete statement of the main thesis and in its limitation of the argument to spatial existences. Dynamical community is the indispensable condition of our apprehension of any merely spatial side-by-sideness. Kant now adds that it is the dynamical continuity of the *spatial* world which enables us to apprehend the coexistence of its constituents. The important bearing of this argument we shall consider in its connection with the proof which Kant added in the second edition.

The third proof is probably the earliest in date of writing. It draws a misleading distinction between subjective and objective coexistence, and seems to argue that only the latter form of coexistence need presuppose the employment of the category of reciprocity. That runs directly counter to the central thesis of the other proofs, that only in terms of dynamical relation is coexistence at all apprehensible. That the above distinction indicates an early date of writing would seem to be confirmed by the obscure phrase "community of apperception" which is reminiscent of the prominence given to apperception in Kant's earlier views, and by the concluding sentence in which Kant employs terms — inherence, consequence, and composition — that are also characteristic of the earlier stages of his Critical enquiries.

It is significant that in the new argument of the second edition the space factor, emphasised in the second proof of the first edition, is again made prominent. The principle is, indeed, reformulated in such manner as to suggest its limitation to spatial existences. "All substances, so far as they can be perceived to coexist *in space*, are in thoroughgoing reciprocity." Now it is decidedly doubtful whether Kant means to limit the category of reciprocity to spatial existences. As we have already noted, he would seem to hold that though the category of causality can *acquire* meaning only in its application to events in space, it may in its subsequent employment be extended to the states of inner sense. The latter are effects dynamically caused, and among their causal conditions are mechanical processes in space. The extension of the category of reciprocity to include sensations and desires undoubtedly gives rise to much greater difficulties than those involved in the universal application of the causal principle. On the other hand, its limitation to material bodies must render the co-ordination of mental states and mechanical processes highly doubtful, and would carry with it all the difficulties of an epiphenomenal view of psychical existences. The truth probably is that in this matter Kant had not thought out his position in any quite

definite manner; and that owing to the influence, on the one hand of the dualistic teaching of the traditional Cartesian physics, and on the other of his increasing appreciation of the part which space must play in the definition and proof of the principles of understanding, he limited the category of reciprocity to spatial existences, without considering how far such procedure is capable of being reconciled with his determinist view of the empirical self. His procedure is also open to a second objection, namely, that while thus reformulating the principle, he fails to remodel his proof in a sufficiently thoroughgoing fashion. The chief stress is still laid upon the temporal element; and in order to obtain a proof of the principle that will harmonise with the prominence given to the space-factor, we are thrown back upon such supplementary suggestions as we can extract from the second argument of the first edition. It is there stated that "without dynamical communion even spatial community (*communio spatii*) could never be known empirically." That is an assertion which, if true, will yield a proof of the principle of reciprocity analogous to that which has been given of the principle of causality; for it will show that just as the conception of causality is involved in, and makes possible, the awareness of time, so the conception of reciprocity is involved in, and makes possible, the awareness of space.

The proof will be as follows. The parts of space have to be conceived as spatially interrelated. Space is not a collection of independent spaces; particular spaces exist only in and through the spaces which enclose them. In other words, the parts of space mutually condition one another. Each part exists only in and through its relations, direct or indirect, to all the others; the awareness of their coexistence involves the awareness of this reciprocal determination. But space cannot, any more than time, be known in and by itself; and what is true of space must therefore hold of the contents, in terms of the interrelations of which space can alone be experienced. How, then, can the reciprocal determination of substances in space be apprehended by a consciousness which is subject in all its experiences to the conditions of time? As Kant has pointed out in A 211 = B 258, objective coexistence is distinguished from objective sequence by reversibility of the perceptions through which it is apprehended. When A and B coexist, our perceptions can begin with A and pass to B, or start from B and proceed to A. There is also, as Kant observes in the second proof, a further condition, namely, that the transition is in each case made through a *continuous* series of changing perceptions.

"Only the continuous influences in all parts of space can lead our senses from one object to another. The light, which plays between our eye and the celestial bodies, produces a mediate communion between us and them, and thereby establishes the coexistence of the latter. We cannot empirically change our position (perceive such a change), unless matter in all parts of space makes the perception of our position possible to us. Only by means of its reciprocal influence can matter establish the simultaneous existence of its parts, and thereby, though only mediately, their coexistence with even the most remote objects. Without communion, every perception of an appearance in space is broken off from every other, and the chain of empirical representations, *i.e.* experience, would have to begin entirely anew with every new object, without the least connection with preceding representations, and without standing to them in any relation of time."

But even such reversibility of *continuous* series does not by itself establish coexistence. For in the imagination we can represent such series, without thereby acquiring the right to assert that they exist not as series but as simultaneous wholes. And as Kant might also have pointed out, even in sense-perception we can experience reversible continuous series that do not in any way justify the inference to coexistence. We may, for instance, produce on a musical instrument a series of continuously changing sounds, and then in immediate succession produce the same series in reverse order. An additional factor is therefore required, namely, the interpretation of the reversibility of our perceptions as being grounded in objects which, because spatially extended, and spatially continuous with one another, can yield continuous series of perceptions, and which, because of their thoroughgoing reciprocity, make possible the reversing of these series. To summarise the argument in a sentence: as the objectively coexistent, if it is to be known at

all, can only be known through sequent representations, the condition of its apprehension is the possibility of interpreting reversible continuous series as due to the reciprocal interaction of spatially ordered substances.

This argument has a twofold bearing. Its most obvious consequence is that all things apprehended as coexistent must be conceived as standing in relations of reciprocal interaction; but by implication this involves the further consequence that the conceptual principle of reciprocity is an integral factor in all apprehension of space. Space, though intuitive in character, has a meaning that demands this concept for its articulation. Just as consciousness of temporal sequence is only possible in terms of causation, so consciousness of spatial coexistence is only possible through application of the category of reciprocity. And since, on Kant's view, awareness of space conditions awareness of time, these conclusions carry the Critical analysis of our consciousness of time a stage further. In confirmation of the more general argument of the objective deduction, reciprocity is added to the already large sum-total of the indispensable conditions of our time-consciousness; while in regard to time itself it is shown that, owing to its space-reference, coexistence may be counted among its possible modes.

I have made occasional reference to the positions adopted by Stout in his *Manual of Psychology*, and may here indicate their relation to the present argument. Stout cites four "categories" or ultimate principles of unity which "belong even to rudimentary perceptual consciousness as a condition of its further development," namely, spatial unity, temporal unity, causal unity, and the unity of different attributes as belonging to the same thing. The criticism which, from the standpoint of the *Analogies*, has to be passed upon this list, is that it ignores the category of reciprocity, *i.e.* of systematic interconnection, and that it fails to recognise the close relation in which the various principles stand to one another. The temporal unity must not be isolated from causal unity, nor either of them from the spatial unity, with which the category of reciprocity is inseparably bound up. Further, Kant maintains that these principles are demanded, not merely for the *development* of perceptual consciousness, but for its very existence.

But Kant's argument suggests many difficulties which we have not yet considered, and we may again employ Schopenhauer's criticisms to define the issues involved.

"The conception of reciprocity ought to be banished from metaphysics. For I now intend, quite seriously, to prove that there is no reciprocity in the strict sense, and this conception, which people are so fond of using, just on account of the indefiniteness of the thought, is seen, if more closely considered, to be empty, false, and invalid.... It implies that both the states A and B are cause and that both are effect of each other; but this really amounts to saying that each of the two is the earlier and also the later; thus it is an absurdity."

This criticism proceeds on the assumption that the category of reciprocity reduces to a dual application of the category of causality. If that were the case, there would, of course, be no separate category of reciprocity, and further it would, as Schopenhauer maintains, be impossible to regard A and B as being at one and the same time both cause and effect of one another. Causality determines the order of the states of substances in the time series; reciprocity must be distinct from causality if it is to be capable of defining the order of their coexistent states in space. A deduction from the dual application of the conception of causality has, therefore, no bearing upon the question of the possibility of this further category. Kant has laid himself open to this criticism by a passage which occurs in the first proof, and which shows that he was not quite clear in his own mind as to how reciprocity ought to be conceived.

"That alone can determine the position of anything else in time, which is its cause or the cause of its determinations. Every substance (inasmuch as only in its determinations can it be an effect) must therefore contain in itself the causality of certain determinations in the other substance, and at the same time the effects of the causality of that other, *i.e.* they must stand in dynamical communion (immediately or mediately), if their coexistence is to be known in any possible experience."

It should be noted that in the new proof in the second edition Kant is careful to employ the terms ground

and influence in place of the terms cause and causality.

Secondly, Schopenhauer argues that if the two states necessarily belong to each other and exist at one and the same time, they will not be simultaneous, but will constitute only *one* state. Schopenhauer is again refusing to recognise the conditions under which alone a special category of reciprocity is called for. We can speak of simultaneity only if a *multiplicity* be given; and if it be given, its nature as *simultaneous plurality* cannot be comprehended through a causal law, which, as such, applies only to sequent order.

Lastly, Schopenhauer endeavours to confirm his position by examination of the supposed instances of reciprocity.

"[In the continuous burning of a fire] the combination of oxygen with the combustible body is the cause of heat, and heat, again, is the cause of the renewed occurrence of the chemical combination. But this is nothing more than a chain of causes and effects, the links of which have alternately *the same name*.... We see before us only an application of the single and simple law of causality which gives the rule to the sequence of states, but never anything which must be comprehended by means of a new and special function of the understanding."

Schopenhauer is again misled by his equating of reciprocity with causal action. Combustion is quite obviously a case of sequent processes. Instead of proving that coexistence does not involve reciprocity, Schopenhauer is only showing that cause and effect may sometimes, as Kant himself observes, seem to be simultaneous. Action *followed* by reaction is not equivalent to what Kant means by reciprocal determination. Schopenhauer also cites the instance of a pair of scales brought to rest by equal weights.

"Here there is no effect produced, for there is no change; it is a state of rest; gravity acts, equally divided, as in every body which is supported at its centre of gravity, but it cannot show its force by any effect."

This example is more in line with what Kant would seem to have in view, but is still defined in reference to the problem of causation, and not in reference to that of coexistence. Kant is not enquiring whether coexistent bodies are related as causes and effects, though, as we have already observed, his language betrays considerable lack of clearness on this very point. He is endeavouring to define the conditions under which we are enabled to recognise that bodies, external to one another in space and apprehensible only through sequent perceptions, are none the less coexistent. And the answer which he gives is that coexistence can only be determined by reference of each existence to the totality of systematic relations within which it is found, its particular spatial location being one of the factors which condition this reference. Causal explanation in the most usual meaning of that highly ambiguous phrase, namely, as explanation of an artificially isolated event by reference to antecedents similarly isolated from their context, may partially account for this event being of one kind rather than another, but will not explain why it is to be found at this particular time in this particular place. That is to say, it will not answer the question which is asked when we are enquiring as to what events are coexistent with it.

But the considerations which thus enable us to dispose of Schopenhauer's criticisms have the effect of involving us in new, and much more formidable, difficulties. Indeed they disclose the incomplete, and quite inadequate, character of Kant's proof of the third *Analogy*. For must not spatial co-existence be independently known if it is to serve as one of the factors determinant of reciprocity? Can the apprehension of extended bodies wait upon a prior knowledge of the system of nature to which they belong?

The mere propounding of these questions does not, however, suffice to overthrow Kant's contention. For he is prepared — that is indeed the reason why the *Critique* came to be written — to answer them in a manner that had never before been suggested, save perhaps in the philosophies of Plato and Aristotle. This answer first emerges in the *Dialectic*, in the course of its treatment of the wider problem, of which the above difficulties are only special instances, how if conditioned parts can only be known in terms of an unconditioned whole, any knowledge whatsoever can be acquired by us. But though Kant in the

Dialectic gives due prominence to this fundamental problem, the hard and fast divisions of his architectonic — and doubtless other influences which would be difficult to define — intervene to prevent him from recognising its full implications. For the problem is viewed in the *Dialectic* as involving considerations altogether different from those dwelt upon in the *Analogies*, and as being without application to the matters of which they treat.

The situation thus created is very similar to that which is occasioned by Kant's unfortunate separation of the problems of space and time in the *Aesthetic* from the treatment of the categories in the *Analytic*. In the *Aesthetic* space and time are asserted to be intuitive, not conceptual, in nature; and yet in the *Analytic* we find Kant demonstrating that the principles of causality and reciprocity are indispensably involved in their apprehension. But even more misleading is the separation of the problems of the *Aesthetic* and *Analytic* from those of the *Dialectic*. Kant's primary and prevailing interest is in the metaphysics, not in the mere methodology, of experience; and it is in the *Dialectic* that the metaphysical principles which underlie and inspire all his other tenets first find adequate statement. Since the third *Analogy* defines the criterion of coexistence in entire independence of all reference to the Ideas of Reason, Kant is thereby precluded from even so much as indicating the true grounds upon which his position, if it is to be really tenable, must be made to rest. For as he ultimately came to recognise, the intuition of space not only involves the conceptual category of reciprocal determination, but likewise demands for its possibility an Idea of Reason. In space the wider whole is always prior in thought to the parts which go to constitute it. But though Kant states that this characteristic of space justifies its being entitled an Idea of Reason, he nowhere takes notice of the obvious and very important bearing which this must have upon the problem, how we are to formulate the criterion of coexistence.

The general character of time is analogous to that of space, and our formulation of the criterion of causal sequence is therefore similarly affected. The system of nature is not the outcome of natural laws which are independently valid; natural laws are the expression of what this system prescribes; they are the modes in which it defines and embodies its inherent necessities.

The situation which these considerations would seem to disclose may, therefore, be stated as follows. If the empirical criteria of truth are independent of the Ideas of Reason, the *Analytic* may be adequate to their discussion, but will be unable to justify the assertion that there is a category of reciprocal or systematic connection distinct from that of causality. If, however, it should be found that these criteria are merely special applications of standards *metaphysical in character* — and that would seem to be Kant's final conclusion, — only in the light of the wider considerations first broached in the *Dialectic*, can we hope to define their nature and implications with any approach to completeness.

4. THE POSTULATES OF EMPIRICAL THOUGHT IN GENERAL

First Postulate. — *That which agrees, in intuition and in concepts, with the formal conditions of experience is possible.*

Second Postulate. — *That which is connected with the material conditions of experience (that is, with sensation) is actual.*

Third Postulate. — *That which is determined, in its connection with the actual, according to universal conditions of experience is (that is, exists as) necessary.*

In this section Kant maintains that when the Critical standpoint is accepted, possibility, actuality and necessity can only be defined in terms of the conditions which render sense-experience possible. In other words, the Critical position, that all truth, even that of *a priori* principles, is merely *de facto*, involves acceptance of the view that the actual reduces to the experienced, and that only by reference to the actual as thus given can possibility and necessity be defined. The Leibnizian view that possibility is capable of being defined independently of the actual, and antecedently to all knowledge of it, must be rejected.

An analysis of the text can be profitably made only after a detailed examination of Kant's general argument; and to that task we may at once apply ourselves. The section affords further illustration of the perverting influence of Kant's architectonic, as well as of the insidious manner in which the older rationalism continued to pervert his thinking in his less watchful moments.

First Postulate. — In the opening paragraphs Kant uses (as it would seem without consciousness of so doing) the term possibility in two very different senses. When the possible is distinguished from the actual and the necessary, it acquires the meaning defined in this first *Postulate*; it is "that which agrees with the *formal* conditions of experience." But it is also employed in a much narrower sense to signify that which can have "objective reality, *i.e.* transcendental truth." The possibility of the objectively real rests upon fulfilment of a threefold condition: (1) that it agree with the formal conditions of experience; (2) that it stand in connection with the material of the sensuous conditions of experience; and (3) that it follow with necessity upon some preceding state in accordance with the principle of causality, and so form part of a necessitated order of nature. In other words, it must be causally necessitated in order to be empirically actual; and only the empirically actual is genuinely possible. Such is also the meaning that usually attaches to the term possible in the other sections of the *Critique*. A 'possible experience' is one that can become actual when the specific conditions, all of which must themselves be possible, are fulfilled. An experience which is not capable of being actual has no right to be described even as possible. As a term applicable to the objectively real, the possible is not wider than the actual, but coextensive with it. As Kant himself remarks, those terms refer exclusively to differences in the subjective attitude of the apprehending mind.

This ambiguity in the term 'possibility' has caused a corresponding ambiguity in Kant's employment of the term 'actuality.' It leads him to endeavour to define the actual, not in its connection with the conditions of possibility, but in distinction from them. The possible having been defined (in the first *Postulate*) solely in terms of the *formal* factors of experience, he proceeds to characterise the actual in a similarly one-sided fashion, exclusively in terms of the *material* element of given sensation. Doubtless the element of sensation must play a prominent part in enabling us to decide what is or is not actually existent, but no definition which omits to take account of relational factors can be an adequate expression of Critical teaching. Indeed, we only require to substitute the words 'sensuously given' for 'actual' in Kant's definition of the third *Postulate* (*i.e.* of the necessary) in order to obtain a correct statement of the true Critical view of actual existence: it is "that which is determined in its connection with the sensuously given according to universal conditions of experience." For Kant the actual and the necessary, objectively viewed, coincide. Necessity is for the human mind always merely *de facto*; and nothing can be objectively actual that is not causally determined. As the empirically possible cannot, in its objective reference, be wider than the empirically necessary, one and the same definition adequately covers all three terms alike. While the distinctions between them will, of course, remain, they will be applicable, not to objects, but only to the subjective conditions of experience in so far as these may vary from one individual to another. Experiences capable of being actual for one individual may be merely possible for another. And what is merely actual to one observer may by others be comprehended in its necessitating connections. The terms will not denote differences in the real, but only variations in the cognitive attitude of the individual.

Thus in professing to show that the three *Postulates* are transcendental *principles*, Kant does less than justice to his own teaching. For though both here and in the opening sections of the chapter he speaks of them in this manner, *i.e.* as being conditions alike of ordinary and of scientific experience, he has himself admitted in so many words the inappropriateness of such a description.

"The principles of modality are nothing more than explanations [not, it may be noted, proofs] of the concepts of possibility, actuality and necessity, in their empirical use, and are therefore at the same time restrictions of all the categories to this merely empirical use, ruling out and forbidding their

transcendental [= transcendent] employment.”

That is to say, these so-called principles are not really principles; they merely embody explanatory statements designed to render the preceding results more definite, and especially to guard against the illegitimate meanings which the Leibnizian metaphysics had attached to certain of the terms involved.

These considerations bring us to the real source of Kant’s perverse argumentation, namely, the artificial (but none the less imperious) demands of his architectonic. He is constrained to provide a set of *principles* corresponding to the categories of modality. The definitions of the modal categories have therefore to be called by that inappropriate name. But that is not the end of the matter. In order to meet the needs of his logical framework, Kant proceeds even further than he had ventured to do in the sections on the *Axioms of Intuition* and *Anticipations of Perception*. There he fell so far short as to provide only a single principle in each case. In dealing, however, with the categories of relation he has been able to define each of the three categories separately, and to derive from each a separate principle. Many of the defects in his argument are, indeed, traceable to this source. The close interrelations of the three principles are, as we have had occasion to note, seriously obscured. But still, in the main, separate treatment of each has proved feasible. Kant, encouraged, as we may believe, by this successful fulfilment of architectonic requirements, now sets himself to develop, in similar fashion, a separate principle for each modal category. But for any such enterprise the conditions are less favourable than in the case of the categories of relation. For, as just indicated, no one of the three can, on Critical principles, possess any genuine meaning save in its relation to the others. Before following out this line of criticism, we must however note some further points in Kant’s argument.

In A 219 = B 266, and again in A 225 = B 272, Kant makes the statement that a concept can be complete prior to any decision as to its possibility, actuality, or necessity. This contention is capable of being interpreted in two quite independent ways, and in only one of those ways is it tenable. He may mean that the distinction between the possible, the actual, and the necessary, does not concern the objectively real, which as such is always both actual and necessary, but only the subjective attitude of the individual towards the objects of his thought and experience. From the Critical standpoint, as we have been arguing, such a contention is entirely just. But Kant would seem in the above statement to be chiefly concerned to maintain that a conception may be complete and determinate, even while we remain in doubt whether the existence for which it stands is even possible. Such a view is merely a relic of the Leibnizian rationalism from which he is striving to break away. All existences have their place in a systematic order of experience, and no conception of them can be either complete or determinate which fails to specify the causal context to which they belong. The process of specifying the detail of a concept is the only process whereby we can define its possibility, actuality, or necessity. Were it capable of complete statement without determination of its modal character, it could never form part of a unified experience. The examples of “fictitious” concepts, which Kant cites, are either so determinate as to be demonstrably inconsistent with experience, and therefore empirically impossible, or so indeterminate as to afford no sufficient means of deciding even as to their possibility.

There is a further objection to the definition given of possibility in the first *Postulate*. After stating that the possible is what *agrees* with the formal conditions of experience, Kant proceeds, on the one hand, to argue that the forms of intuition and the categories of understanding may, in accordance with this criterion, be viewed as possible, and, on the other hand, to maintain that no other concepts can be so regarded. That is to say, the possible, as thus interpreted, does not consist in something additional to, and in harmony with, the conditions of experience, but reduces without remainder to those very forms. Now Kant is not betrayed merely by inadvertence into thus narrowing the sphere of the possible; such limitation is an almost inevitable consequence of the one-sided manner in which he has treated the concept of the possible in this first *Postulate*. He professes to be proceeding in the light of the results obtained in the transcendental deduction, and to be defining the possible in terms of the conditions which make sense-

experience possible. But the deduction has shown that experience is possible only in so far as the material factors co-operate with the formal. And when this is recognised, it becomes obvious that a definition of the possible in terms of sensation, — namely, as that which is capable of being presented in sense-perception, — is equally legitimate, and is indeed required in order to correct the deficiencies of the definition which Kant has himself given. As both factors are indispensable in all possible experience, both must be reckoned with in defining the possible.

Kant's argument in the fifth paragraph is somewhat obscured by its context. He is contending that fictitious (*gedichtete*) concepts, elaborated from the contents presented in perception, cannot be determined as possible. As they involve sensuous contents, the formal elements of experience do not suffice for proof of their possibility; and since the contents are supposed to have been recombined in ways not supported by experience, an empirical criterion is equally inapplicable. Obviously Kant is here using the term 'possible' not in the meaning of the first *Postulate*, but in its narrower connotation as signifying that which is capable of objective reality. Such fictitious concepts may completely fulfil all the demands prescribed by space, time, and the categories, and yet, as he here insists, be none the less incapable of objective existence.

The argument is still further obscured by the character of the concrete examples which Kant cites. They involve modes of action or of intuition which contradict the very conditions of human experience, and so for that reason alone fall outside the realm of the empirically possible. That would not, however, seem to be Kant's meaning in employing them. Assumed powers of anticipating the future or of telepathic communication with other minds are, he says, concepts

"...the possibility of which is altogether groundless, as they cannot be based on experience and its known laws, and without such confirmation are arbitrary combinations of thoughts, which, although indeed free from contradiction, can make no claim to objective reality and so to the possibility of an object such as we here profess to think."

The mathematical examples which Kant gives in A 223 = B 271 are no less misleading. The concept of a triangle can, it is implied, be determined as possible in terms of the first *Postulate*, since it harmonises with a formal condition of experience, namely, space. This is true only if it be granted that construction in space can be executed absolutely *a priori*, in independence of all sense-experience. Such is, of course, Kant's most usual view; and to that extent the argument is consistent. Mathematical concepts will from this point of view represent the only possible exception to the general statement that the formal conditions of experience constitute a criterion of possibility for no concepts save themselves. Kant's final conclusion is clearly and explicitly stated in the following terms:

"I leave aside everything the possibility of which can be derived only from its reality in experience, and have here in view only the possibility of things through *a priori* concepts; and I maintain the thesis that the possibility of such things can never be established from such concepts taken in and by themselves, but only when they are viewed as formal and objective conditions of experience in general."

We are now in a position to appreciate the reasons which have induced Adickes to regard the text as of composite origin. Adickes argues that Kant's original intention was to treat the three concepts together, showing that they can be defined only in empirical terms, and that their significance is consequently limited to the world of appearance. Such is the content of the first, second, fourth (excepting the first sentence), and fifth paragraphs. No attempt is made to separate the three *Postulates*, and the term possibility is throughout employed exclusively as referring to objective reality. (In the third paragraph it is used in both senses.) The other paragraphs were, according to Adickes' theory, added later, when Kant unfortunately resolved to fulfil more exactly the requirements of his architectonic. That involved the formulation of three separate *Postulates*, with all the many evil consequences which that attempt carried in its train. He must then have interpolated the third paragraph, added the first sentence to the fourth paragraph, corrected the too extensive sweep of the older paragraphs through the introduction of the sixth

paragraph, further supplemented the exposition of the first *Postulate* by the seventh paragraph, and added independent treatments of the postulates of actuality and necessity. This may seem a very complicated and hazardous hypothesis; but careful examination of the text, with due recognition of the confused character of the argument as it stands, will probably convince the reader that Adickes is in the right.

Second Postulate. — Perception is necessary to all determination of actuality. The actual is either itself given in perception or can be shown, in accordance with the *Analogies*, to stand within the unity of objective experience, in connection with what is thus given. So long as Kant expresses himself in these terms his statements are entirely valid. Nothing which cannot be shown to be bound up with the contingent material of sense-experience can be admitted as actual. He proceeds, however, to give a definition of actuality which entirely omits all reference to the *Analogies*, and which is open to the same fundamental criticism as his characterisation of possibility in the first *Postulate*. Though the earlier statements give due recognition both to the material content and to the relational forms constitutive of complete experience, Kant now contrasts the mere or bare (*blosser*) concept and the given perception in a manner which suggests the unfortunate distinction drawn in the *Prolegomena*, and repeated in the second edition of the *Critique*, between judgments of perception and judgments of experience. Kant's reference to "the mere concept of a thing" is on the same lines as the opening paragraph of the section. However complete the concept may be, it yields not the least ground for deciding as to the existence of its object.

Kant's thinking, as I have already pointed out, is here perverted by the continuing influence of the Leibnizian rationalism. He is forgetting that, on Critical principles, even the categories are meaningless except in their reference to the contingently given. If that be true of the strictly *a priori*, it must hold with even greater force of empirical concepts with sensuous content. As the sole legitimate function of concepts, whether *a priori* or empirical, is to organise and unify the material of sense, there can be no such thing as the mere or bare concept. Such a combination of words is without Critical significance. A concept as such must refer to, and embody insight into, the real. Only in proportion to its incompleteness, that is, to its indefiniteness, can it remain without specific and quite determinate location within the context of unified experience. It may, indeed, be found convenient to retain the phrase "mere concept" notwithstanding its misleading character and rationalistic origin. It must, however, be used only to mark the indefiniteness, indeterminateness, or incompleteness which prevents it from adequately revealing the denotation to which through the nature of its content it necessarily refers. Meaning and existence, connotation and denotation, are complementary the one to the other, and though not, perhaps, coextensive (if that term has itself meaning in this connection), are none the less inseparably conjoined. When Kant's utterances, as frequently happens, imply the contrary, they may be taken as revealing the strength and insidious tenacity of the influences from which he was sufficiently courageous, but not always sufficiently watchful, to break away.

The doctrine of the "mere concept" finds its natural supplement in the equally un-Critical assertion that

"...perception [evidently employed in the less pregnant sense, as signifying 'sensation accompanied by consciousness'], which supplies the material to the concept, is *the sole character of actuality*."

This same position is expressed equally strongly by Kant in his *Reflexionen* (ii. 1095).

"Possibility is thought without being given; actuality is given without being thought; necessity is given through being thought."

Such statements are entirely out of harmony with Kant's central teaching. There is no lack of passages in the *Critique* which inculcate the direct contrary. Though the element of sensation is a *sine qua non* of all experience of the actual, the formal elements are no less indispensable. In their absence the merely given would reduce to less than a dream; for even in dreams images are interpreted and are referred to some connected context. The given, merely as such, cannot enter the field of consciousness, and is therefore "for us as good as nothing." As Caird has pointed out, we find in Kant

"...two apparently contradictory forms of expression — (1) that the understanding by means of its conceptions refers our preceptions to objects, and (2) that conceptions are referred to objects only indirectly through perceptions. The former mode of expression is preferred whenever Kant has to show that 'perceptions without conceptions are blind'; the latter when he has to show that 'conceptions without perceptions are empty.'" "We can understand the possibility of Kant's looking at the subject in these two opposite ways, only if we remember the reciprocal presupposition of perception and conception in the judgment of knowledge, and the way in which Kant tries to explain it, now from the point of view of perception, and now from the point of view of conception. The effect of this is, no doubt, a formal contradiction which Kant himself never disentangles, but which *we* must endeavour to disentangle, if we would do justice to him."

The one-sidedness of Kant's definition of actuality is certainly due to the cause suggested by Caird. The definition, notwithstanding its misleading character, serves to enforce against the older rationalism, with which Kant throughout this section is almost exclusively concerned, the central tenet through which the Critical teaching is distinguished from that of Leibniz, namely, that neither existence, possibility, nor necessity, can be established save by reference to the contingent nature of the sensuously given. Proof by reference to the possibility of experience can establish only those conditions which can be shown to be *de facto* necessary in order that consciousness of time may be accounted for. The formal conditions of experience, which in and by themselves are determinable neither as actual nor as possible, are established as actual, and so as necessary, by reference to the merely given; they are necessary only in this merely relative fashion, as being indispensable to what can never itself be viewed as other than contingent.

"Our knowledge of the existence of things reaches, then, only so far as perception and its continuation according to laws of nature can extend. If we do not start from experience, or do not proceed according to laws of the empirical connection of appearances, our guessing or enquiring into the existence of anything will only be an idle pretence."

Polemically, therefore, Kant's formulation of the second *Postulate* is not without its advantages, though from the inner standpoint of Critical teaching it is altogether inadequate.

For comment upon A 226 = B 273, and upon the general teaching of this *Postulate* in its important bearing upon Kant's phenomenalism, cf. above, p-19.

B 274-9. — *Refutation of Idealism*, cf. above, ff.

Third Postulate. — In the opening sentence Kant draws the distinction which was lacking in his treatment of the first *Postulate* between 'material' and 'formal' modality. (No distinction, however, is drawn between the 'formal' possibility of the first *Postulate* and logical possibility, which consists in absence of contradiction.) It is with the former alone that we have to deal. As existence cannot be determined completely *a priori*, necessity can never be known from concepts, but only by reference to the actually given, in accordance with the universal principles that condition experience. Further, since such empirical necessity does not concern the existence of substances, but only the existence of their states, viewed as dynamically caused, the criterion of empirical necessity reduces to the second *Analogy*, viz. that everything which happens is determined by an antecedent empirical cause. This criterion does not extend beyond the field of possible experience, and even within that field applies only to those existences which can be viewed as effects, *i.e.* as *events* which come into existence in time, and of which therefore the causes are of the same temporal and conditioned character. The necessity is a hypothetical necessity; given an empirical event, it can always be legitimately viewed as necessitated by an antecedent empirical cause.

Kant introduces, reinterprets, and in this altered form professes to justify, four of the central principles of the Leibnizian metaphysics. *In mundo non datur casus* gives expression to the above empirical

principle. *Non datur fatum* may be taken as meaning that natural (*i.e.* empirical) necessity is a conditioned and therefore comprehensible necessity, and is consequently not rightly described as blind. The other two principles, *non datur saltus*, and *non datur hiatus* connect with the principle of continuity already established in the *Anticipations of Perception* and in the second *Analogy*.

Kant's further remarks reveal an uneasy feeling that he is neglecting to assign these principles to the pigeon-holes provided in his architectonic. The reader, he states, may easily do so for himself. That may be so, but only if the reader be permitted the same high-handed methods of adjustment that are here illustrated in Kant's location of *non datur fatum* with the principles of modality.

In the next paragraph (A 230 = B 282) Kant suddenly, without warning or explanation, attaches to the term possibility a meaning altogether different from any yet assigned to it. He now takes it as equivalent to the absolutely or metaphysically possible. Combining this with the meanings previously given to it by Kant we obtain the following table: —

Possibility–

Logical: equivalent to absence of contradiction.

Empirical: in the wider sense, equivalent to agreement with the formal conditions of experience; in the narrower or stricter sense, involving in addition the capacity of being presented in sense-experience.

Metaphysical: equivalent to absolute possibility, a conception not of understanding but of Reason.

When this last meaning is given to the term, an entirely new set of problems arises, to the confusion of the reader who very properly continues to employ the term possibility in the empirical sense which, as Kant has been insisting, is alone legitimate. Kant has temporarily changed over to the standpoint of the metaphysical view which he has been criticising, and accordingly uses the term 'possibility' in the Leibnizian sense. Is Leibniz, he asks, justified in maintaining that the field of the possible is wider than the realm of the actual, and the latter in turn wider in extent than the necessary? In reply Kant accepts the metaphysical meaning assigned to the term 'possibility,' but restates the problem in Critical fashion. Do all things belong as appearances to the context of a single experience, or are other types of experience possible? Do other forms of intuition besides space and time, other forms of understanding besides the discursive through concepts, come within the range of the possible? These are questions which fall to be answered, not by the mere understanding, the sole function of which is empirical, but by Reason, which transcends the world of appearance.

Kant introduces these questions, as he is careful to state, only because they are currently believed to be within the competence of the understanding; and he now for the first time points out that possibility, in this sense, means absolute possibility, that which is independent of all limiting conditions, a meaning ruled out by the preceding treatment of the modal categories. Like all other absolute conceptions, it belongs to Reason, and must therefore await treatment in the *Dialectic*. These admissions come, however, only after the discussion has been completed. Had Kant reversed the order of the two paragraphs which constitute this digression, and marked them off as being a digression, he would have greatly assisted the reader in following the argument.

Kant adds a refutation of the merely logical arguments by which Leibniz had professed to establish the priority and greater scope of the possible. From the proposition, everything actual is possible, we can infer by immediate inference that some possible things are actual. That, however, would seem to imply that part of the possible is not actual, and that something must be added to the possible in order to constitute the actual. But this, Kant replies, is obviously an untenable view. The something additional to the possible, not being itself possible, we should be constrained to regard as impossible. *For our*

understanding, the possible is that which connects with some perception in agreement with the formal conditions of experience. (Kant here gives the correct Critical definition of the possible, by combining the two first postulates.) Whether, and how far, other existences beyond the field of sense experience are possible, we have no means of deciding.

B 288-294. — This second edition section emphasises the fact that possibility cannot be determined through the categories alone, but only through the categories in their relation to intuition, and indeed to outer intuition. Possibility is throughout taken as referring to objective reality. The section is chiefly important in connection with the problems bearing on the relation of inner and outer sense and on the nature of our consciousness of time.

In B 289-91 Kant criticises those rationalistic arguments which rest upon the equating of necessity of thought with necessity of existence. When it is sought by mere analysis of concepts to prove that all accidental existence has a cause, the most that can be shown is that the existence of the accidental cannot be *comprehended* by us, unless the existence of a cause be assumed. But we may not argue that a condition of possible understanding is likewise a condition of possible existence. What is or is not possible for thought is, without special proof, no sufficient criterion of what is or is not possible in the real. If, again, the term accidental be taken as meaning that which can exist only as a consequence of some other existence, the general principle becomes merely analytic, and must not be taken as establishing the synthetic principle of causality. The latter demands transcendental proof by reference to the possibility of contingent experience.

CHAPTER III

ON THE GROUND OF THE DISTINCTION OF ALL OBJECTS WHATEVER INTO PHENOMENA AND NOUMENA

THIS chapter, as Kant himself states, can yield no new results. It will serve merely to summarise those already established in the *Analytic*, showing how they one and all converge upon a conclusion of supreme importance for understanding the nature and scope of human experience — the conclusion, that though the objective employment of the categories can be justified only within the realm of sense-experiences, they have a wider significance whereby they define a distinction between appearances and things in themselves. This is the conclusion which Kant now sets himself to illustrate and enforce in somewhat greater detail. It may be observed that the title of the chapter makes mention only of grounds for *distinguishing* between phenomena and noumena. That things in themselves really exist, Kant, as we shall find, never seriously thought of questioning.

Kant begins by recalling a main point in the preceding argument. The categories apart from the manifold of sensibility are merely logical functions without content. Though *a priori*, they require to be supplemented through empirical intuition.

“Apart from this relation to possible experience they have no objective validity of any sort, but are a mere play of the imagination or the understanding with their respective representations.”

As evidence of the truth of this conclusion Kant now adds a further argument, namely, the impossibility of defining the categories except in terms that involve reference to the conditions of sensibility. When these conditions are omitted, the categories are without relation to any object and consequently without meaning. They are no longer concepts of possible empirical employment, but only of “things in general.” When, for instance, the permanence of existence in time, which is the condition of the empirical application of the concept of substance, is omitted, the category reduces merely to the notion of something that is always a subject and never a predicate.

“But not only am I ignorant of all conditions under which this logical pre-eminence may belong to anything, I can neither put such a concept to any use nor draw the least inference from it. For under these conditions no object is determined for its employment, and consequently we do not at all know whether it signifies anything whatsoever.”

In abstraction from sense-data, the categories still remain as concepts or *thoughts*, logically possible; but that is not to be taken as signifying that they still continue to possess meaning, *i.e.* reference to an object. And in the absence of ascertainable meaning they cannot, of course, be defined.

In A 244 Kant states his position in somewhat different fashion. In abstraction from sense the categories have meaning, but not determinate meaning; they relate not to any specific object, but only to things in general. In this latter reference, however, they possess no objective validity, since in the absence of intuition there is no means of deciding whether or not any real existence actually corresponds to them.

But whichever mode of statement be adopted, the same conclusion follows.

“Accordingly, the transcendental *Analytic* has this important result, that the most the understanding can achieve *a priori* is to anticipate the form of a possible experience in general. And since that which is not appearance cannot be an object of experience, the understanding can never transcend those limits of sensibility within which alone objects are given to us. Its principles are merely rules for the exposition of appearances; and the proud title of an Ontology, which presumptuously claims to supply, in systematic doctrinal form, synthetic *a priori* knowledge of things in general (*e.g.* the principle of causality), must therefore give place to the modest claims of a mere Analytic of pure understanding.”

A 248-9 opens a new line of argument which starts from the results obtained in the *Aesthetic*. The proof that space and time are subjective forms establishes the merely phenomenal character of everything which can be apprehended in and through them, and is meaningless except on the assumption that things in themselves exist. This assumption, Kant argues, is already involved in the very word 'appearance,' and unless it be granted, our thinking will revolve in a perpetual circle. But, he proceeds, this conclusion may easily be misinterpreted. It might be taken as proving the objective reality of noumena, and as justifying us in maintaining a distinction between the sensible and the intelligible worlds, and therefore in asserting that whereas the former is the object of intuition, the latter is apprehended by the understanding in pure thought. We should then be arguing that though in experience things are known only as they appear, through pure understanding a nobler world than that of sense, "*eine Welt im Geiste gedacht*," is opened to our view.

But any such interpretation, Kant insists, runs directly counter to the teaching of the *Analytic*, and is ruled out by the conclusions to which it has led. Categories yield only "rules for the exposition of appearances," and cannot be extended beyond the field of possible experience. It is true that all our sense-representations are related by the understanding to an object that is "transcendental." But that object, in its transcendental aspect, signifies only a something = *x*. It cannot be thought apart from the sense-data which are referred to it. When we attempt to isolate it, and so to conceive it in its independent nature, nothing remains through which it can be thought.

"It is not in itself an object of knowledge, but only the representation of appearances under the concept of an object in general, viewed as determinable through the manifold of those appearances."

Kant is here again expounding his early doctrine of the transcendental object. Evidently, at the time at which this passage was written, he had not yet come to realise that such teaching is not in harmony with his Critical principles. It is, as we have seen above, a combination of subjectivism and of dogmatic rationalism. The very point which he here chiefly stresses was bound, however, when consistently followed out, to reveal the untenableness of the doctrine of the transcendental object; and in the second edition Kant so recast this chapter on phenomena and noumena as to eliminate all passages in which the transcendental object is referred to.

But to return to Kant's own argument: the reason why the mind is "not satisfied with this substrate of sensibility," and therefore proceeds to duplicate the phenomenal world by a second world of noumena, lies in the character of the agency whereby sensibility is limited. Sensibility is limited by the understanding; and the understanding, overestimating its powers and prerogatives, proceeds to transform the notion of the transcendental object = *x* into the concept of a noumenon, viewed in a manner conformable to its etymological significance, as something apprehended by reason or pure intuition, *i.e.* as intuited in some non-sensuous fashion. For only by postulating the possibility of a non-sensuous species of intuition, can the notion of a noumenon, thus positively conceived, be saved from self-contradiction. Otherwise we should be asserting the apprehension of an object independently of appearances, and yet at the same time denying the only means through which such apprehension is possible. Statement of the postulate suffices, however, to reveal its unsupported character. We have no such power of non-sensuous, intuitive apprehension; nor can we in any way prove that such a power is possible even in a Divine Being. Though, therefore, the concept of noumena is not self-contradictory, it involves more than we have the right to assert; the process whereby the empty notion of a transcendental object = *x* is transformed into the positive concept of a noumenon is easily comprehensible, but it is none the less illegitimate. We must, Kant insists, keep strict hold of the central doctrine of Critical teaching, namely, that the categories are applicable only to the data of sense. We can still employ them as pure logical functions, yielding the notion of objects in general (of the transcendental object = *x*). But this does not widen the sphere of *known* existences. It only enables us to comprehend the limited and merely

phenomenal character of the world experienced.

At this point Kant's argument takes a strange and misleading turn. The concept of object in general (the transcendental object = *x*) has been proved to be involved in the apprehension of appearances as appearances, and in this capacity to be a limiting concept (*Grenzbegriff*), which, though negative in function, is indispensably involved in the constitution of human experience. Now, however, Kant proceeds to ascribe this function to *the concept of the noumenon*. That concept is, he repeats, purely problematic. Even the mere possibility of its object, presupposing as it does the possibility of an understanding capable through non-sensuous intuition of apprehending it, we have no right to assert. That the concept is not self-contradictory is the most that we can say of it. None the less, it is to this concept that Kant here ascribes the indispensable limiting function.

"The concept of a noumenon is a merely limiting concept, the function of which is to curb the pretensions of sensibility; and it is therefore only of negative employment. At the same time it is no arbitrary invention, and it is bound up with the limitation of sensibility, though it cannot affirm anything positive beyond the field of sensibility."

This confusion, between the concept of a noumenon and the less definite concept of object in general, which is probably due to the combining of manuscripts of different dates, is corrected in the second edition by means of a new distinction which Kant introduces, evidently for this very purpose. The term noumenon may, he there says, be used either positively or negatively. Taken positively, it signifies "an object of a non-sensuous intuition"; regarded negatively, it means only "a thing so far as it is not an object of our sensuous intuition." Only in its negative employment, he states, is it required as a limiting concept; and it is then, as he recognises, indistinguishable from the notion of the unknown thing in itself.

But despite this variation in mode of expression, in the main Kant holds consistently to his fundamental teaching.

"...understanding is not limited through sensibility; on the contrary, it itself limits sensibility by applying the term noumena to things in themselves (things not regarded as appearances). But in so doing it at the same time sets limits to itself, recognising that it cannot know these noumena through any of the categories, and that it must therefore think them only under the title of an unknown something."

Or as Kant adds in the concluding sentence of this chapter:

"...the problematic thought which leaves open a place for [intelligible objects], serves only, like an empty space, for the limitation of empirical principles, without itself containing or revealing any other object of knowledge beyond their sphere."

A sentence in A 258 = B 314 deserves special notice.

"...we can never know whether such a transcendental or exceptional knowledge is possible under any conditions, least of all if it is to be regarded as of the sort that stands under our ordinary categories."

This sentence clearly shows that Kant was willing to recognise that the categories may be inapplicable, not merely owing to lack of data for their specification, but because of their inherent character. They may be intrinsically inapplicable, expressing only the *modi* of our self-consciousness. They may be merely the instruments of our human thinking, not forms necessary to knowledge as such.

RELEVANT PASSAGES IN THE SECTION ON AMPHIBOLY

Before passing to consideration of the extensive alterations made in this chapter in the second edition, it is advisable to take account of the two passages dealing with this problem in the first edition section on *Amphiboly*: namely, A 277-280 = B 333-6, and A 285-9 = B 342-6. The first of these passages is of great interest in other connections; its chief importance in reference to the present problem lies in its concluding paragraph. Kant there declares that the representation of an object "as thing in general" is not only, in the absence of specific data, insufficient for the determination of an object, but is self-contradictory. For we

must either abstract from all reference to an object, and so be left with a merely logical representation; or, in assuming an object, we must postulate a special form of intuition which we do not ourselves possess, and which therefore we cannot employ in forming our concept of the object. *Here again Kant is substituting the concept of a noumenon for the less definite concept of the thing in itself*. This is still more explicitly done in the second passage. The pure categories are, Kant there declares, incapable of yielding the concept of an object. Apart from the data of sense they have no relation to any object. As purely logical functions, they are altogether lacking in content or meaning. By objects as things in themselves we must therefore mean objects of a non-sensuous intuition. Kant still, indeed, continues to maintain that to them the categories do not apply, and that we cannot, therefore, have any knowledge of them, either intuitional or conceptual.

"Even if we assume a non-sensuous form of intuition, our functions of thought would still have no meaning in reference to it."

But Kant now insists that the notion of noumena, viewed in the above manner, differs from the notion of "objects in general" (transcendental = *x*) in being a legitimate non-contradictory conception; and he also insists that though more positive in content, it is for that very reason less open to misunderstanding. Its function is not to extend our knowledge, but merely to limit it.

"For it merely says that our species of intuition does not extend to all things, but only to objects of our senses; that its objective validity is consequently limited; and that a place therefore remains open for some other species of intuition, and so for things as its objects."

The concept of a noumenon, as thus employed to signify the objects of a non-sensuous intuition, is, Kant proceeds, merely problematic. As we have neither intuition nor (it may be) categories fitted for its apprehension, it represents something upon the possibility or impossibility of which we are quite unable to pronounce.

"...as the problematic concept of an object for a quite different intuition and a quite different understanding than ours, it is itself a problem."

We may not therefore assert the existence of noumena, but we must none the less form to ourselves the concept of them. This concept is indispensably involved in the constitution of our empirical knowledge, and is demanded for its proper interpretation. Only when viewed as a self-sufficient representation of an absolute existence does it become dogmatic and therefore illegitimate. In its Critical aspects it stands for a problem which human reason is constrained by its very nature to propound.

"The concept of the noumenon is, therefore, not the concept of an object, but is a problem unavoidably bound up with the limitation of our sensibility — the problem, namely, as to whether there may not be objects entirely disengaged from our sensuous species of intuition. This is a question which can only be answered in an indeterminate manner, by saying that, as sense intuition does not extend to all things without distinction, a place remains open for other different objects; and consequently that these latter must not be absolutely denied, though — since we are without a determinate concept of them (inasmuch as no category can serve that purpose) — neither can they be asserted as objects for our understanding."

The fact that these fundamental concepts have not yet been quite definitely and precisely formulated in Kant's own mind, appears very clearly from the immediately following paragraph. For he there again introduces the concept of the transcendental object, and adds that if "we are pleased to name it noumenon for the reason that its representation is not sensuous, we are free so to do." The characterisation given in this paragraph of the transcendental object deserves special notice, for in it Kant goes further in the sceptical expression of his position, though not indeed in the modification of it, than in any other passage.

"[The understanding in limiting sensibility] thinks for itself an object in itself, but only as transcendental object which is the cause of appearance and therefore not itself appearance, and which can

be thought neither as quantity nor as reality nor as substance, etc.... We are completely ignorant whether it is to be met with in us or outside us, whether it would be at once removed with the cessation of sensibility, or whether in the absence of sensibility it would still remain."

This sentence reveals Kant as at once holding unquestioningly to the existence of things in themselves, and yet at the same time as teaching that they must not be conceived in terms of the categories, not even of the categories of reality and existence.

ALTERATIONS IN SECOND EDITION

In the second edition certain paragraphs of the chapter on *Phenomena and Noumena* are omitted, and new paragraphs are inserted to take their place. Though these alterations do not give adequate expression to the Critical teaching in its maturest form, there are three important respects in which they indicate departures from the teaching of the first edition. In the first place, those paragraphs in which the doctrine of the transcendental object finds expression are entirely eliminated, and the phrase 'transcendental object' is no longer employed. This, as we have already noted, is in harmony with the changes similarly made in the second edition *Transcendental Deduction and Paralogisms*.

Secondly, Kant is even more emphatic than in the first edition, that the categories must not be employed save in reference to sense intuitions. In the first edition he still allows that their application to things in themselves is logically possible, though without objective validity. In the second edition he goes much further. Save in their empirical employment the categories "mean nothing whatsoever."

"[In the absence of sensibility] their whole employment, and indeed all their meaning entirely ceases; for we have then no means of determining whether things in harmony with the categories are even possible...."

In the third place, Kant, as already noted, distinguishes between a negative and a positive meaning of the term noumenon. Noumenon in its negative sense is defined as being merely that which is not an object of sensuous intuition. By noumenon in the positive sense, on the other hand, is meant an object of non-sensuous intuition. Kant now claims that it is the concept of noumenon in the negative sense, as equivalent therefore simply to the thing in itself, that alone is involved, as a *Grenzbegriff*, in the "doctrine of sensibility." For its determination the categories cannot be employed; that would demand a faculty of non-sensuous intuition, which we do not possess, and would amount to the illegitimate assertion of noumena in the positive sense. The limiting concept, indispensably presupposed in human experience, is therefore the bare notion of things in themselves. And accordingly, in modification of the conclusion arrived at in the first edition, viz. that "the division of objects into phenomena and noumena ... is not in any way admissible," Kant now adds to the term noumena the qualifying phrase "in the positive sense." In this way the assumption that things in themselves actually exist becomes quite explicit, despite Kant's greater insistence upon the impossibility of applying any of the categories to them.

But beyond thus placing in still bolder contrast the two counter assertions, on the one hand that the categories must not be taken by us as other than merely subjective thought-functions, and on the other that a limiting concept is indispensably necessary, Kant makes no attempt in these new passages to meet the difficulties involved. With the assertion that the categories as such, and therefore by implication those of reality and existence, are inapplicable to things in themselves, he combines, without any apparent consciousness of conflict, the contention that things in themselves must none the less be postulated as actually existing.

The teaching of this chapter must be regarded as only semi-Critical. The fact that it is formulated in terms of the doctrine of the transcendental object, itself suffices to determine the date at which it must

have been composed as comparatively early; and such changes as Kant could make in the second edition were necessarily of a minor character. More extensive alterations would have involved complete reconstruction of the entire chapter, and indeed anticipation of the central teaching of the *Dialectic*.

Kant is also hampered by the unfortunate location to which he has assigned this chapter. At this point in the development of his argument, namely, within the limits of the *Analytic*, Kant could really do no more than recapitulate the *negative* consequences which follow from the teaching of the transcendental deduction. For though these might justify him in asserting that it is understanding that limits sensibility, he was not in a position to explain that the term understanding, as thus employed, has a very wide meaning, and that within this faculty he is prepared to distinguish between understanding in the strict sense as the source of the categories, and a higher power to which he gives the title Reason, and which he regards as originating a unique concept, that of the unconditioned. Yet only when these distinctions, and the considerations in view of which they are drawn, have been duly reckoned with, can the problem before us be discussed in its full significance.

This placing of the chapter within the *Analytic*, and therefore prior to the discussions first broached in the *Dialectic*, has indeed the unfortunate consequence of concealing not only from the reader, but also, as it would seem, to some extent from Kant himself, the ultimate grounds upon which, from the genuinely Critical standpoint, the distinction between phenomena and noumena must be based. For neither in this chapter, nor in any other passage in the *Critique*, has Kant sought to indicate, in any quite explicit manner, the bearing which the important conclusions arrived at in the *Dialectic* may have in regard to it. Like so many of the most important and fruitful of his tenets, these consequences are suggested merely by implication; or rather remain to be discovered by the reader's own independent efforts, in proportion as he thinks himself into the distinctions upon which, in other connections, Kant has himself insisted. They are never actually formulated in and by themselves.

In seeking, therefore, to decide upon what basis the distinction between appearance and reality ought to be regarded as resting, we are attempting to determine how the argument of this chapter would have proceeded had it been located at the close of the *Dialectic*. The task is by no means easy, but the difficulties are hardly as formidable as may at first sight appear. The general outlines of the argument are fairly definitely prescribed by Kant's treatment of kindred questions, and may perhaps, with reasonable correctness, be hypothetically constructed in view of the following considerations.

Just as Kant started from the natural assumption that reference of representations to objects must be their reference to things in themselves, so he similarly adopted the current Cartesian view that it is by an inference, in terms of the category of causality, that we advance from a representation to its external ground. It was very gradually, in the process of developing his own Critical teaching, and especially his phenomenalist view of the empirical world in space, that he came to realise the very different position to which he stood committed. When the doctrine of the transcendental object is eliminated from his teaching, and when the categories, including that of causality, are pre-empted for the *empirical* object, and that object is regarded as directly apprehended, the function of mediating the reference of phenomenal nature to a noumenal basis falls to the Ideas of Reason. For the distinction is no longer between representations and their noumenal causes, but between the limited and relative character of the entire world in space and time, and the unconditioned reality which Reason demands for its own satisfaction. To regard the world in space as merely phenomenal, because failing to satisfy our standards of genuine reality, is to adopt an entirely different attitude from any to be found in Descartes or Locke. The position may be outlined in the following manner, in anticipation of its more adequate statement in connection with the problems of the *Dialectic*.

The concept, whereby Reason limits sensibility, is not properly describable as being that of the thing in itself; it is the unique concept of the unconditioned. Our awareness of the conditioned as being conditioned presupposes, over and above the categories, an antecedent awareness of Ideal standards; and

to that latter more fundamental form of consciousness all our criteria of truth and reality are ultimately due. The criteria by means of which we empirically distinguish sense-appearance from sense-illusion, when rigorously applied, lead us to detect deficiencies in the empirical as such. We have then no alternative save to conceive absolute reality in terms of the rational Ideals, of which the empirical criteria are merely specialised forms.

There are thus two distinct, but none the less interdependent, elements involved in Kant's more mature teaching, phenomenalism, and what may be called the Idealist, or absolutist, interpretation of the function of Reason. Each demands the other for its own establishment. There must be a genuinely objective world, by reflection upon which we may come to consciousness of the standards which are involved in our judgments upon it; and we must possess a faculty through which our consciousness of these standards may be accounted for. The standards of judgment cannot be acquired by means of judgments which do not already presuppose them; the processes by which they are brought to clear consciousness cannot be the processes in which they originate. They must be part of the *a priori* conditions of experience and combine with space, time and the categories to render experience of the kind which we possess — self-transcending and self-limiting — actually possible.

From this point of view the distinction between appearance and reality is not a contrast between experience and the non-experienced, but a distinguishing of factors, which are essential to all experience, and through which we come to consciousness of an irresolvable conflict between the Ideals which inspire us in the acquisition of experience, and the limiting conditions under which alone experience is attainable by us. In the higher field of Reason, as in the lower field of understanding, it is not through the given, but only through the given as interpreted by conditioning forms of an Ideal nature, that a meaningful reality can disclose itself to the mind. The ultimate meaning of experience lies in its significance when tested by the standards which are indispensably involved in its own possibility. That meaning is essentially metaphysical; more is implied in experience than the experienced can ever itself be found to be.

Such is the central thesis of the Critical philosophy, when the teaching of the *Analytic* is supplemented by that of the *Dialectic*. Though the *Critique* is, indeed, the record of the manifold ways in which Kant diverged from this position, not a systematic exposition of its implications and consequences, the above thesis represents the goal upon which his various lines of thought tend to converge. It is the guiding motive of his devious and complex argument in the three main divisions of the *Dialectic*. On no other interpretation can the detail of his exposition be satisfactorily explained.

There are two chief reasons why Kant failed to draw the above conclusions in any quite explicit manner. One reason has already been sufficiently emphasised, namely, that the thesis, which I have just formulated, rests upon a phenomenalist view of the natural world, whereas the *Dialectic* is inspired by the earlier, subjectivist doctrine of the transcendental object. Upon the other main reason I shall have frequent occasion to insist. As we shall find, Kant was unable to arrive at any quite definitive decision as to the nature of the Ideals of Reason. He alternates between the sceptical and the absolutist view of their origin and function, and in the process of seeking a comprehensive mid-way position which would do justice to all that is valid in the opposing arguments, the further question as to the bearing of his conclusions upon the problem of the distinction between appearance and reality was driven into the background. But we are anticipating matters the discussion of which must meantime be deferred.

APPENDIX

THE AMPHIBOLY OF THE CONCEPTS OF REFLECTION

IN this appendix Kant gives a criticism of the Leibnizian rationalism — a criticism already partially

stated in the section on the *Postulates* — and he does this in a manner which very clearly reveals the influence which that rationalism continued to exercise upon his own thinking. Thus Kant speaks of the "mere concept," and in doing so evidently means to imply that it exists in its own right, with a nature determined solely by intrinsic factors of a strictly *a priori* character, in complete independence of the specific material of sense-experience. He denies, it is true, the objective validity of such concepts, and maintains that in their empirical employment they are completely transformed through the addition of new factors. None the less he allows to the concepts an intrinsic nature, and practically maintains that from the point of view of the pure concept, and therefore from the point of view of a logic based upon it, the Leibnizian rationalism is the one true system of metaphysics. For pure thought, Leibniz's system is the ultimate and only possible philosophy; and were thought capable of determining the nature of things in themselves, we should be constrained to adopt it as metaphysically valid. This is the standpoint which underlies much of Kant's argument in the *Dialectic*. It leads him to maintain that the self must necessarily, in virtue of an unavoidable transcendental illusion, believe in its own independent substantial reality, that the mind is constrained to conceive reality as an unconditioned unity, and that the notions of God, freedom, and immortality are Ideas necessarily involved in the very constitution of human thought.

But we must not regard Kant's doctrine of the pure concept merely as a survival from a standpoint which the Critical teaching is destined to displace and supersede. For Kant is not led through inconsistency, or through any mere lack of thoroughness in the development of his Critical principles, to retain this rationalistic doctrine. To understand the really operative grounds of Kant's argumentation, and so to place the contents of this section in proper focus, we must recall the fundamental antithesis, developed in my introduction, between the alternative positions, which are represented for Kant by the philosophies of Hume and Leibniz. Kant, as already observed, is profoundly convinced of the essential truth of the Leibnizian position. He holds to the Leibnizian view of reason. Human reason is essentially metaphysical; its ultimate function is to emancipate us from the limiting conditions of animal existence; it reveals its nature in those Ideas of the unconditioned, the discussion of which Kant reserves for the *Dialectic*.

The chief defect in Kant's criticism of Leibniz, as developed in this section, is that the deeper issues, which determine the extent of his agreement with Leibniz, are not raised or even indicated. Consequently, his references to pure thought, and his assertion that from the point of view of pure thought Leibniz is entirely justified in his teaching, bewilder the reader, who has been made to adopt a Critical standpoint, and therefore to believe that thought can function only in connection with the data of sense-experience. Kant would seem, indeed, to have lapsed into the dogmatic standpoint of the *Dissertation*, distinguishing between a sensible and an intelligible world, and maintaining that pure thought is capable of determining the nature of the latter. The only difference between his teaching here and in the *Dissertation* consists in the admission that all knowledge is limited to sense-experience, and that we are therefore unable to determine whether this intelligible world which we must *think*, and *think in the precise manner defined by Leibniz*, does or does not exist.

This section is, indeed, like the chapter on *Phenomena and Noumena*, wrongly located. Giving, as it does, Kant's criticism of the Leibnizian ontology, it discusses problems of metaphysics; and ought therefore to have found its place in the *Dialectic*, in natural connection with the corresponding examination of the metaphysical sciences of rational psychology, cosmology, and theology. Architectonic, that ever-present source of so many of Kant's idiosyncrasies, has again interposed its despotic mandate. As there are only three forms of syllogism, only three main divisions can be recognised in the *Dialectic*; and the criticism of ontology, to its great detriment, must therefore be located, where it does not in the least belong, in the concluding section of the *Analytic*.

But we must follow Kant's argument as here given. Leibniz views thought as capable of prescribing, antecedently to all experience, the fundamental conditions to which reality must conform. The possible is

prior to, and independent of, the actual; and can be adequately determined by pure reason from its own inherent resources. Kant does not here question this assertion of the independence and priority of pure thought. He is content to maintain that what is valid for thought need not hold of those appearances which are the only possible objects of human knowledge, since in sense-experience conditions, unforeseen by pure thought, partly limitative and partly extensive of its concepts, intervene to modify the conclusions which from its own point of view are logically valid. Leibniz, through failure to realise the dual character of thought and sense, overlooked this all-important fact; and, in asserting that what is true for pure thought is valid of the sensuously real, fell victim to the fallacy which Kant entitles transcendental amphiboly.

Kant's clearest statement of the fallacy is in A 280 = B 336. It reduces, formally stated, to the fallacy of denying the antecedent. In accordance with the *dictum de omni et nullo*, we can validly assert that what belongs to or contradicts a universal concept, belongs to or contradicts the particulars which fall under that concept. Leibniz employs the principle in a negative and invalid form. He argues that what is *not* contained in a universal concept is also not contained in the particulars to which it applies. "The entire intellectualist system of Leibniz is reared upon this latter principle." And as Kant points out, the reason why so acute and powerful a thinker succumbed to this obvious fallacy is to be found in his view of sense as merely confused thought; or, to state the same point in another way, in his interpretation of appearances as being the confused representations of things in themselves. All differences between appearance and reality are, on this view, due merely to lack of clearness in our apprehension of the given. Sense, when completely clarified, reduces without remainder to pure thought; and in the concepts, which thought develops from within itself, lie the whole content alike of knowledge and of real existence. Owing to a metaphysical theory of the nature of the real, itself due to a false interpretation of the nature and function of pure thought, and ultimately traceable to an excessive preoccupation with knowledge of the strictly mathematical type, Leibniz failed to do justice to the fundamental characteristics of our human experience, and in especial to the actual given nature of space, time, and dynamical causality. His rationalistic metaphysics has its roots in the Cartesian philosophy, and is, in Kant's view, the perfected product of philosophical thinking, when developed on dogmatic, *i.e.* non-Critical, lines. It is the opposite counterpart of the empirical or sceptical type of philosophy which in modern times found its first great supporter in Locke, and which, as Kant held, obtained its perfected expression in the philosophy of Hume. While Descartes and Leibniz intellectualise appearances, Locke and Hume regard the *a priori* concepts of understanding as merely empirical products of discursive reflection. Both commit the same fundamental error of failing to recognise that understanding and sensibility are two distinct sources of representations. Both consequently strive, in equally one-sided fashion, to reduce the complexity of experience to one alone of its constituent elements. This section of the *Critique* ought to have developed the Critical teaching in its opposition to both these alternative attitudes; Kant arbitrarily limits it to criticism of the Leibnizian rationalism.

Kant's method of introducing and arranging his criticism is artificial, and need be no more than mentioned. Critical reflection upon the sources of our knowledge, which Kant, in order to distinguish it from reflection of the ordinary type, entitles *transcendental* reflection, is, he states, a duty imposed upon all who would profess to pass *a priori* judgments upon the real. It will trace the concepts employed to their corresponding faculties, intellectual and sensuous, and will reveal the independence and disparity of sensibility and understanding, and so will effectually prevent that false locating of concepts to which transcendental amphiboly is due. Such reflection, he further argues, consists in a *comparison* of the representations with the faculty to which they are due, and like ordinary comparison will determine the relations of (1) *identity and difference*, (2) *agreement and opposition*, (3) *inner and outer*, (4) *determinable and determining* (matter and form). In this arbitrary but ingenious fashion Kant contrives to obtain the four main headings required for his criticism of the Leibnizian ontology.

(1) Under the first heading he deals with the principle of the identity of indiscernibles. It is, Kant

maintains, a typical example of the fallacy of transcendental amphiboly. Leibniz argues that if no difference is discoverable in the concept of things, there can be none in the things themselves; things which are identical in conception must be identical in all respects. But this, Kant replies, is true only so long as the concepts abstract from the sensuous conditions of existence. Thus no two cubic feet of space are alike. They are distinguishable from one another by their spatial location; and that is a difference which concerns the conditions of intuition; it is not to be discovered in the pure concept. Spaces, alike for thought, are distinguishable for sense. To take another of Kant's illustrations: two drops of water, if indistinguishable in all their internal properties of quality or quantity, are conceptually identical. Through differences of location in space, irrelevant to their conception, they can none the less be intuited as numerically different. The principle of indiscernibles is not a law of nature, but only an analytic rule for the comparison of things through mere concepts.

(2) A second principle of the Leibnizian metaphysics is that realities can never conflict with one another. This is supposed to follow from the fact that in pure thought the only form of opposition is logical negation. Realities, being pure affirmations, must necessarily harmonise with one another. This principle ignores the altogether different conditions of sense-existence. Space, time, and the resulting possibility of dynamical causality supply the conditions for real opposition. Two existences, though equally real and positive, may annul one another. Two forces acting upon a body may neutralise one another. From the above logical principle Leibniz's successors profess to obtain the far-reaching metaphysical conclusions, that all realities agree with one another, that evil is merely negative, consisting exclusively in limitation of existence, and that God, without detriment to the unity of his being, can be constituted of all possible realities.

(3) Viewing space and time, which condition external relation, as merely confused forms of apprehension, Leibniz further concluded that the reality of substance is purely internal. And ruling out position, shape, contact and motion, all of which involve external relations, he felt justified in endowing the monads with the sole remaining form of known existence, namely consciousness. The assertion that the monads are incapable of external relation leads to the further conclusion that they are incapable of interaction, and stand in systematic relation to one another, solely in virtue of a pre-established harmony.

(4) From the point of view of pure thought matter must precede form. The universal must precede the particular which is a specification of it. Unlimited reality is taken as being the matter of all possibility, and its limitation or form as being due to negation. Substances must antecedently exist in order that external relations may have something upon which to ground themselves. Space and time must be interpreted as confused apprehensions of purely intellectual orders, space representing a certain order in the reciprocal (pre-established) correspondence of substances, and time the dynamical sequence of their states. On the other hand, from the standpoint of sense and its intuitional forms the reverse holds. The world of appearance is conditioned by the forms of space and time; the objectively possible coincides with the actual; and the *substantia phaenomenon* has no independent essence, but reduces without remainder to external relations. For pure thought this world of given appearance is an utterly paradoxical form of existence; it is the direct opposite of everything that genuine reality ought to be. In this strange conclusion the problems of the *Dialectic*, in one of their most suggestive forms, at once loom up before us. As stated above, this entire discussion is an anticipation of questions which cannot be adequately treated within the limits of the *Analytic*.

The text of this section is highly composite. The entire content of the *Appendix* is twice reintroduced and restated at full length in the accompanying *Note*. These successive expositions of one and the same argument were doubtless independently written, and then later pieced together in this external fashion. A 277-8 = B 333-4, on the nature of the *substantia phaenomenon*, would by its references to the transcendental object seem to be of early origin. It has already been commented upon. A 285-9 = B 342-6, on the other hand, which supplements the chapter on *Phenomena and Noumena*, would seem to be of late

origin. It is so dated by Adickes, owing to the reference to schemata in its opening sentence.

A 289-91 = B 346-9. Table of the division of the conception of nothing. — This curious and ingenious classification of the various meanings of the term ‘nothing’ is chiefly of interest through its first division: “empty conception without object, *ens rationis*.” The *ens rationis* can best be defined in its distinction from the fourth division: “empty object without conception, *nihil negativum*.” The former is a *Gedankending*; the latter is an *Unding*. The former indeed, though not contradictory, is mere fiction (*bloss Erdichtung*), and consequently must not be taken as falling within the field of the possible. The latter is a concept which destroys itself, and which therefore stands in direct conflict with the possible. The *ens rationis* includes, Kant explicitly states, the conception of noumena, “which must not be reckoned among the possibilities, although they must not for that reason be declared to be also impossible.” Kant must here be taking noumena in the positive sense. As usual Kant’s attempt to obtain parallels for the four classes of category breaks down. The so-called *nihil privativum* and the *ens imaginarium* do not properly come within the denotation of the term ‘nothing.’ This is very evident in the examples which Kant cites. Cold is as real as the opposite with which it is contrasted, while pure space and pure time are not negative even in a conventional sense.

TRANSCENDENTAL LOGIC

DIVISION II. THE TRANSCENDENTAL DIALECTIC

INTRODUCTORY COMMENT UPON THE COMPOSITE ORIGIN AND CONFLICTING TENDENCIES OF THE DIALECTIC.

We have had constant occasion to observe the composite origin and conflicting tendencies of the *Analytic*. The *Dialectic* is hardly less composite in character, and is certainly not more uniform in its fundamental teaching.

The composite nature of the text, though bewildering to the unsophisticated reader, is not, however, without its compensations. The text, as it stands, preserves the record of the manifold influences which presided over its first inception, and of the devious paths by which Kant travelled to his later conclusions. It thus enables us to determine, with considerable accuracy, the successive stages through which it has passed in the process of settling into its present form. As we shall find, the sections on the antinomies contain the original argument, out of which by varied processes of supplementation and modification the other parts have arisen.

The conflict of doctrine has also its counter-advantages. The problems are impartially discussed from opposed standpoints; the difficulties peculiar to each of the competing possible solutions are frankly recognised, and indeed insisted upon; and the internal dialectic of Kant's own personal thinking obtains dramatic expression. We are thus the better enabled to appreciate the open-minded pertinacity with which Kant set himself to do justice to every significant aspect of his many-sided problems, and are consequently in less danger of simplifying his argument in any arbitrary manner, or of ignoring the tentative character of the solutions at which he arrives.

I shall first define the main lines of conflict, and shall then attempt to trace those conflicts to the considerations in which they have their source. The two chief lines of thought traceable throughout the *Dialectic* are represented by its negative and by its positive tendencies respectively. From one point of view, Reason is merely the understanding in its self-limiting, self-regulative employment, and the main purpose of the *Dialectic* is to guard against the delusive power of fictitious principles. From the other point of view, Reason is a faculty distinct from understanding, and its problems run parallel with those of the *Analytic*, forming no less important a subject of philosophical reflection, and no less fruitful a source of positive teaching. The one line of argument connects with Kant's more sceptical tendencies, the other with his deep-rooted belief in the ultimate validity of the absolute claims of pure thought.

When we approach the *Dialectic* from the standpoint of the *Analytic*, it is the negative aspect that is naturally most prominent. In the *Analytic* Kant has proved that all knowledge is limited to sense-experience, and that a metaphysical interpretation of reality is altogether impossible. But as the human mind would seem to be possessed by an inborn need of metaphysical construction, this conclusion cannot obtain its due influence until the sources of the metaphysical tendency have been detected and laid bare. The *Dialectic* must yield *a psychology of metaphysics* as well as a *logic of illusion*.

But when, on the other hand, the problems of the *Dialectic* are viewed in their *distinction* from those of the *Analytic*, and their independent character is recognised, they appear in a perspective which sets them in a very different light. Reason is a faculty co-ordinate with understanding, and yields *a priori* concepts distinct in function, no less than in nature, from the categories. To mark this distinction Kant entitles the concepts of Reason Ideas. They demand both a metaphysical and a transcendental deduction. These requirements are fulfilled through their derivation from the three forms of syllogism, and by the proof that they exercise an indispensable function, at once limiting and directing the understanding. As limiting concepts, they condition the consciousness of those Ideal standards through which the human mind is

enabled to distinguish between appearance and things in themselves. As regulative, they prescribe the problems which the understanding in its search for knowledge is called upon to solve.

These two tendencies, sceptical and constructive, are never, indeed, in complete opposition. Common to both, rendering possible the psychological explanation of the metaphysical impulse, which even the negative standpoint demands, is the doctrine of the regulative function of Ideal principles. This doctrine, which already appears in the *Dissertation* of 1770, was later developed into the Critical theory of transcendental illusion; and by means of that theory Kant succeeded in bringing the two standpoints into a very real and vital connection with one another. At first sight it may seem to achieve their complete reconciliation, accounting for their distinction while rendering them mutually complementary; and Kant's teaching may perhaps be so restated as to bear out that impression. But the harmony is never completely attained by Kant. Here, as in the *Analytic*, there is an equipoise of tendencies that persist in opposition.

Kant's mediating doctrine of transcendental illusion may first be stated. It rests upon a distinction between appearance and illusion. Appearance (*Erscheinung*) is a transcript in phenomenal terms of some independent reality; and of such appearances we can acquire what from the human point of view is genuine knowledge. On the other hand, all professed insight into the nature of the transcendent or non-empirical is sheer illusion (*Schein*), and purely subjective. There are three species of illusion, logical, empirical and transcendental. Logical illusion stands apart by itself. It is due merely to inattention or ignorance; and vanishes immediately the attention is aroused. Empirical and transcendental illusion, on the other hand, have a twofold point of agreement, first, in being unavoidable, and secondly, in that they originate in our practical needs. We may know that the moon at its rising is no larger than in mid-heavens, that the ocean is no higher in the distance than at the shore; this makes not the least difference in the perceptions as they continue to present themselves. That the illusions are adapted to our practical needs, and are consequently beneficial, is less often observed. Changes in the colour, form, and size of objects as they recede from us, the seeing of the parallel sides of a street as converging, enable us to achieve what would not otherwise be possible. By their means we acquire the power of compressing a wide extent of landscape into a single visual field, of determining distance, and the like. Their practical usefulness is in almost exact proportion to the freedom with which they depart from the standards of the independently real. Kant argues that, in these respects, transcendental illusion is analogous to the empirical. Just as the illusory characteristics of our perceptions are to be understood only in terms of their practical function, so the Ideas of pure Reason have always a practical bearing, and can only be explained and justified in terms of the needs which they satisfy. As theoretical enquirers, we accept all that affords us orientation in the attainment of knowledge; as moral agents, we postulate the conditions which are necessary for the realisation of the moral imperative. And as the Ideals of natural science are found (such is Kant's contention) to be in general form akin to those of the moral consciousness, they thus acquire a twofold footing in the mental life, maintaining their place there quite independently of theoretical proof. Though illusory, they are unavoidable; and though theoretically false, they are from a practical point of view both legitimate and indispensable.

Kant, in developing this thesis, might profitably have pointed to still another respect in which the analogy holds between sense-experience and transcendental beliefs. The illusions of sense-perception come in the ordinary processes of experience to be detected as such by the mind. From the theoretical standpoint of the outside observer who compares the situation of one percipient with that of another, and so is enabled to cancel the differences which variety of situation carries with it, the useful illusions of ordinary experience are reduced to the level of mere appearance. In contradicting one another they reveal their subjective character, and also at the same time afford data for determining the objective conditions to which their subjectively necessary existence is causally due. In similar fashion the transcendental illusions result in contradictions, which compel the mind to recognise that the Ideals to which it is committed by its practical needs are of a merely subjective character, and may never be legitimately

interpreted as representing the actual nature of the independently real.

The chief transcendental illusion, and ultimately the cause of all the others, consists in the belief that the Ideals of explanation which satisfy Reason must in general outline represent the nature of ultimate reality. What the individual seeks to discover he naturally believes to exist prior to the discovery. As practical beings, we regard the objects of sense-experience as absolute realities — they are the realities of practical life, and we are practical rather than theoretical beings — and the existing empirical sciences, conceived as Ideally completed, are therefore viewed as yielding an adequate representation of ultimate reality. But such a belief involves us in contradictions. The world of phenomena in space and time is endlessly relative. It can have no outer bounds or first beginning, and no smallest parts; and in the series of causal antecedents there can be no member that is not effect as well as cause. Viewed as representing a pre-existent goal, the Ideas of Reason are imaginary completions of the intrinsically and merely relative, and are in their very notion self-contradictory. All that is definite in their content conflicts with their absoluteness; and yet, as it would seem, only in their empirical reference can they hope for objective verification.

Such are the problems of the *Dialectic*, so far as they can be formulated in terms common to the two opposed standpoints. Their deeper significance, and the grounds of Kant's alternating treatment of them, only appear when he raises the further questions, what those Ideals of explanation which Reason prescribes really are, and how, if they conflict with the content of experience, it is possible that they should be conceived at all. To these questions Kant propounds both a sceptical and an Idealist answer. The former, in bare outline, may be stated as follows. The so-called Ideas are based upon experience and are derived from it. The understanding removes the limitations to which its pure concepts are subject in sense-experience, and proceeds to use them in their widest possible application, *i.e.* to things in general. As thus employed, they are without real significance, and are indeed self-contradictory. To form the Idea of the unconditioned, we have to omit all those conditions through which alone anything can be apprehended, even as possible. To construct the concept of absolute or unconditioned necessity, we have similarly to leave aside the conditions upon which necessity, as revealed in experience, in all cases depends; in eliminating conditions, we eliminate necessity in the only forms in which it is conceivable by us. Such Ideas are, indeed, simply *schematic forms*, whereby we body forth to ourselves, in more or less metaphorical terms, the concept of a *maximum*. They are imaginary extensions, in Ideal form, of the unity and system which understanding has discovered in actual experience, and which, under the inspiration of such Ideals, it seeks to realise in ever-increasing degree. If the understanding, as thus insisting upon Ideal satisfaction, be entitled Reason, the Ideas must be taken as expressing a subjective interest, and as exhausting their legitimate employment in the regulation of the understanding. Their transcendental deduction will consist in the proof that they are necessary to the understanding for the *perfecting* of its experience. They do not justify us in attempting to decide, in anticipation of actual experience, how far the contingent collocations and the inexhaustible complexities of brute experience are really reducible to a completely unified system; but they quite legitimately demand that through all discouragements we persist in the endeavour towards their realisation. In any case, it is by experience that the degree of their reality has to be decided. We judge of things by the standard of that for which they exist, and not *vice versa*. As the sole legitimate function of the Ideas is that of inspiring the understanding in its empirical employment, they must never be interpreted as having metaphysical significance. As the Ideas exist solely for the sake of experience, it is they that must be condemned, if the two really diverge. We do not say "that a man is too long for his coat, but that the coat is too short for the man." It is experience, not Ideas, which forms the criterion alike of truth and of reality.

Kant's teaching, when on Idealist lines, is of a very different character. Reason is distinct from understanding, and yet is no less indispensably involved in the conditioning of experience. All consciousness is consciousness of a whole which precedes and conditions its parts. Such consciousness

cannot be accounted for by assuming that we are first conscious of the conditioned, and then proceed through omission of its limitations to form to ourselves, by means of the more positive factors involved in this antecedent consciousness, an Idea of an unconditioned whole. The Idea of the unconditioned is distinct in nature from all other concepts, and cannot be derived from them. It must be a pure *a priori* product of what may be named the faculty of Reason. Its uniqueness is what causes its apparent meaninglessness. As it is involved in all consciousness, it conditions all other concepts; and cannot, therefore, be defined in terms of them. Its significance must not be looked for save in that Ideal, to which no experience, and no concept other than itself, can ever be adequate. That in this Ideal form it has a very real and genuine meaning is proved by our capacity to distinguish between appearance and reality. For upon it this distinction, in ultimate analysis, is found to rest. Consciousness of limitation presupposes a consciousness of what is beyond the limit; consciousness of the unconditioned is prior to, and renders possible, our consciousness of the contingently given. The Idea of the unconditioned must therefore be counted as being, like the categories, though in a somewhat different manner, a condition of the possibility of experience. With it our standards both of truth and of reality are inextricably bound up. The Ideas in which it specifies itself, so far from depending upon empirical verification, are the touchstone by which we detect the unreality of the sensible world, and by which a truer reality, such as would be adequate to the Ideal demands of pure Reason, is prefigured to the mind.

These two standpoints are extremely divergent in their consequences. Each leads to a very different interpretation of the content of the Ideas, of their function in experience, and of their objective validity. On the one view, their content is merely empirical, and sense-experience is our sole criterion of truth and reality; on the other, they have to be recognised as containing a pure *a priori* concept, and are themselves the standards by which even empirical truth can alone be determined. In the one case, they are Ideals projected by experience for its own empirical guidance; they are built upon contingent experience, and depend upon it alike for the content which makes them conceivable and for their validity. In the other, they are presuppositions of experience, at once conditioning its possibility and revealing its merely phenomenal character. According to the sceptical view, Reason is concerned only with itself and its own subjective demands; on the Idealist view, it is a metaphysical faculty, and outlines possibilities that may perhaps be established by practical Reason.

Such, in broad outline, are the central doctrines of the *Dialectic*. They constitute an extraordinarily stimulating and suggestive body of Critical teaching. In no other division of the *Critique* do the power and originality of Kant’s thinking gain such abundant, forceful and illuminating expression. The accumulated results of the painstaking analyses of the earlier sections contribute a solidity and fulness of meaning, which render the argument extremely impressive, even to those who are out of sympathy with Kant’s ultimate purposes. Its persistent influence, on sceptical no less than on Idealist lines, and often conveyed by very devious channels, can frequently be detected even in thinkers — Herbert Spencer is an instance — who would indignantly repudiate the charge of being indebted to such a source.

THE HISTORY AND DEVELOPMENT OF KANT’S VIEWS IN REGARD TO THE PROBLEMS OF THE DIALECTIC

We may now proceed to consider the evidence in support of the early origin of the central portions of the *Dialectic* — the sections on the antinomies. As Benno Erdmann has very conclusively shown, preoccupation with the problem of antinomy was the chief cause of the revolution which took place in Kant’s views in 1769, and which found expression in his *Dissertation* of 1770. It was the existence of antinomy which led Kant to recognise the subjectivity of space and time. That is to say, it led him to develop that doctrine of transcendental idealism which reappears in the concluding sections of the *Aesthetic*, and which was recast and developed in the *Analytic*. Already in the *Dissertation* it supplies

the key for the solution of the problems concerning infinity. The impossibility of completing the space, time, and causal series, and the consequent impossibility of satisfying the demands of the mind for totality, simplicity and unconditionedness, do not, it is there maintained, discredit reason, but only serve to establish the subjectivity of the sensuous forms to which the element of infinitude is in all cases due.

Kant's thinking was, of course, diverted into an entirely new channel (as his letter to Herz of February 21, 1772, shows), when he came to realise that the metaphysical validity or invalidity of thought must be decided prior to any attempt to discover a positive solution of such problems as are presented by the antinomies. And when, owing to the renewed influence of Hume, at some time subsequent to the date of the letter to Herz, this new problem was recognised as being the problem of *a priori synthesis*, all questions regarding the nature of the absolutely real were made to take secondary rank, yielding precedence to those of logical theory. When the antinomy problems re-emerge, their discussion assumes Critical form.

In three fundamental respects Kant's treatment of the antinomies in the *Dissertation* differs from that of the *Critique*. In the first place, the demand for totality or absoluteness is not in the *Dissertation* ascribed to a separate faculty. Indeed Kant's words would seem to show that at times he had inclined to ascribe it merely to the free-ranging fancy or imagination. Secondly, as the various antinomies were traced exclusively to the influence of space and time upon pure thought, they were treated together, and no classification of them was attempted. And lastly, though Kant's utterances are somewhat ambiguous, the illusory character of the antinomies was in the main viewed as being of a more or less *logical* nature. That is to say, it was regarded as entirely preventable and as "vanishing like smoke" upon adoption of a true philosophical standpoint.

A number of the *Reflexionen* reveal the various tentative schemes, by trial of which Kant worked his way toward a more genuinely Critical treatment of the problems of infinity. The intellectual factors receive fuller recognition, and as a consequence a definite classification results. At some time prior to the discovery of the table of categories, Kant adopted a threefold division of what he names first principles or presuppositions — principles of substance-accident, of ground-consequence, and of whole-part. *Reflexion* ii. 578 is typical.

"Three *principia*: (1) in the field of the actual there is the relation of substance to accident (*inhaerentia*): (2) of ground to consequence (*dependentia*): (3) of parts and of composition (*compositio*). There are three presuppositions: of the subject, of the ground, and of the parts; of insition [Kant's own term], of subordination, and of composition; therefore also three first *principia*: (1) subject, which is never a predicate; (2) ground, which is never a consequence; (3) unity, which is not itself composite."

There are numerous other *Reflexionen* to the same effect. The resulting conceptions are defined both as limits and as absolute totalities, and in *Reflexion* ii. 1252 are enumerated as follows:

"The first subject; the first ground; the first part. The subject which holds everything in itself; the ground which takes everything under itself; the whole which comprehends everything. The *totalitas absoluta* of reality, of series, of co-ordination."

The introduction of the terms 'absolute' and 'totality' indicate that Kant has also come to recognise the presence of a unique notion (equivalent to the "unconditioned" of the *Critique*), distinct in content from any of the three enumerated *principia*, but common to them all. From the very first Kant would seem to have appropriated for it the title Idea. *Reflexionen* ii. 1243, 1244, and 124 may be quoted:

"The Idea is single (*individuum*), self-sufficient, and eternal. The divinity of our soul is its capacity to form the Idea. The senses give only copies or rather *apparentia*." "Idea is the representation of the whole in so far as it necessarily precedes the determination of the parts. It can never be empirically represented, for the reason that in experience we proceed from the parts through successive syntheses to the whole. It is the archetype (*Urbild*) of things, for certain objects are only possible through an Idea. Transcendental Ideas are those in which the absolute whole determines the parts in an aggregate or as series."

“Metaphysics proper is the application of transcendental philosophy to concepts supplied by Reason and necessary to it, to which, however, no corresponding objects can be given in experience. The concepts must therefore refer to the supersensible. That, however, can be nothing but the unconditioned, *for that is the sole theoretical Idea of reason*. [Not italicised in the original.] Metaphysics thus relates: (1) to that of which only the whole can be represented as absolutely unconditioned: (2) to things so far as they are in themselves sensuously unconditioned. The first part is cosmology, the second rational doctrine of the soul, pneumatology and theology.”

At this stage, therefore, Kant would seem to have held that there is but one Idea strictly so called, and that the above three *principia* are merely specifications of it in terms of the concepts of substance-accident, ground-consequence, and whole-part. The classification thus obtained is in certain respects more satisfactory than that which is adopted in the *Critique*. It locates the cosmological argument with the causal category, and so would enable the conceptions of freedom or *causa sui*, and of Divine Existence, to be dealt with in their natural connection with one another. It also supplies, in the category of whole and part, a more fitting heading for those antinomy problems which deal with the unlimited and the limited, the divisible and the indivisible, the complex and the simple. The classification would, however, in separating the problem of the simple from that of substance, remain open to the same criticism as that of the *Critique*.

This classification must, as we have stated, be of a date prior to Kant’s discovery of the table of categories. That is quite clear from its ignoring the category of reciprocity, and from its combination of the other two categories of relation with the merely quantitative category of whole and part. For though the last is also entitled composition and co-ordination, it is conceived in these particular *Reflexionen* in exclusively quantitative terms. When Kant formulated the “metaphysical” deduction of the categories he was, of course, compelled to recast the classification, and did so in the only possible manner, consistent with his architectonic, by substituting the category of reciprocity for that of whole and part, and by taking the new heading, obtained through combination of reciprocity with the Idea of the unconditioned, as equivalent to the Idea of Divine Existence. But this could not be done without dislocating the entire scheme. The category of ground and consequence is deprived of its chief application, that expressed in the cosmological argument; and in order to provide a new content for it, Kant is compelled to force upon it the problems previously classified under the displaced category of whole and part. Even so, the problem of the *causa sui* cannot be eliminated, and reappears, partly as the problem of freedom, and partly as the modal problem of necessary existence.

The identification of the theological Idea with the category of reciprocity has a further consequence. It carries the problem of Divine Existence outside the sphere of the problems of infinity, and necessitates a very different treatment from that which it would naturally have received at Kant’s hands, if developed in its connection with his own Critical teaching. He is driven to expound it in the extreme rationalistic form in which it had been formulated by Leibniz and Wolff, as a doctrine of the *Ens realissimum*.

Prior to the rearrangement, necessitated by recognition of the category of reciprocity, Kant would seem to have expected to bring the entire body of Wolffian metaphysics within the scope of a general doctrine of antinomy. The problems of the divisible and the indivisible, of the simple and the complex, leading as they do to discussion of the presuppositions underlying the Leibnizian monadology, concern spiritual as well as material substance. Similarly, the main problems of theology would have been treated in connection with the cosmological inference to a first cause, and with the discussion of the possibility of first beginnings in space and time.

The sections in the *Critique* devoted to the antinomies reveal, in many ways, Kant’s original design. It is especially noticeable in his discussion of the third and fourth antinomies. The problems of freedom and of necessary existence are by no means treated in merely cosmological fashion. Indeed Kant makes no pretence of concealing their psychological and theological implications. Even the first and second

antinomies have obvious bearings of a similar character. But it is in the section entitled *The Interest of Reason in this Self-conflict* that the broader significance of the antinomies finds its fullest expression. In its suggestive contrast of the two possible types of philosophy, Epicurean and Platonic, the argument entirely transcends the bounds prescribed to it by its cosmological setting. As we follow the comprehensive sweep of its argument, we can hardly avoid regretting that Kant failed to keep to his original plan, as here unfolded, of expounding the self-conflict of Reason in the form of a broad judicial statement of the grounds and claims of the two opposing authorities which divide the allegiance of the human spirit, namely, the intellectual and the moral, science with its cognitive demands on the one hand, the consciousness of duty with its no less imperious prescriptions on the other. The materialist philosophies would then have been presented as inevitably arising when intellectual values are made supreme; and the Idealist philosophies as equally cogent when moral values are taken as primary and are allowed to determine speculative tenets. Against this background of conflicting dogmatisms the comprehensive and satisfying character of the Critical standpoint would have stood out the more clearly; and its historical affiliations, its debt to the sceptics and materialists, no less than to the Idealists, would have been depicted in more adequate terms. As it is, in the chapters on the *Paralogisms* and the *Ideal of Pure Reason* there is almost entire failure to recognise the possibility of a naturalistic solution of the problems with which they deal, and Kant so far succumbs to the outworn influences of his day and generation — the very influences from which the Critical philosophy, consistently developed, is a final breaking away — as to maintain, almost in the manner of the English Deists, of Voltaire and Rousseau, that God, Freedom, and Immortality are conceptions which the mind must necessarily form, and in the validity of which it must spontaneously believe. Kant is here, indeed, interpreting "natural reason" in the light of his own personal history. The Christian beliefs, in which he had been nurtured from childhood, and their rationalist counterparts in the Wolffian philosophy, had become, as it were, a second nature to him; and the resistance, which in his own person they had offered to the development of Critical teaching, he not unnaturally interpreted as evidence of their being imposed by the very structure of reason. He transforms the metaphysical sciences in their Wolffian form into inevitable illusions of the human mind.

There is evidence that the theological problems were the first to be withdrawn from the sphere of the "sceptical method," peculiar to the antinomies. Thus *Reflexion* ii. 125 states that "metaphysics proper consists of *cosmologia rationalis* and *theologia naturalis*" — rational psychology being, as it would seem, still included within cosmology. What the considerations were which induced Kant to claim similarly independent treatment for rational psychology, we can only conjecture. For a time, while still holding to the bipartite division, he would seem to have made the further change of also separating psychology from cosmology, classing psychology and theology together as subdivisions of the rational science of soul.

"[Metaphysics has two parts]: the first is cosmology, the second rational doctrine of soul, pneumatology and theology."

A main factor deciding Kant in favour of a dogmatic, non-sceptical treatment of rational psychology may have been the greater opportunity which it seemed to afford him of connecting its doctrines with the teaching of the *Analytic*, and especially with his central doctrine of apperception. But to whatever cause the decision was due, it resulted in the impoverishment of the second antinomy, through withdrawal of the more important half of its natural content. This antinomy could no longer be made to comprehend a discussion of the logical bases of monadology, and of its professed proofs of the simplicity and immortality of the soul. Nothing is left to it save the discussion of the monadistic theory of matter (*somatologia pura*). This change has also, as already noted, the unfortunate effect of precluding Kant from recognition of the physical application of the category of substance. By the simple he means the substantial, and yet he may not say so; his architectonic forbids.

I may hazard the further suggestion that Kant's interpretation of rational psychology in terms of the

Critical doctrine of apperception is of earlier date than his doctrine of transcendental illusion. For the chapter on the *Paralogisms* seems in its first form to have contained no reference to that latter doctrine. The few passages which take account of it, all bear evidence of being later intercalations. This is the more remarkable in that the Paralogisms can easily be shown to be typical examples of transcendental illusion. Indeed, neither the antinomies nor the theological Ideal conform to its definition in the same strict fashion.

The problem as to whether the doctrine of transcendental illusion and the deduction of the Ideas from the three species of syllogism originated early or late, is largely bound up with the question as to when Kant finally adopted the terms *Analytic* and *Dialectic* as titles for the two main divisions of his *Transcendental Logic*. That Kant was at first very uncertain as to what the main divisions of his system ought to be, appears very clearly from the *Reflexionen*. To his teaching as a whole he usually applies the title *Transcendental Philosophy*, and in *Reflexion* ii. 123 he enumerates the following subdivisions within it: *Aesthetic*, *Logic*, *Critique*, and *Architectonic*. By *Critique* Kant must here mean what in other *Reflexionen* he names *Discipline*, and which he finally named *Dialectic*. As thus identified with the *Discipline*, the *Dialectic* is at times viewed as a division of a *Methodology* or *Organon*, whose other divisions are entitled *Canon* and *Architectonic*. This earlier scheme may therefore be represented as follows:

Transcendental
Philosophy–

Doctrine of Elements

Aesthetic.
Logic.

Critique = Discipline [corresponding to the Dialectic of the *Critique*].

Doctrine of Methods
(Methodology)

Canon.
Architectonic.

The terms *Analytic* and *Dialectic* do not occur in these *Reflexionen*, and their adoption may therefore be inferred to synchronise with Kant's later decision to include the treatment of the metaphysical sciences within his *Logic*; and that decision was probably an immediate result of his having developed meantime a doctrine of transcendental illusion. The new scheme in its final form is therefore as follows:

Transcendental
Philosophy
or Critique of
Pure Reason

Doctrine of
Elements

Aesthetic.
Logic.

Analytic

of Concepts.
of Judgement.

Dialectic — of Reason.

Doctrine of
Methods
(Methodology)

Discipline (retained but given a new
and more general content).

Canon.
Architectonic.
History.

In thus transferring *Dialectic* from the *Methodology* to the *Doctrine of Elements*, Kant stands committed to the view that it contains positive teaching of a character analogous to that of the *Analytic*, with which it is now co-ordinated. As we have already noted, the fundamental opposition which runs through the entire *Dialectic* is due to the conflict between the older view of Reason as merely understanding in its transcendent employment, and this later view of it as a distinct faculty, yielding concepts with a positive and indispensable function, different from, and yet also analogous to, that exercised by the categories of the understanding.

Adickes, to whom students of Kant are indebted for a convincing demonstration of the constant influence of Kant's logical architectonic upon the content of the Critical teaching, would seem at this point to rely too exclusively upon that method of explanation. He contends that Kant's deduction of the Ideas of Reason from the three species of syllogism is entirely traceable to this source, and is without real philosophical significance. That is perhaps in the main true. But it need not prevent us from appreciating the importance of the doctrines which Kant contrives to expound under guise of this logical machinery. We have already observed that prior to the discovery of this deduction Kant had recognised the connection between the concept of the unconditioned and the three Ideas through which it finds expression. As the forms of syllogism are differentiated in terms of the three categories of relation, the deduction does not interfere with Kant's retention of this classification of Ideas; while in connecting Reason as a faculty with reasoning as a logical process, an excellent opportunity is found for explaining the grounds and significance of the demand for unconditionedness, i.e. for completeness of explanation. This demand, as he has also come to recognise, lies open to question, and therefore calls for more precise definition.

The artificial character of the metaphysical deduction lies not so much in this derivation of the three Ideas of the unconditioned — unconditioned substance, unconditioned causality, unconditioned system — from the categorical, hypothetical, and disjunctive forms of syllogism respectively, as in the further equating of them with the Ideas of the Self, the World, and God. The Idea of unconditioned substance has many possible applications besides the use to which it is put in rational psychology. The Idea of an unconditioned causality may be conceived in psychological and theological as well as in cosmological terms; and as a matter of fact Kant himself frequently identifies it with the concept of freedom, as in the third and fourth antinomies, or when he enumerates the Ideas as being those of God, Freedom, and Immortality. Similarly, the Idea of system is the inspiring principle of materialism, and also finds in such philosophies as that of Spinoza much more adequate expression than in the *Ens realissimum* of the Wolffian School. But further comment is not, at this stage, really profitable. These are questions which can best be discussed as they emerge in the course of the argument.

Kant carried his logical architectonic one stage further. Not satisfied with connecting the three Ideas of Reason with the categories that underlie the three species of syllogism, he also attempted to organise the various particular applications of each Idea in terms of the fourfold division of the table of categories. By the use of his usual high-handed methods he succeeded in doing so in the case of the psychological and cosmological Ideas. There are four paralogisms and four antinomies. But when the attempt failed in regard to the theological Idea, he very wisely abstained from either apology or explanation. That the failure was not due to lack of desire or perseverance appears from *Reflexion* ii. 1573, which would seem to be the record of an unavailing attempt to obtain a satisfactory articulation of the theological Ideal. Doubtless, had he been sufficiently bent upon it, he could have worked out some sort of fourfold division; but there were limits even to Kant's devotion to the architectonic scheme. It is difficult to see how any such arrangement could have been followed without serious perversion of the argument.

Adickes has suggested that the distinction between the faculty of understanding and the faculty of judgment is subsequent to, and suggested by, Kant's successful tracing of the Ideas to a separate faculty of Reason. Some such distinction was demanded in order that the parallelism of transcendental and formal logic might be complete. This conjecture of Adickes is probably correct. It would seem to be supported by the internal evidence of the *Analytic of Principles*. As we have had occasion to note, the doctrine of schematism, in terms of which the distinction between understanding and judgment is formulated, is late in date of origin. This distinction is of the same artificial character as that between understanding and Reason; and though, like the latter distinction, it supplies Kant with a convenient framework for the arrangement of genuine Critical material, it also tends to conceal the simpler and more inward bonds of true relationship.

TRANSCENDENTAL DIALECTIC

INTRODUCTION

I. Transcendental Illusion

Dialectic is a Logic of Illusion. — The meaning which Kant attaches to the term dialectic has already been considered. The passage above quoted from his *Logic* shows the meaning which he supposed the term historically to possess, namely, as being a sophistical art of disputation, presenting false principles in the guise of truth by means of a seeming fulfilment of the demands of strict logical proof. The incorrectness of this historical derivation hardly needs to be pointed out. Kant professes to be following his contemporaries in thus using the term as a title for the treatment of false reasoning. But even this statement must be challenged. Adickes, after examination of a large number of eighteenth-century text-books, reports that in the six passages in which alone he has found it to occur it is never so employed. In Meier it is used as a title for the theory of probable reasoning, and in Baumgarten it occurs only in adjectival form as equivalent to sophistical. This last is the nearest approach to Kant's definition. All historical considerations may therefore be swept aside. We are concerned only with the specific meaning which Kant thought good to attach to the term. He adapts it in the freest manner to the needs of his system. In A 61 = B 85, as in his *Logic*, he has defined it in merely negative fashion. He is now careful to specify the more positive aspects of the problems with which it deals. Though definable as the logic of illusion, the deceptive inferences with which it concerns itself are of a quite unique and supremely significant character. They must, as above noted, be distinguished alike from logical and from empirical illusion. They have their roots in the fundamental needs of the human mind, and the recognition of their illusory character does not render unnecessary either a positive explanation of their occurrence or a Critical valuation of their practical function as regulative ideals.

A 293 = B 349. — Regarding the connection between illusion and error cf. B 69, and above, p-53.

A 295 = B 352. — Logical, empirical, and transcendental illusion. Cf. above, p, 427-9, 437.

A 296 = B 352. — Kant here defines the terms transcendental and transcendent in a very unusual manner. The two terms are not, he states, synonymous. The principles of pure understanding are of merely empirical validity, and *consequently* are not of *transcendental* employment beyond the limits of experience. A principle is *transcendent* when it not only removes these limits, but prescribes the overstepping of them.

II. Pure Reason as the Seat of Transcendental Illusion

(*a*) *Reason in General*

Reason, like understanding, is employed in two ways, formal or logical and real. The logical use of Reason consists in mediate inference, the real in the generation of concepts and principles. Reason is thus both a logical and a transcendental faculty, and we may therefore expect that its logical functions will serve as a clue to those that are transcendental. The argument which follows is extremely obscure. It is a foreshadowing in logical terms of a distinction which, as Kant himself indicates, cannot at this stage be adequately stated. The distinction may be extended and paraphrased as follows. Reason, generically taken as including both activities, is the faculty of principles, in distinction from understanding which is the faculty of rules. Principles, properly so-called, are absolutely *a priori*. Universals which imply the element of intuition must not, therefore, be ranked as principles in the strict sense. They are more properly to be entitled rules. A true principle is one that affords knowledge of the particulars which come under it,

and which does so from its own internal resources, that is to say, through pure concepts. In other words, it yields *a priori* synthetic knowledge, and yet does so independently of all given experience. Now, as the *Analytic* has proved, knowledge obtained through understanding, whether in mathematical or in physical science, is never of this character. Its principles, even though originating in pure intuition or in the pure understanding, are valid only as conditions of possible experience, and are applicable only to such objects as can occur in the context of a sense-perception. That is to say, the understanding can never obtain synthetic knowledge through pure concepts. Though, for instance, it prescribes the principle that everything which happens must have a cause, that principle does not establish itself by means of the concepts which it contains, but only as being a presupposition necessary to the possibility of sense-experience. If, then, principles in the strict sense actually exist, they must be due to a faculty distinct from understanding, and will call for a deduction of a different character from that of the categories.

In the last paragraph but one of the section Kant indicates the doctrine which he is foreshadowing. The rules of understanding apply to appearances, prescribing the conditions under which the unity necessary to any and every experience can alone be attained. The principles of Reason do not apply directly to appearances, but only to the understanding, defining the standards to which its activities must conform, if a completely unified experience is to be achieved. Whereas the rules of understanding are the conditions of objective existence in space and time, principles in the strict sense are criteria for the attainment of such absoluteness and totality as will harmonise Reason with itself. Reason, determined by principles which issue from its own inherent nature, prescribes what the actual ought to be; understanding, proceeding from rules which express the conditions of possible experience, can yield knowledge only of what is found to exist in the course of sense-experience. The unity of Reason is Ideal; the unity of understanding is empirical. Principles are due to the *self*-determination of reason; the rules of understanding express the necessitated determinations of sense. The former demand a more perfect and complete unity than is ever attainable by means of the latter. Two passages from the *Lose Blätter* will help to define the distinction.

"There is a synthesis prototypon and a synthesis ectypon. The one ... *simpliciter, a termino a priori*, ... the other *secundum quid, a termino a posteriori*.... Reason advances from the universal to the particular, the understanding from the particular to the universal.... The first is absolute and belongs to the free or metaphysical, and also to the moral, employment of Reason." "The principles of the synthesis of pure Reason are all metaphysical.... [They] are principles of the subjective unity of knowledge through Reason, *i.e.* of the agreement of Reason with itself."

The chief interest of this section lies in its clear indication of the dual standpoint to which Kant is committing himself by the manner in which he formulates this distinction between rules and principles. The indispensableness of the latter, upon which Kant is prepared to insist, points to the Idealist interpretation of their grounds and validity; their derivation from mere concepts, without reference to or basis in experience, must, on the other hand, in view of the teaching of the *Analytic*, commit Kant to a sceptical treatment of their objective validity. In the above account, suggestions of the Idealist point of view are not entirely absent; but, on the whole, it is the sceptical view that is dominant. The Ideas of Reason can be justified as necessary only for the perfecting of experience, not as conditions of experience as such. They express a subjective interest in the attainment of unity, not conditions of the possibility of objective existence.

"[Civil Laws] are only limitations imposed upon our freedom in order that such freedom may completely harmonise with itself; hence they are directed to something which is entirely our own work, and of which we ourselves, through these concepts, can be the cause. But that objects in themselves, the very nature of things, should stand under principles, and should be determined according to mere concepts, is a demand which, if not impossible, is at least quite contrary to common sense [*Widersinnisches*]."

(*b*) *The Logical Use of Reason*

In this subsection Kant introduces the distinction between understanding and judgment which he has sought to justify in A 130 ff. = B 169 ff. By showing that inference determines the *relation* between a major premiss (due to the understanding) and the condition defined in the minor premiss (due to the faculty of judgment), he professes to obtain justification for classifying the possible forms of reasoning according to the three categories of relation. The general remark is added that the purpose of Reason, in its logical employment as inference, is to obtain the highest possible unity, through subsumption of all multiplicity under the smallest possible number of universals.

(*c*) *The Pure Use of Reason*

Kant here states the alternatives between which the *Dialectic* has to decide. Is Reason merely formal, arranging given material according to given forms of unity, or is it a source of principles which prescribe higher forms of unity than any revealed by actual experience? Further examination of its formal and logical procedure constrains us, Kant asserts, to adopt the latter position; and at the same time indicates how those principles must be interpreted, namely, as subjective laws that apply not to objects but only to the activities of the understanding.

In the first place, a syllogism is not directly concerned with intuitions, but only with concepts and judgments. This may be taken as indicating that pure Reason relates to objects only mediately *by way* of understanding and its judgments. The unity which it seeks is higher than that of any possible experience; it is a unity which must be constructed and cannot be given.

Secondly, Reason in its logical use seeks the *universal* condition of its judgment; and when such is not found in the major premiss proceeds to its discovery through a regressive series of prosyllogisms. In so doing it is obviously determined by a principle expressive of the peculiar function of Reason in its logical employment, namely, that for the conditioned knowledge of understanding the *unconditioned* unity in which that knowledge may find completion must be discovered. Such a principle is synthetic, since from analysis of the conception of the conditioned we can discover its relation to a condition, but never its relation to the *unconditioned*. That is a notion which falls entirely outside the sphere of the understanding, and which therefore demands a separate enquiry. How is the above *a priori* synthetic principle to be accounted for, if it cannot be traced to understanding? Has it objective, or has it merely subjective validity? And lastly, what further synthetic principles can be based upon it? Such are the questions to which Critical *Dialectic* must supply an answer. This *Dialectic* will be composed of two main divisions, the doctrine of “the transcendent concepts of pure Reason” and the doctrine of “transcendent and dialectical inferences of Reason.”

BOOK I

THE CONCEPTS OF PURE REASON

The distinction here drawn between concepts obtained by reflection and concepts gained by inference is a somewhat misleading mode of stating the fact that, whereas the categories of understanding condition experience and so make possible the unity of consciousness necessary to all reflection, or, in other words, are conditions of the material supplied for inference, the concepts of Reason are Ideal constructions which though in a certain sense resting upon experience none the less transcend it. The function of the Ideas is to organise experience in its totality; that of the categories is to render possible the sense-perceptions constitutive of its content. The former refer to the unconditioned, and though that is a conception under which everything experienced is conceived to fall, it represents a type of knowledge to which no actual experience can ever be adequate.

Conceptus ratiocinati — conceptus ratiocinantes. When such transcendent concepts possess “objective validity,” they are correctly inferred, and may be entitled *conceptus ratiocinati*. If, on the other hand, they are due to merely sophistical reasoning, they are purely fictitious, *conceptus ratiocinantes*. This distinction raises many difficulties. Kant’s intention cannot be to deny that the *conceptus ratiocinati* are “mere Ideas” (*entia rationis*) — for such is his avowed and constant contention — or that the inference to them is dialectical and is based upon a transcendental illusion. Two alternatives are open. He may mean that they are only valid when the results of such inference are Critically reinterpreted, and when the function of the Ideas is realised to be merely regulative; or his intention may be to mark off the Ideas, strictly so-called, which are inevitable and beneficial products of Reason, from the many idle and superfluous inventions of speculative thought. Kant’s concluding remark, that the questions at issue can be adequately discussed only at a later stage, may be taken as in the nature of an apology for the looseness of these preliminary statements, and as a warning to the reader not to insist upon them too absolutely. The participles *ratiocinati* and *ratiocinantes* are of doubtful latinity. The distinction of meaning here imposed upon them has not been traced in any other writer, and is perhaps Kant’s own invention.

SECTION I

IDEAS IN GENERAL

Kant connects his use of the term Idea with the meaning in which it is employed by Plato. He urges upon all true lovers of philosophy the imperative need of rescuing from misuse a term so indispensable to mark a distinction more vital than any other to the very existence of the philosophical disciplines.

“[For Plato] Ideas are the archetypes of the things themselves, and not, like the categories, merely keys to possible experiences. In his view they issued from the Supreme Reason, and from that source have come to be shared in by human Reason.... He very well realised that our faculty of knowledge feels a much higher need than merely to spell out appearances according to a synthetic unity, in order to read them as experience. He knew that our Reason naturally exalts itself to forms of knowledge which so far transcend the bounds of experience that no given empirical object can ever coincide with them, but which must none the less be recognised as having their own reality and which are by no means mere fictions of the brain.”

Plato found these ideas chiefly, though not exclusively, in the practical sphere. When moral standards are in question, experience is the mother of illusion.

“For nothing can be more injurious or more unworthy of a philosopher than the vulgar appeal to so-called adverse experience. Such experience would never have existed at all, if those institutions had been established at the proper time in accordance with Ideas, and if Ideas had not been displaced by crude conceptions which, just because they have been derived from experience, have nullified all good intentions.”

Even in the natural sphere Ideas which are never themselves adequately embodied in the actual must be postulated in order to account for the actual. Certain forms of existences “are possible only according to Ideas.”

“A plant, an animal, the orderly arrangement of the cosmos — probably, therefore, the entire natural world — clearly show that they are possible only according to Ideas, and that though no single creature in the conditions of its individual existence coincides with the Idea of what is most perfect in its kind — just as little as does any individual man exactly conform to the Idea of humanity, which he actually carries in his soul as the archetype of his actions — yet these Ideas are none the less completely determined in the

Supreme Understanding, each as an individual and each as unchangeable, and are the original causes of things. But only the totality of things, in their interconnection as constituting the universe, is completely adequate to the Idea."

Though Kant avows the intention of adapting the term Idea freely to the needs of his more Critical standpoint, all these considerations contribute to the rich and varied meanings in which he employs it.

Reflexionen and passages from the *Lectures on Metaphysics* may be quoted to show the thoroughly Platonic character of Kant's early use of the term, and to illustrate its gradual adjustment to Critical demands.

"The Idea is the unity of knowledge, through which the manifold either of knowledge or of the object is possible. In the former, the whole of knowledge precedes its parts, the universal precedes the particular; in the latter, knowledge of the objects precedes their possibility, as *e.g.* in [objects that possess] order and perfection." "That an object is possible only through a form of knowledge is a surprising statement; but all teleological relations are possible only through a form of knowledge [*i.e.* a concept]." "The Idea is single (*individuum*), self-sufficient, and eternal. The divinity of our soul is its capacity to form the Idea. The senses give only copies or rather *apparentia*." "As the Understanding of God is the ground of all possibility, archetypes, Ideas, are in God.... The divine *Intuitus* contains Ideas according to which we ourselves are possible; *cognitio divina est cognitio archetypa*, and His Ideas are archetypes of things. The [corresponding] forms of knowledge possessed by the human understanding we may also entitle (in a comparative sense) archetypes or Ideas. They are those representations of our understanding which serve for judgment upon things." "Idea is the representation of the whole in so far as it necessarily precedes the determination of the parts. It can never be empirically represented, because in experience we proceed from the parts through successive synthesis to the whole. It is the archetype of things, for certain objects are only possible through an Idea. Transcendental Ideas are those in which the absolute whole determines the parts in an aggregate or as series." "The pure concepts of Reason have no *exemplaria*; they are themselves archetypes. But the concepts of our pure Reason have as their archetypes this Reason itself and are therefore subjective, not objective." "The transcendental Ideas serve to limit the principles of experience, forbidding their extension to things in themselves, and showing that what is never an object of possible experience is not therefore a non-entity [*Unding*], and that experience is not adequate either to itself or to Reason, but always refers us further to what is beyond itself." "The employment of the concept of understanding was immanent, that of the Ideas as concepts of objects is transcendent. But as regulative principles alike of the completion and of the limitation of our knowledge, they are Critically immanent." "The difficulties of metaphysics all arise in connection with the reconciling of empirical principles with Ideas. The possibility of the latter cannot be denied, but neither can they be made empirically intelligible. The Idea is never a *conceptus dabilis*; it is not an empirically possible conception."

Kant appends the following 'Stufenleiter' (ladder-like) arrangement of titles for the various kinds of representation. Representation (*Vorstellung*) is the term which he substitutes for the Cartesian and Lockian employment of the term idea, now reserved for use in its true Platonic meaning. To entitle such a representation as that of red colour an idea is, in Kant's view, an intolerable and barbaric procedure; that representation is not even a concept of the understanding.

SECTION II

This section completes the metaphysical deduction of the Ideas. In the preceding sections on the logical and on the pure use of Reason, Kant has pointed out that Reason proceeds in accordance with the principle, that for the conditioned knowledge of understanding the unconditioned, in which it finds completion, must be discovered. This principle is synthetic, involving a concept which transcends the understanding; and as Reason in its logical use is merely formal, that concept must be due to Reason in its creative or transcendental activity. In the section before us Kant deduces from the three kinds of syllogism the three possible forms in which such an Idea of Reason can present itself. The deduction is, as already noted, wholly artificial, and masks Kant's real method of obtaining the Ideas, namely, through combination of the unique concept of the unconditioned with the three categories of relation. The deduction is based upon an extremely ingenious analogy between the logical function of Reason in deductive inference and its transcendental procedure in prescribing the Ideal of unconditioned totality. In the syllogism the predicate of the conclusion is shown to be connected with its subject in accordance with a condition which is stated in its universality in the major premiss. Thus if the conclusion be: Caius is mortal, in constructing the syllogism, required to establish it, we seek for a conception which contains the condition under which the predicate is given — in this case the conception "man" — and we state that condition in its universality: All men are mortal. Under this major premiss is then subsumed Caius, the object dealt with: Caius is a man. And so indirectly, by reference to the universal condition, we obtain the knowledge that Caius is mortal. Universality, antecedently stated, is restricted in the conclusion to a specific object. Now what corresponds in the synthesis of intuition to the *universality* (*universalitas*) of a logical premiss is *allness* (*universitas*) or *totality* of conditions. The transcendental concept of Reason, to which the logical procedure is to serve as clue, can therefore be no other than that of the totality of conditions for any given conditioned. And as totality of conditions is equivalent to the *unconditioned*, this latter must be taken as the fundamental concept of Reason; the unconditioned is conceived as being the ground of the synthesis of everything conditioned. But there are three species of relation, and consequently there are three forms in which the concept of Reason seeks to realise its demand for the unconditioned: (1) through categorical synthesis in one subject, (2) through hypothetical synthesis of the members of a series, and (3) through disjunctive synthesis of the parts in one system. To these three correspond the three species of syllogism, categorical, hypothetical, and disjunctive, in each of which thought passes through a regressive series of prosyllogisms back to an unconditioned: the first to a concept which stands for what is always a subject and never a predicate; the second to a presupposition which itself presupposes nothing further; and the third to such an aggregate of the members of the division as will make that division complete. It may be observed that in this proof the threefold specification of the concept of the unconditioned is really obtained directly from the categories of relation, or at least from the judgments of relation, and not from the corresponding species of syllogism.

Totality and unconditionedness, when taken as equivalent, become synonymous with the *absolute*. This last term, however, especially when taken as defining possibility and necessity, is ambiguous. The absolutely possible may signify either that which in itself, *i.e.* so far as regards its internal content, is possible; or else that which is in every respect and in all relations possible. The two meanings have come to be connected largely owing to the fact that the internally impossible is impossible in every respect. Otherwise, however, the two meanings fall completely apart. Absolute necessity and inner necessity are quite diverse in character. We must not, for instance, argue that the opposite of what is absolutely necessary must be inwardly impossible, nor consequently that absolute necessity must in the end reduce to an inner necessity. Examination will show that, in certain types of cases, not the slightest meaning can be attached to the phrase 'inner necessity.' As we possess the terms inner and logical to denote the first form of necessity, there is no excuse for employing the term absolute in any but the wider sense. That, Kant

holds, is its original and proper meaning. The *absolute* totality to which the concept of Reason refers is that form of completeness which is in every respect unconditioned.

In A 326 = B 383 Kant’s mode of statement emphasises the connection of the Ideas with the categories of relation. Reason, he claims, “seeks to extend the synthetic unity, which is thought in the category, to the absolutely unconditioned.” Such positive content as the Ideas can possess lies in the experience which they profess to unify; in so far as they transcend experience and point to an Ideal completion that is not empirically attainable, they refer to things of which the understanding can have no concept. It is necessary, however, that they should present themselves in this absolute and transcendent form, since otherwise the understanding would be without stimulus and without guidance. Though mere Ideas, they are neither arbitrary nor superfluous. They regulate the understanding in its empirical pursuit of that systematic unity which it requires for its own satisfaction.

In A 327-8 = B 383-4 one and the same ground is assigned for entitling the Ideas transcendental and also transcendent, namely, that, as they surpass experience, no object capable of being given through the senses corresponds to them. But a difference would none the less seem to be implied in the connotation of the two terms. In being prescribed by the very nature of Reason, they are transcendental; as overstepping the limits of experience, they are transcendent. Kant’s use of the terms subject and object in this passage is also somewhat puzzling. ‘Object’ is employed in the metaphysical sense proper only from the pre-Critical standpoint of the *Dissertation*, as meaning an existence apprehended through pure thought. The term ‘subject’ receives a correspondingly un-Critical connotation. The further phrase “the merely speculative use of Reason” is somewhat misleading, even though we recognise that for Kant speculative and theoretical are synonymous terms; we should rather expect “Reason in its legitimate or Critical or directive function.” Kant’s intended meaning, however, is sufficiently clear. When we say that a concept of Reason is an Idea merely, we have in mind the degree to which it can be *empirically* verified. We are asserting that it prescribes an Ideal to which experience may be made to approach, but which it can never attain. It defines “a problem to which there is no solution.” In the practical sphere of morals, on the other hand, the Ideal of Reason must never be so described. Though only partially realisable, it is genuinely actual. Even those actions which imperfectly embody it none the less presuppose it as their indispensable condition. In two respects, therefore, as Kant points out, the statement that the transcendental concepts of Reason are merely Ideas calls for qualification. In the first place they are by no means “superfluous and void.” They supply a canon for the fruitful employment of understanding. And secondly, they may perhaps be found to make possible a transition from natural to moral concepts, and so to bring the Ideas of practical Reason into connection with the principles of speculative thought. The reader may again note the genuinely Platonic character of Kant’s use of the term Idea.

In A 330-1 = B 386-7 Kant returns to the problem of the metaphysical deduction, and analyses the nature of syllogistic reasoning. The analysis differs from that of A 321 ff. = C 377 ff. only in emphasising that when a conclusion is given as valid the totality of the premisses required for its establishment can be postulated as likewise given, and that when completely stated in the implied prosyllogisms the premisses form a regressive series. In this way Kant contrives to bring the logical process into closer connection with the transcendental principle, which he now definitively formulates as follows: When the conditioned is given, the series of conditions up to the unconditioned is likewise given. The series of antecedent conditions may either have a first term or may be incapable of such. In either case it has to be viewed as unconditioned, in the one case in virtue of its unconditioned beginning, in the other in its character as an unending and therefore unlimited series. In one or other form Reason demands that the unconditioned be recognised as underlying and determining everything conditioned.

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SYSTEM OF THE TRANSCENDENTAL IDEAS

The three Ideas of Reason, as derived from the three kinds of syllogism, are now brought into connection with the three possible relations in which representations are found to stand: first, to the thinking subject; secondly, to objects as appearances; thirdly, to objects of thought in general. Kant argues that the completed totalities towards which Reason strives are likewise three in number. Reason seeks: (1) in regard to the subject known, as constituting the fact of inner experience, a representation of the self or soul that will render completely intelligible what is peculiar to the inner life; (2) in regard to the object known, a conception of the completed totality of the world of phenomena, the cosmos; (3) in regard to the ultimate synthesis of the subject known and the object known, such a conception of all existing things as will render intelligible the co-operation of mind and external nature in one experience. In this way Kant professes to obtain transcendental justification for the threefold division of metaphysical science into rational psychology, rational cosmology, and rational theology. The absolute unity of the thinking subject is dealt with by psychology, the totality of all appearances by cosmology, and the Being, which contains the condition of the possibility of all that can be thought, by theology.

In thus proceeding, Kant is assuming that the concepts of unconditioned substance and of unconditioned necessity can be interpreted only in spiritualist and theological terms. This assumption stands in direct conflict with what the history of philosophy records. The Absolute has frequently been materialistically defined, and, as Kant himself admits, we cannot prove that the thinking subject may not be naturalistically conditioned. Architectonic is again exercising its baleful influence. That the argument is lacking in cogency is indeed so evident that Kant takes notice of the deficiency, and promises that it will be remedied in the sequel. This promise he is unable to fulfil. Such further reasons as he is able to offer are of the same external character.

"Of these transcendental Ideas, *strictly speaking, no objective deduction, such as we were able to give of the categories, is possible*." As Kant indicates by use of the phrase 'strictly speaking,' this statement is subject to modification. He himself formulates a transcendental deduction of the Ideas, as principles regulative of experience. The deduction from the three forms of syllogism, which Kant here entitles subjective, ought properly to be named 'metaphysical.'

BOOK II

THE DIALECTICAL INFERENCES OF PURE REASON

CHAPTER I

THE PARALOGISMS OF PURE REASON

As rational psychology fails to distinguish between appearances and things in themselves, it identifies mere apperception with inner sense; the self in experiencing the succession of its inner states is supposed to acquire knowledge of its own essential nature. "I, as thinking, am an object of inner sense, and am entitled soul," in contrast to the body which is an object of outer sense. Empirical psychology deals with the concrete detail of inner experience; rational psychology abstracts from all such special experiences, indeed from everything empirical, professing to establish its doctrine upon the single judgment, "I think." That judgment has already been investigated in its connection with the problem of the possibility, within the field of experience, of synthetic *a priori* judgments. It has now to be considered as a possible basis for knowledge of the self as a thinking being (*ein denkend Wesen*) or soul (*Seele*).

Following the guiding thread of the table of categories, but placing them in what he regards as being, in this connection, the most convenient order, Kant obtains a "topic" or classification of the possible rubrics for the doctrines of a rational psychology: (1) the soul is *substance*; (2) is *simple*; (3) is *numerically identical*; (4) stands in relation to *possible* objects in space. Now all those four doctrines are, Kant holds, incapable of demonstration. The proofs propounded by rational psychology are logically imperfect, committing the logical fallacy which is technically named paralogism. The fallacy is not, however, of merely logical character. Had that been the case, it could never have gained such general currency. Certainly no metaphysical science, widely accepted by profound thinkers, could ever have come to be based upon it. The paralogism is transcendental in character, resting upon a transcendental ground. It represents an illusion which from any non-Critical standpoint is altogether unavoidable. Its dialectic is a natural dialectic, wrongly interpreted by the Schools, but not capriciously invented by them. The key to its proper treatment is first supplied by the results of the transcendental deduction. We are now called upon to apply these results in explanation of the occurrence of the paralogisms, and in judgment upon their false claims. Little that is really new is to be found in this chapter; but many of the established results of the *Analytic* receive interesting illustration, and are thereby set in a clearer light.

In rational psychology the "I think" is taken in its universal, or to use Kant's somewhat misleading term, problematic aspect, that is to say, not as a judgment expressive of the self's own existence but "in its mere possibility," as representing the self-consciousness of all possible thinking beings. As we cannot gain a representation of thinking beings through outer experience, we are constrained to think them in terms of our own self-consciousness. The "I think" is thus taken as a universal judgment, expressing what belongs to the conception of thinking being in general. The judgment is so interpreted by rational psychology, "in order to see what predicates applicable to its subject (be that subject actually existent or not) may flow from so simple a judgment."

In summarising what is directly relevant in the argument of the transcendental deduction, Kant emphasises that the I, as representation, is altogether empty of content.

"We cannot even say that it is a conception, but only that it is a bare (*blosses*) consciousness which accompanies all conceptions. Through this I or he or it (the thing) which thinks, nothing further is represented than a transcendental subject of the thoughts = *x*...."

It is apprehended only in its relation to the thoughts which are its predicates; apart from them we cannot form any conception whatever of it, but can only revolve in a perpetual circle, since any judgment upon it has already made use of its representation.

The patchwork character of the *Critique*, the artificial nature of the connections between its various

parts, is nowhere more evident than in this section on the *Paralogisms*. According to the definition given of transcendental illusion, we naturally expect Kant's argument to show that the *Paralogisms* rest upon a failure to distinguish between appearance and reality. As a matter of fact, the cause of their fallacy is traced in the first three *Paralogisms* solely to a failure to distinguish between the logical and the real application of the categories. The argument can indeed be restated so as to agree with the introductory sections of the *Dialectic*. But Kant's manner of expounding the *Paralogisms* shows that this chapter must originally have been written independently of any intention to develop such teaching as that of the sections which in the ultimate arrangement of the *Critique* are made to lead up to it.

First Paralogism: of Substantiality. — Save for the phrase 'subject in itself,' there is, in Kant's comment upon this *Paralogism*, not a word regarding the necessity of a distinction between appearance and reality, but only an insistence that the "I think" yields no knowledge of the thinking self. Consciousness of the self and knowledge of its underlying substance are by no means identical. The self, so far as it enters into consciousness, is a merely logical subject; the underlying substrate is that to which this self-consciousness and all other thoughts are due. It is in the light of this distinction that Kant discusses the substantiality of the subject. As expressive of the "I think," the category of substance and attribute can be employed only to define the relation in which consciousness stands to its thoughts; it expresses the merely logical relation of a subject to its predicates. It tells us nothing regarding the nature of the "I," save only that it is the invariable centre of reference for all thoughts. In order to know the self as substance, and so as capable of persisting throughout all change, and as surviving even the death of the body, we should require to have an intuition of it, and of such intuition there is not the slightest trace in the "I think." It "signifies a substance only in Idea, not in reality." As Kant adds later, the permanence and self-identity of the representation of the self justifies no argument to the permanence and self-identity of its underlying conditions. Inference from the nature of representation to the nature of the object represented is entirely illegitimate. In the equating of the two, and not, as the introduction to the *Dialectic* would lead us to expect, in a failure to distinguish appearance from reality, consists the paralogistic fallacy of this first syllogism.

Second Paralogism: of Simplicity. — We may follow Adickes in his analysis of A 351-62. (*a*) The original criticism, parallel to that of the first *Paralogism*, would seem to be contained in paragraphs five to nine. (*b*) The opening paragraphs, and (*c*) the concluding paragraphs, would seem, for reasons stated below, to be independent and later additions.

(*a*) The argument of the central paragraphs runs almost exactly parallel with the criticism of the first *Paralogism*, applying the same line of thought, in disproof of the assumed argument for the simplicity of the soul. It may be noted, in passing, that Kant here departs from his table of categories. There is no category of simplicity. The connection which he seeks to establish between the concept of simplicity and the categories of quality is arbitrary. It more naturally connects with the category of unity; but the category of unity is required for the third *Paralogism*. For explanation of the way in which he equates the concept of simplicity with the category of reality Kant is satisfied to refer the reader to the section on the second antinomy in which this same identification occurs. Indeed the simplicity here dwelt upon seems hardly distinguishable from substantiality, and therefore it is not surprising that Kant's criticism of the second *Paralogism* should be practically identical with that of the first. Since the "I," as logical subject of thought, signifies only a something in general, and embodies no insight into the constitution of this something, it is for that reason empty of all content, and consequently simple. "The simplicity of the *representation* of a subject is not *eo ipso* a knowledge of the simplicity of the subject itself...." The second *Paralogism* thus, in Kant's view, falsely argues from the merely logical unity of the subject *in representation* to the actual simplicity of the subject *in itself*.

(*b*) One reason for regarding the first four paragraphs as a later addition is their opening reference to the introductory sections of the *Dialectic*, of which this chapter otherwise takes little or no account. This

Paralogism is, Kant declares, "the Achilles of all the dialectical inferences in the pure doctrine of the soul," meaning that it may well seem a quite invulnerable argument.

"It is no mere sophistical play contrived by a dogmatist in order to impart to his assertions a superficial plausibility (*Schein*), but an inference which appears to withstand even the keenest scrutiny and the most scrupulously exact investigation."

The second paragraph is a very pointed restatement of a main supporting argument of this second *Paralogism*. This argument well deserves the eulogy with which Kant has ushered it in. It is as follows. The unity of consciousness can not be explained as due to the co-operative action of independent substances. Such a merely external effect as that of motion in a material body may be the resultant of the united motions of its parts. But it is otherwise with thought. For should that which thinks be viewed as composite, and the different representations, as, for instance, of the single words of a verse, be conceived as distributed among the several parts, a multiplicity of separate consciousnesses would result, and the single complex consciousness, that of the verse as a whole, would be rendered impossible. Consciousness cannot therefore — such is the argument — inhere in the composite. The soul must be a simple substance.

As there is no reference in this argument to the "I think," the criticism cannot be that of the first *Paralogism*, nor that of the central paragraphs of this second *Paralogism*. Kant's reply — as given in the third and fourth paragraphs — is in effect to refer the reader to the results of the *Analytic*, and is formulated in the manner of his *Introduction* to the *Critique*. The principle that multiplicity of representation presupposes absolute unity in the thinking subject can neither be demonstrated analytically from mere concepts, nor derived from experience. Being a synthetic *a priori* judgment, it can be established only by means of a transcendental deduction. But in that form it will define only a condition required for the possibility of consciousness; it can tell us nothing in regard to the noumenal nature of the thinking being. And, as Kant argues in the third *Paralogism*, there may be a possible analogy between thought and motion, though of a different kind from that above suggested.

The entire absence of all connection between the argument of these paragraphs and the argument of those which immediately follow upon them, at least suffices to show that this second *Paralogism* has not been written as a continuous whole; and taken together with the fact that the problem is here formulated in terms of the *Introduction* to the *Critique*, would seem to show that this part of the section is of comparatively late origin.

(*c*) The concluding paragraphs, which are of considerable intrinsic interest, also reflect an independent line of criticism. As the phrase "the above proposition" seems to indicate, they were not originally composed in this present connection. They give expression to Kant's partial agreement with the line of argument followed by the rationalists, but also seek to show that, despite such partial validity, the argument does not lend support to any metaphysical extension of our empirical knowledge. In A 358 we have what may be a reference to the argument of the introductory sections of the *Dialectic*. The argument under criticism is praised as being "natural and popular," "occurring even to the least sophisticated understanding," and as leading it to view the soul as an altogether different existence from the body. The argument is as follows. None of the qualities proper to material existence, such as impenetrability or motion, are to be discovered in our inner experience. Nor can feelings, desires, thoughts, etc., be externally intuited. In view of these differences, we seem justified in asserting that the soul cannot be an appearance in space, and cannot therefore be corporeal. Kant replies by drawing attention to the fundamental Critical distinction between appearances and things in themselves. If material bodies, as apprehended, were things in themselves, the argument would certainly justify us in refusing to regard the soul and its states as of similar nature. But since, as the *Aesthetic* has shown, bodies, as known, are mere appearances of outer sense, the real question at issue is not that of the distinction between the soul and

bodies in space, but of the distinction between the soul and that something which conditions all outer appearances.

"...this something which underlies the outer appearances and which so affects our sense that it obtains the representations of space, matter, shape, etc., this something, viewed as noumenon (or better, as transcendental object), might yet also at the same time serve as the subject of our thoughts...."

Thus the argument criticised serves only to enforce the very genuine distinction between inner and outer appearances; it justifies no assertion, either positive or negative, as to the nature of the soul or as to its relation to body in its noumenal aspect. The monadistic, spiritualist theory of material existence remains an open possibility, though only as an hypothesis incapable either of proof or of disproof. We cannot obtain, by way of inference from the character of our apperceptive consciousness, any genuine addition to our speculative insight.

Third Paralogism: of Personality. — Kant's criticism again runs parallel with that of the preceding *Paralogisms*. The fallacy involved is traced to a confusion between the numerical identity of the self *in representation* and the numerical identity of the subject *in itself*. The logical subject of knowledge must, as the transcendental deduction has proved, think itself as self-identical throughout all its experiences. This is indeed all that the judgment "I think" expresses. It is mere identity, "I am I." But from the identity of representation we must not argue to identity of the underlying self. So far as the unity of self-consciousness is concerned, there is nothing to prevent the noumenal conditions of the self from undergoing transformation so complete as to involve the loss of identity, while yet supporting the representation of an identical self.

"Although the dictum of certain ancient Schools, that everything in the world is in a flux and nothing permanent and abiding, cannot be reconciled with the admission of substances, it is not refuted by the unity of self-consciousness. For we are unable from our own consciousness to determine whether, as souls, we are permanent or not. Since we reckon as belonging to our identical self only that of which we are conscious, we must necessarily judge that we are one and the same throughout the whole time of which we are conscious. We cannot, however, claim that such a judgment would be valid from the standpoint of an outside observer. As the only permanent appearance which we meet with in the soul is the representation 'I' that accompanies and connects them all, we are unable to prove that this 'I,' a mere thought, may not be in the same state of flux as the other thoughts which are connected together by its means."

And Kant adds an interesting illustration.

"An elastic ball which impinges on another similar ball in a straight line communicates to the latter its whole motion, and therefore its whole state (*i.e.* if we take account only of the positions in space). If, then, in analogy with such bodies, we postulate substances such that the one communicates to the other representations together with the consciousness of them, we can conceive a whole series of substances of which the first transmits its state together with its consciousness to the second, the second its own state with that of the preceding substance to the third, and this in turn the states of all the preceding substances together with its own consciousness and with their consciousness to another. The last substance would then be conscious of all the states of the substances, which had undergone change before its own change, as being its own states, because they would have been transferred to it together with the consciousness of them. And yet it would not have been one and the same person in all these states."

The perversely Hegelian character of Caird's and Watson's manner of interpreting the *Critique* is especially evident in their treatment of the *Paralogisms*. They make not the least mention of this part of Kant's teaching.

Kant employs a further argument which would seem to show that at the time when these paragraphs were written the general tendency of his thought was predominantly subjectivist in character. There are, he implies, as many different times as there are selves that represent time. The argument is as follows. As

the “I think” is equivalent to “I am I,” we may say either that all time of which I am conscious is in me, or that I am conscious of myself as numerically identical in each and every part of it. In my individual consciousness, therefore, identity of my person is unfailingly present. But an observer, viewing me from the outside, represents me in the time of his own consciousness; and as the time in which he thus sets me is not that of my own thinking, the self-identity of my consciousness, even if he recognises its existence, does not justify him in inferring the objective permanence of my self.

The two concluding paragraphs seem to have been independently composed. They contribute nothing of importance.

Fourth Paralogism: of Ideality. — The main argument of this *Paralogism*, which contains the first edition refutation of idealism, has already been considered above. We require, therefore, only to treat of it in its connection with the other *Paralogisms*, and to note some few minor points that remain for consideration. Its argument differs from that of the other *Paralogisms* in that the fallacy involved is traced, in agreement with the requirements of the introductory sections of the *Dialectic*, to a failure to distinguish between appearances and things in themselves. Its connection with the table of categories is extremely artificial. In A 344 = B 402 the category employed is that of possibility, in A 404 and A 344 *n*. that of existence. Kant’s attempt to combine the problem here treated with that of the other *Paralogisms* can only be explained as due to the requirements of his architectonic. This *Paralogism* does not concern itself with the nature of the soul. It refers exclusively to the mode of existence to be ascribed to objective appearances. None the less, Kant contrives to bring it within the range of rational psychology in the following manner. He argues that rational psychologists are one and all adherents of empirical idealism. They confound appearances in space with things in themselves, and therefore assert that our knowledge of their existence is inferential and consequently uncertain. The errors of empirical idealism are thus bound up with the dogmatic assumptions of the rationalist position. They are traceable to its failure to distinguish between appearances and things in themselves. Such dogmatism may take the form of materialism or of ontological dualism, as well as of spiritualism. All three, in professing to possess knowledge of things in themselves, violate Critical principles. If the chief function of rational psychology consists in securing the conception of the soul against the onslaughts of materialism, that can be much more effectively attained through transcendental idealism.

“For, on [Critical] teaching, so completely are we freed from the fear that on the removal of matter all thought, and even the very existence of thinking beings, would be destroyed, that on the contrary it is clearly shown that if I remove the thinking subject the whole corporeal world must at once vanish, since it is nothing save appearance in the sensibility of our subject and a species of its representations.”

We do not, indeed, succeed in proving that the thinking self is in its existence independent of the “transcendental substrate” of outer appearances. But as both possibilities remain open, the admission of our ignorance leaves us free to look to other than speculative sources for proof of the independent and abiding existence of the self.

Reflection on the Whole of Pure Psychology. — This section affords Kant the opportunity of discussing certain problems which he desires to deal with, but is unable to introduce under the recognised rubrics of his logical architectonic. There are, Kant says, three other dialectical questions, essential to the purposes of rational psychology, grounded upon the same transcendental illusion (confusion of appearances with things in themselves), and soluble in similar fashion: (1) as to the possibility of the communion of soul and body, *i.e.* of the state of the soul during the life of the body; (2) as to the beginning of this association, *i.e.* of the soul in and before birth; (3) as to the termination of this association, *i.e.* of the soul in and after the death of the body. Kant treats these three problems from the extreme subjectivist standpoint, inner and outer sense being distinguished and related in the manner peculiar to the first edition. The contrast between mind and body is a difference solely between the appearances of inner and those of outer sense. Both alike exist only in and through the thinking subject, though the latter

“...have this deceptive property that, representing objects in space, they as it were detach themselves from the soul and appear to hover outside it.”

The problem, therefore, of the association of soul and body, properly understood, is not that of the interaction of the soul with other known substances of an opposite nature, but only

“...how in a thinking subject outer intuition, namely, that of space, with its filling in of figure and motion, is possible. And that is a question which no human being can possibly answer. The gap in our knowledge ... can only be indicated through the ascription of outer appearances to that transcendental object which is the cause of this species of representations, but of which we can have no knowledge whatsoever and of which we shall never acquire any conception.”

The familiar problem of the association of mind and body is thus due to a transcendental illusion which leads the mind to hypostatise representations, viewing them as independent existences that act upon the senses and generate our subjective states. The motions in space, which are merely the expression in terms of appearance of the influence of the transcendental object upon “our senses,” are thus wrongly regarded as the causes of our sensations. They themselves are mere representations, and, as Kant implies, are for that reason incapable of acting as causes. In this section, it may be noted in passing, there is not the least trace of the phenomenalist teaching, according to which spatial objects are viewed as acting upon the bodily sense-organs. Kant here denies all interaction of mind and body, and recognises only the interaction of their noumenal conditions. Appearances as such can never have causal efficacy. The position represented is pure subjectivism, and very significantly goes along with Kant’s earlier doctrine of the transcendental object.

The dogmatic character of the interaction theory appears very clearly, as Kant proceeds to point out, in the objections which have been made to it, whether by those who substitute for it the theories of pre-established harmony and occasionalism, or by those who adopt a sceptical non-committal attitude. Their objections rest upon exactly the same presupposition as the theory which they are attacking. To demonstrate the impossibility of interaction, they must be able to show that the transcendental object is not the cause of outer appearances; and owing to the limitations of our knowledge that is entirely beyond our powers. Failing, however, to draw a distinction between appearances and things in themselves, they have not realised the actual nature of the situation, and accordingly have directed their objections merely to showing that mind and body, taken as independent existences, must not be viewed as capable of interaction.

The Critical standpoint also supplies the proper formulation for the other two problems — a formulation which in itself decides the degree and manner of our possible insight in regard to them. The view that the thinking subject may be capable of thought prior to all association with the body should be stated as asserting

“...that prior to the beginning of that species of sensibility in virtue of which something appears to us in space, those transcendental objects, which in our present state appear to us as bodies, could have been intuited in an entirely different manner.”

The view that the soul, upon the cessation of all association with the corporeal world, may still continue to think, will similarly consist in the contention

“...that if that species of sensibility, in virtue of which transcendental objects (which in our present state are entirely unknown) appear to us as a material world, should cease, all intuition of them would not for that reason be removed; but that it would still be possible that those same unknown objects should continue to be known [sic] by the thinking subject, though no longer, indeed, in the quality of bodies.”

Not the least ground, Kant claims, can be discovered by means of speculation in support of such assertions. Even their bare possibility cannot be demonstrated. But it is equally impossible to establish any valid objection to them. Since we cannot pretend to knowledge of things in themselves, a modest acquiescence in the limitations of experience alone becomes us.

The remaining paragraphs (A 396-405) contain nothing that is new. They merely repeat points already more adequately stated. A 401-2, which deals with the nature of apperception and its relation to the categories, has been considered above. The argument that, as the self must presuppose the thought of itself in knowing anything, it cannot know itself as object, is also commented upon above.

The statement that the determining self (the thinking, *das Denken*) is to be distinguished from the determinable self (the thinking subject) as knowledge from its object, should be interpreted in the light of Kant's argument in the second and third *Paralogisms*, that the simplicity and self-identity of the representation of an object must not be taken as knowledge of simplicity or numerical identity in the object represented.

The analysis given in A 402-3 of the fallacy involved in the *Paralogisms* is, as Adickes has pointed out, confused and misleading. Kant here declares that in the major premiss of each syllogism the assertion is intended in the merely logical sense, and therefore as applicable only to the subject *in representation*, but in the minor premiss and conclusion is asserted of the subject as bearer of consciousness, *i.e. in itself*. But were that so, the minor premiss would be a false assertion, and the false conclusion would not be traceable to logical fallacy. Kant gives the correct statement of his position in B 410-11. The attempted justification of the fourfold arrangement of the *Paralogisms* with which the section concludes suffers from the artificiality of Kant's logical architectonic.

SECOND EDITION STATEMENT OF THE PARALOGISMS

Except for the introductory paragraphs, which remain unaltered, the chapter is completely recast in the second edition. The treatment of the four *Paralogisms* which in the first edition occupied thirty-three pages is reduced to five. The problems of the mutual interaction of mind and body, of its prenatal character and of its immortality, the discussion of which in the first edition required some ten pages, are now disposed of in a single paragraph (B 426-7). The remaining twenty-two pages of the new chapter are almost entirely devoted to more or less polemical discussion of criticisms which had been passed upon the first edition. These had been in great part directed against Kant's doctrine of apperception and of inner sense, and so could fittingly be dealt with in connection with the problems of rational psychology. As Benno Erdmann has suggested, B 409-14 and 419-21 would seem to be directed against Ulrichs' Leibnizian position and especially against his metaphysical interpretation of apperception. B 428-30 treats of the difficulties raised by Pistorius in regard to the existence of the self. B 414-15 is similarly polemical, but in this case Kant cites his opponent, Mendelssohn, by name. Throughout, as in the alterations made in the chapter on *Phenomena and Noumena*, Kant insists more strongly than in the first edition upon the unknowableness of the self, and on the difference between thought and knowledge. The pure forms of thought are not, Kant now declares, concepts of objects, that is, are not categories, but "merely logical functions." Though this involves no essential doctrinal change, it indicates the altered standpoint from which Kant now regards his problem. Its significance has already been dwelt upon.

In formulating the several arguments of the four *Paralogisms*, Kant develops and places in the forefront a statement which receives only passing mention in A 352-3, 362, 366-7, 381-2, namely, that the truths contained in the judgments of rational psychology find expression in merely identical (*i.e.* analytic) propositions. This enables Kant to formulate both the *Paralogisms* and his criticisms thereof in much briefer and more pointed fashion. In each case the *Paralogism*, as he shows, substitutes a synthetic *a priori* judgment, involving an extension of our knowledge and a reference to the noumenal self, for the given judgment which, in so far as it is valid, is always a merely analytic restatement of the purely formal "I think." From the very start also, Kant introduces the distinctions of his own Critical teaching, especially that between thinking and intuiting, and that between the determining and the determinable self.

First Paralogism. — That the I which thinks must always *in thought* be viewed as subject and not as

mere predicate, is an identical proposition. It must not be taken as meaning that the subject which underlies thought is an abiding substance. This latter proposition is of much wider scope, and would involve such data (in this case entirely lacking) as are required for the establishment of a synthetic *a priori* judgment.

Second Paralogism. — That the I of *apperception* and so of all *thought* is single and cannot be resolved into a multiplicity of subjects, is involved in the very conception of thought, and is therefore an analytic proposition. It must not be interpreted as signifying that the self is a simple substance. For the latter assertion is again a synthetic proposition, and presupposes for its possibility an intuition by the self of its own essential nature. As all our intuitions are merely sensuous, that cannot be looked for in the "I think."

"It would, indeed, be surprising if what in other cases requires so much labour to discover — namely, what it is, of all that is presented by intuition, that is substance, and further, whether this substance is simple (*e.g.* in the parts of matter) — should be thus directly given me, as if by revelation, in the poorest of all representations."

We may here observe how the practice, adopted by Caird, of translating *Anschauung* by 'perception' has misled him into serious misunderstanding of Kant's teaching. It has caused him to interpret Kant as arguing that we have no knowledge of the self because we can have no *sensuous* perception of it. Kant's argument rather is that as all human "intuition" is sensuous, we are cut off from all possibility of determining our noumenal nature. We are thrown back upon mere concepts which, as yielding only analytic propositions, cannot extend our insight beyond the limits of sense-experience. The term 'intuition' is much broader in meaning than the term 'perception'; it can also be employed as equivalent to the phrase '*immediate* apprehension.' The grounds for Kant's contention that we have no intuition or immediate knowledge of the self are embodied in, and inspire, his doctrine of inner sense. It may also be noted that in B 412 Kant, speaking of the necessity of intuition for knowledge of the self, uses the unusual phrase 'a permanent intuition' — a phrase which, so far as I have observed, he nowhere employs in dealing with the intuition that conditions the sense perception of material bodies. Its employment here may perhaps be due to the fact that its implied reference is not to a given sensuous manifold but to some form of immediate apprehension, capable of revealing the permanent nature of the noumenal self.

Third Paralogism. — That I am identical with myself throughout the consciousness of my manifold experiences, is likewise an analytic proposition obtainable by mere analysis of the "I think." And since that form of consciousness, as stated in the criticism of the preceding *Paralogism*, is purely conceptual, containing no element of intuition, no judgment based solely upon it can ever be taken as equivalent to the synthetic proposition that the self, as thinking being, is an identical substance.

Fourth Paralogism. — This *Paralogism* is somewhat altered. As noted above, the problem dealt with in the first edition concerns the outer world, and only quite indirectly the nature of the self. In the second edition that argument is restated, and is more properly located within the *Analytic*. The argument which now takes its place runs parallel with that of the three preceding *Paralogisms*. The assertion that I distinguish my own existence as a thinking being from other things outside me, including thereunder my own body, is an analytic proposition, since by *other* things is meant things which I think as different from myself.

"But I do not thereby learn whether this consciousness of myself would be at all possible apart from things outside me through which representations are given to me, and whether, therefore, I can exist merely as thinking being (*i.e.* without existing in human form)."

In B 417-18 Kant points out that rational psychology, in asserting that the self can be conscious apart from all consciousness of outer things, commits itself to the acceptance of problematic idealism. If consciousness of outer objects is not necessary to consciousness of self, there can be no valid method of proving their existence. In the fourth *Paralogism* of the first edition, the inter-dependence of rational

psychology and empirical idealism is also dwelt upon, but is there traced to a confusion of appearances with things in themselves.

B 410-11. — The correct formulation is here given of what in the first edition is quite incorrectly stated. A paralogism is a syllogism which errs in logical form (as contrasted with a syllogism erring in matter, *i.e.* the premisses of which are false). In the paralogisms of Rational Psychology, the logical fallacy committed is that of ambiguous middle, or as Kant names it, the *sophisma figurae dictionis*. In the major premiss the middle term is used as referring to real existence, in the minor only as expressive of the unity of consciousness.

Refutation of Mendelssohn's Proof of the Permanence of the Soul. — Mendelssohn's argument is that the soul, as it does not consist of parts, cannot disappear *gradually* by disintegration into its constituent elements. If, therefore, it perishes, it must pass out of existence *suddenly*; at one moment it will exist, at the next moment it will be non-existent. But, Mendelssohn maintains, for three closely connected reasons this would seem to be impossible. In the first place, the immediate juxtaposition of directly opposed states is never to be met with in the material world. Complete opposites, such as day and night, waking and sleeping, never follow upon one another abruptly, but only through a series of intermediate states. Secondly, among the opposites which material processes thus bridge over, the opposition of being and not-being is never to be found. Only by a miracle can a material existence be annihilated. If, therefore, empirical evidence is to be allowed as relevant, we must not assert of the invisible soul what is never known to befall the material existences of the visible world. Thirdly — the only part of Mendelssohn's argument which Kant mentions — the sudden cessation of the soul's existence would also violate the law of the continuity of time. Between any two moments there is always an intermediate time in which the one moment passes continuously into the other.

Kant's reply to this third part of Mendelssohn's argument is that though the soul must not be conceived as perishing suddenly, it may pass out of existence by a continuous diminution through an infinite number of smaller degrees of intensive reality; and in support of this view he maintains the very doubtful position that clearness and obscurity of representation are not features of the contents apprehended, but only of the intensity of the consciousness directed upon them.

B 417-22. — Kant here points out that rational psychology, as above expounded, proceeds synthetically, starting from the assertion of the substantiality of the soul and proceeding to the proof that its existence is independent of outer things. But it may proceed in the reverse fashion, analytically developing the implications supposed to be involved in the "I think," viewed as an existential judgment, *i.e.* as signifying "I exist thinking." Kant restates the argument in this analytic form in order, as it would seem, to secure the opportunity of replying to those criticisms of his teaching in the first edition which concern his doctrine of apperception and his employment of the categories, especially of the category of existence, in relation to the self. What is new and important in these pages, and also in the connected passages in B 428-30, has been discussed above.

B 419-20. — After remarking that simplicity or unity is involved in the very possibility of apperception, Kant proceeds to argue that it can never be explained from a strictly materialist standpoint, since nothing that is real in space is ever simple. Points are merely limits, and are not therefore themselves anything that can form part of space. The passage as a whole would seem to be directed against the Leibnizian teaching of Ulrichs.

B 426-7. — Kant makes a remark to which nothing in his argument yields any real support, namely, that the dialectical illusion in rational psychology is due to the substitution of an Idea of reason for the quite indeterminate concept of a thinking being in general. As is argued below, the assumption which he is here making that the concept of the self is an *a priori* and ultimate Idea of pure Reason, cannot be regarded as a genuine part of his Critical teaching.

B 427-8 touches quite briefly upon questions more fully and adequately treated in the first edition. The

scanty treatment here accorded to them would seem to indicate, as Benno Erdmann remarks, that the problem of the interaction of mind and body which so occupied Kant's mind from 1747 to 1770 has meantime almost entirely lost interest for him. The problem of immortality remains central, but it is now approached from the ethical side.

In B 421 and B 423-6 Kant draws from his criticism of the *Paralogisms* the final conclusion that the metaphysical problems as to the nature and destiny of the self are essentially *practical* problems. When approached from a theoretical standpoint, as curious questions to be settled by logical dialectic, their speculative proof

"...so stands upon the point of a hair, that even the schools preserve it from falling only so long as they keep it unceasingly spinning round like a top; even in their own eyes it yields no abiding foundation upon which anything could be built." "Rational psychology exists not as *doctrine*, ... but only as *discipline*. It sets impassable limits to speculative reason in this field, and thus keeps us, on the one hand, from throwing ourselves into the arms of soulless materialism, or, on the other hand, from losing ourselves in an unsubstantial spiritualism which can have no real meaning for us in this present life. But though it furnishes no positive doctrine, it reminds us that we should regard this refusal of Reason to give satisfying response to our inquisitive probings into what is beyond the limits of this present life as a hint from Reason to divert our self-knowledge from fruitless and extravagant speculation to its fruitful practical employment." "The proofs which are serviceable for the world at large preserve their entire value undiminished, and indeed, upon the surrender of these dogmatic pretensions, gain in clearness and in natural force. For Reason is then located in its own peculiar sphere, namely the order of ends, which is also at the same time an order of nature; and since it is in itself a practical faculty which is not bound down to natural conditions, it is justified in extending the order of ends, and therewith our own existence, beyond the limits of experience and of life."

Then follows brief indication of the central teaching of the *Metaphysics of Ethics* and of the two later *Critiques*. Through moral values that outweigh all considerations of utility and happiness, we become conscious of an inner vocation which inspires feelings of sublimity similar to those which are aroused by contemplation of the starry firmament; and to the verities thus disclosed we can add the less certain but none the less valuable confirmation yielded by natural beauty and design, and by the conformity of nature to our intellectual demands.

"Man's natural endowments — not merely his talents and the impulses to employ them, but above all else the Moral Law within him — go so far beyond all utility and advantage which he may derive from them in this present life, that he learns thereby to prize the mere consciousness of a righteous will as being, apart from all advantageous consequences, apart even from the shadowy reward of posthumous fame, supreme over all other values; and so feels an inner call to fit himself, by his conduct in this world, and by the sacrifice of many of its advantages, for being a citizen of a better world upon which he lays hold in Idea. This powerful and incontrovertible proof is reinforced by our ever-increasing knowledge of purposiveness in all that we see around us, and by a glimpse of the immensity of creation, and therefore also by the consciousness of a certain illimitableness in the possible extension of our knowledge and of a striving commensurate therewith. All this still remains to us, though we must renounce the hope of ever comprehending, from the mere theoretical knowledge of ourselves, the necessary continuance of our existence."

IS THE NOTION OF THE SELF A NECESSARY IDEA OF REASON?

One point of great importance must be dwelt upon before we pass from the *Paralogisms*. Though the negative consequences which follow from the teaching of the objective deduction are here developed in the most explicit manner, Kant does not within the limits of this chapter, in either edition, make any further

reference to the doctrine expounded in the introductory sections of the *Dialectic*, viz. that the notion of the self as an immortal being is a necessary Idea of human Reason. The reader is therefore left under the impression that that doctrine is unaffected by the destructive criticism passed upon rational psychology, and that it still survives as an essential tenet of the Critical philosophy. And he is confirmed in this view when he finds the doctrine reappearing in the *Appendix* to the *Dialectic* and in the *Methodology*. The Idea of the self is there represented as performing a quite indispensable, regulative function in the development of the empirical science of psychology. Now it is one thing to maintain the existence of Ideal demands of Reason for unity, system and unconditionedness, and to assert that it is in virtue of these demands that we are led, in the face of immense discouragement and seeming contradictions, to reduce the chance collocations and bewildering complexities of ordinary experience to something more nearly approximating to what Reason prescribes. But it is a very different matter when Kant claims that in any one sphere, such as that of psychology, the unity and the unconditionedness must necessarily be of one predetermined type. He is then injecting into the Ideals that *specific* guidance which only the detail of experience is really capable of supplying. He is proving false to his own Critical empiricism, in which no function is ascribed to Reason that need in any way conflict with the autonomy of specialist research; and he is also violating his fundamental principle that the *a priori* can never be other than purely formal. Indeed, when Kant discloses somewhat more in detail what he means by the regulative function of the Idea of the self, the ambiguity of his statements reveals the unconsidered character of this part of his teaching. It is the expression only of a preconception, and has eluded the scrutiny of his Critical method largely because of the protective colouring which its admirable adaptation to the needs of his architectonic confers upon it. If, for instance, we compare the three passages in which it is expounded in the *Appendix* to the *Dialectic*, we find that Kant himself alternates between the authoritative prescription to psychology of a spiritualist hypothesis and what in ultimate analysis, when ambiguities of language are discounted, amounts simply to the demand for the greatest possible simplification of its complex phenomena. The passages are as follows.

"In conformity with these Ideas as principles we shall first, in psychology, connect in inner experience all appearances, all actions and receptivity of our mind, as if (*als ob*) the mind were a simple substance which persists with personal identity (in this life at least), while its states, to which those of the body belong only as outer conditions, are in continual change."

"...in the human mind we have sensation, consciousness, imagination, memory, wit, power of discrimination, pleasure, desire, etc. Now, to begin with, a logical maxim requires that we should reduce, so far as may be possible, this seeming diversity, by comparing these with one another and detecting their hidden identity. We have to enquire whether imagination combined with consciousness may not be the same thing as memory, wit, power of discrimination, and perhaps even identical with understanding and Reason. Though logic is not capable of deciding whether a *fundamental power* actually exists, the Idea of such a power is the problem involved in a systematic representation of the multiplicity of powers. The logical principle of Reason calls upon us to bring about such unity as completely as possible; and the more appearances of this or that power are found to be identical with one another, the more probable it becomes that they are simply different manifestations of one and the same power, which may be entitled, relatively speaking, their *fundamental power*. The same is done with the other powers. The relatively fundamental powers must in turn be compared with one another, with a view to discovering their harmony, and so bringing them nearer to a single radical, *i.e.* absolutely fundamental, power. But this unity of Reason is purely hypothetical. We do not assert that such a power must necessarily be met with, but that we must seek it in the interest of Reason, that is, of establishing certain principles for the manifold rules which experience may supply to us. We must endeavour, wherever possible, to bring in this way systematic unity into our knowledge."

In the third of the *Appendix* passages these two views are confusedly combined. Kant is insisting that

an Idea never asserts, even as an hypothesis, the existence of a real thing.

"[An Idea] is only the schema of the regulative principle by which Reason, so far as lies in its power, extends systematic unity over the whole field of experience. The first object of such an Idea is the 'I' itself, viewed simply as thinking nature or soul. If I am to investigate the properties with which a thinking being exists in itself, I must interrogate experience. I cannot even apply any one of the categories to this object, except in so far as its schema is given in sense intuition. But I never thereby attain to a systematic unity of all appearances of inner sense. Instead, then, of the empirical concept (of that which the soul actually is), which cannot carry us far, Reason takes the concept of the empirical unity of all thought; and by thinking this unity as unconditioned and original, it forms from it a concept of Reason, *i.e.* the Idea of a simple substance, which, unchangeable in itself (personally identical), stands in association with other real things outside it; in a word, the Idea of a simple self-subsisting intelligence. Yet in so doing it has nothing in view save principles of systematic unity in the explanation of the appearances of the soul. It is endeavouring to represent all determinations as existing in a single subject, all powers, so far as possible, as derived from a single fundamental power, all change as belonging to the states of one and the same permanent being, and all appearances in space as completely different from the actions of thought. The simplicity and other properties of substance are intended to be only the schema of this regulative principle, and are not presupposed as the real ground of the properties of the soul. For these may rest on altogether different grounds of which we can know nothing. The soul in itself could not be known through these assumed predicates, not even if we regarded them as absolutely valid in regard to it. For they constitute a mere Idea which cannot be represented *in concreto*. Nothing but advantage can result from the psychological Idea thus conceived, if only we take heed that it is not viewed as more than a mere Idea, and that it is therefore taken as valid only in its bearing on the systematic employment of Reason in determining the appearances of our soul. For no empirical laws of bodily appearances, which are of a totally different kind, will then intervene in the explanation of what belongs exclusively to inner sense. No windy hypotheses of generation, extinction, and palingenesis of souls will be permitted. The consideration of this object of inner sense will thus be kept completely pure and unmixed, without employing heterogeneous properties. Also, Reason's investigations will be directed to reducing the grounds of explanation in this field, so far as may be possible, to a single principle. All this will be best obtained (indeed is obtainable in no other way) through such a schema, viewed as if (*als ob*) it were a real being. The psychological Idea, moreover, can signify nothing but the schema of a regulative principle. For were I to enquire whether *the soul in itself* is of spiritual nature, the question would have no meaning. In employing such a concept I not only abstract from corporeal nature, but from nature in general, *i.e.* from all predicates of a possible experience, and therefore from all conditions for thinking an object for such a concept: yet only as related to an object can it be said to have a meaning."

The last passage would seem to indicate that Kant has still another and only partially avowed reason for insisting upon a *special* and *spiritualist* Idea, as regulative of empirical psychology. It is necessary, he would seem to argue, in order to mark off the peculiar nature of its subject matter, and to warn us against attempting to explain its phenomena in the mechanistic manner of physical science. But if that is Kant's intention, he has failed to formulate the position in any really tenable way. It is impossible to maintain, as he here does, that "no empirical laws of bodily appearances [can] intervene in the explanation of what belongs exclusively to inner sense." Indeed, in the immediately following sentences, he very clearly indicates how completely such a position conflicts with his own real teaching. To think away the corporeal is to think away all experience. Experience is not dualistically divided into separate worlds. It is one and single, and the principle of causality rules universally throughout, connecting inner experiences of sense, feeling, and desire, with their outer conditions, organic and physical. Thus Kant's retention of the Idea of the self is chiefly of interest as revealing the strength and tenacity of his spiritualist leanings. We may judge of the disinterestedness and courage of his thinking by the contrary character of his pre-

conceptions. For even when they have been shown to be theoretically indemonstrable, they continue to retain by honorific title the dignity from which they have been deposed. The full force of the objections is none the less recognised.

"The simplicity of substance ... is not presupposed as the real ground of the properties of the soul. For these may rest on altogether different grounds of which we can know nothing."

That, however, is only Kant's unbiassed estimate of the theoretical evidence; it is not an expression of his own personal belief.

CHAPTER II

THE ANTINOMY OF PURE REASON

This introduction summarises the preceding argument, and distinguishes the new problems of *Antinomy* from those of the *Paralogisms*. In rational psychology pure Reason attains, as it were, euthanasia; in the antinomies an entirely different situation is disclosed. For though rational cosmology is able to expound itself in a series of demonstrated theses, its teaching stands in irreconcilable conflict with the actual nature of appearances, as expressed through a series of antitheses which are demonstrable in an equally cogent manner.

SECTION I

SYSTEM OF THE COSMOLOGICAL IDEAS

The first eight paragraphs of this section are of great textual interest. They must have been written at a time when Kant still intended to expound his entire criticism of metaphysical science in the form of a doctrine of antinomy. For they define the Ideas of Reason as exclusively cosmological, and give a very different explanation of their origin from that which has been expounded in the preceding chapters. Evidently, therefore, this part of the section must have been written prior to Kant's formulation of the metaphysical deduction from the three species of syllogism. This is supported by the fact that the argument begins anew, just as if the matter had not previously been discussed; and that, though a new view of the nature of Reason is propounded, there is not the least mention of the more Idealist view which it displaces. Reason, Kant here teaches, is not a faculty separate from the understanding, and does not therefore produce any concept peculiar to itself. Reason is simply a name for the understanding in so far as it acts independently of sensibility, and seeks, by means of its pure forms, in abstraction from all empirical limitations, to grasp the unconditioned. "The transcendental Ideas are in reality nothing but categories extended to the unconditioned." The intelligible, as thus conceived by the understanding, expresses itself, as he later shows, in a series of theses; while the sensuous expresses its opposite and conflicting character in a series of antitheses.

Yet not all categories yield a concept of the unconditioned. That is possible only to those which concern themselves with a series of members conditioning and conditioned, and in reference to which, therefore, the postulate of an unconditioned would seem to be legitimate, viz.: (1) unconditioned quantity in space and time; (2) unconditioned quality (indivisibility and simplicity) of reality in space (matter); (3) unconditioned causality of appearances; (4) unconditioned necessity of appearances. As this arrangement is determined by the needs of Kant's architectonic, no detailed comment is here called for. Its consequences we shall have ample opportunity to consider later. As already noted, Kant's statement in A 414 = B 441, that "the category of substance and accident does not lend itself to a transcendental Idea," shows very clearly that, at the time when he composed this passage, he had not yet bethought himself of placing a separate and independent Idea at the basis of rational psychology. But as Kant here strives to follow the fourfold arrangement of the categories, the content of these paragraphs must either have been later recast or have been composed in the interval between his discovery of the metaphysical deduction of the categories and his formulation of the corresponding deduction of the Ideas from the three forms of syllogism. It may also be observed that the derivation of the cosmological Idea from the hypothetical

syllogism, which embodies only the category of causality, clashes with the above specification of it in terms of all four rubrics of category.

The remaining paragraphs (ninth to thirteenth) of this section must be of later date, as they are developed in view of the independent treatment of the theological Ideal. (Adickes, in dating the ninth and tenth paragraphs with the preceding instead of with the concluding paragraphs, would seem to have overlooked this fact.) In order to justify the treatment of the Ideas of a first cause and of unconditioned necessity, as *cosmological*, Kant now asserts that the antinomies concern only appearances— "our [cosmical] Ideas being directed only to what is unconditioned *among the appearances*," *and not to noumena*. His explanation of the nature of transcendental illusion, and of the antinomies in particular, as being due to a failure to distinguish between appearance and things in themselves, is thus ruthlessly sacrificed to considerations of architectonic. Kant could not, of course, consistently hold to the position here adopted; but it causes him from time to time, especially in dealing with the third and fourth antinomies, to make statements which tend seriously to obscure the argument and to bewilder the careful reader.

Kant is far from clear as to the relation in which the concepts of the totality of conditions and of the unconditioned stand to one another. In A 322 = B 379 they would seem to be taken as exactly equivalent concepts. In A 416-17 = B 443-5 they are apparently regarded as distinct, the former only leading up to the latter. But discussion of this important point must meantime be deferred.

SECTION II

ANTITHETIC OF PURE REASON

"[Antithetic] is the conflict between two apparently dogmatic judgments [*Erkenntnisse*] to neither of which can we ascribe any superior claim to acceptance over the other, *i.e.* by Antithetic I mean a *thesis*, together with an *antithesis*." "Transcendental Antithetic is an investigation of the antinomy of pure Reason, its causes and outcome."

The very existence of such antinomy presupposes a twofold condition: first, that it does not refer to a gratuitous but to an inevitable problem of human Reason, "one which it must necessarily encounter in its natural progress"; and secondly, that the thesis and the antithesis together generate a "natural and inevitable illusion," which continues to persist even after its deceptive power has been clearly disclosed. Such conflict is caused by the fact that Reason seeks a unity which transcends the understanding, and which nevertheless is meant to conform to the conditions of the understanding. If the unity is adequate to the demands of Reason, it is too great for the understanding; if it is commensurate with the understanding, it is too small for Reason. The theses express the higher unity at which Reason aims; the antitheses are the judgments to which the understanding is constrained by the nature of the appearances with which both it and Reason profess to deal. If we hold to Reason, we make assertions contradictory of the appearances; while if we place reliance on the understanding, Reason condemns our conclusions.

This conflict is limited to those few problems above enumerated in which we are called upon to complete a given series. Since totality, whether in the form of a first beginning of the series or as an actual infinity of the whole series, can never itself be experienced, these are problems in regard to which experience can be of no assistance to us. It can neither confirm nor refute any particular solution. The only possible method of deciding between the competing claims is to watch or even to provoke the conflict, in the hope that we may finally be able to detect some misunderstanding, and so to resolve the conflict to the satisfaction of both the litigants. Such is Kant's description of what he entitles his "sceptical method."

Without here attempting a full discussion of the subject, it seems advisable to point out at the very start

what Kant's exposition seriously obscures, namely, the real character of the evidence upon which the theses and the antitheses respectively rest. The latter are not correctly stated as transcending experience, and as therefore incapable of confirmation by it. The proofs which Kant offers of them are, indeed, of a non-empirical *a priori* character. They are formulated in terms of the dogmatic rationalism of the Leibnizian position, with a constant appeal to abstract principles. But, as a matter of fact, they can be much more adequately established — in so far as they can be established at all — through analysis of the spatial and temporal conditions of material existence. As space and time are continuous and homogeneous, any assertion which is true of a space or time however small is likewise true of a space or time however large. Any space consists of spaces, and must be regarded as itself part of a larger whole. Any time consists of parts which are themselves times, and is apprehensible only as following upon preceding times. It is by such considerations as these that we are led to regard the material world as unlimited, as infinitely divisible, and as having no first state.

Kant's method of demonstrating the theses — that the world is limited, is finitely divisible, and has a first state — is no less misleading. Here again his rationalistic arguments conceal the basis upon which the various theses really rest. Their true determining ground is the demand of Reason for some more satisfactory form of unconditionedness than that which is found in the actual infinite. It is this demand which has led philosophers to look around for proofs in support of the theses, and to elaborate those rationalistic arguments which Kant here reproduces. Thus the grounds of the antitheses are altogether different from those of the theses; and in neither case are they properly represented by the arguments which Kant employs.

The reasons why Kant in his detailed statement of the antinomies has omitted, or at least subordinated, the above considerations, are complex and various. In the first place, this doctrine of antinomy was in several of its main features already formulated prior to his development of the Critical philosophy. It forms part of his *Dissertation* of 1770; and at that time Kant was still largely in fundamental sympathy with the Leibnizian ontology. Secondly, Kant is here professing to criticise the science of rational cosmology, and is therefore bound to expound it in more or less current form. And in the third place, he teaches that *the antinomies exist as antinomies only when viewed from the false standpoint of dogmatic rationalism*. Had he eliminated the rationalistic proofs, the conflict of the antinomies, in its strictly logical form, as the conflict of direct contradictories, would at once have vanished. The general framework of this division of the *Dialectic* demanded a rationalistic treatment of both theses and antitheses, and Kant believed that the rationalistic proofs which he propounds in their support are unanswerable, so long as the dogmatic standpoint of ordinary consciousness and of Leibnizian ontology is preserved. But even when that important limitation is kept in view, Kant fails to justify this interpretation of the conflict, and we must therefore be prepared to find that his proofs, *whether of theses or of antitheses*, are in all cases inconclusive. I shall append to each of his arguments a statement of the reasons which constrain us to reject them as unsound. We shall then be in a position to consider his whole doctrine of antinomy in its broader aspects, and in its connection with the teaching of the other main divisions of the *Dialectic*.

FIRST ANTINOMY

Thesis. — (*a*) The world has a beginning in time, and (*b*) is also limited in regard to space.

Thesis *a*. Proof. — If we assume the opposite, namely, that the world has no beginning in time, and if we define the infinite as that which can never be completed by means of a successive synthesis, we must conclude that the world-series can never complete itself. But the entire series of past events *elapses*, *i.e.* completes itself at each moment. It cannot therefore be infinite.

Criticism. — This argument gains its plausibility from the illegitimate use of the term 'elapse' (*verfliessen*) as equivalent to 'complete itself.' If it be really correct to define the infinite as that which can never be completed, the conclusion to be drawn is that the temporal series is always actually infinite,

and that no point or event in it is nearer to or further from either its beginning or its end. We may select any point in the series as that from which we propose to begin a regress to the earlier members of the series, but if the series is actually infinite, it will be a regress without possibility of completion, and one therefore which removes all justification for asserting that at the point chosen a series has completed itself. It has no beginning, and has no completion. What it has done at each moment of the past it is still doing at each present moment, namely, coming out of an inexhaustible past and passing into an equally inexhaustible future. Time is by its given nature capable of being interpreted only as actually infinite, alike in its past and in its future. It cannot complete itself any more than it can begin itself. The one would be as gross a violation of its nature as would the other. The present exists only as a species of transition, unique in itself, but analogous in nature to the innumerable other times that constitute time past. It is a transition from the infinite through the infinite to the infinite. That we cannot comprehend how, from an infinitude that has no beginning, the present should ever have been reached, is no sufficient reason for denying what by the very nature of time we are compelled to accept as a correct description of the situation which is being analysed. The actual nature of time is such as to rule out from among the possibilities the thesis which Kant is here professing to be able to establish; time, being such as it actually is, can have no beginning.

What thus holds of time may likewise hold of events in time. If time is actually infinite, no proof can be derived from it in support of the assumption that the world has had a beginning in time.

The phrase “by means of a successive synthesis” gives a needlessly subjectivist colouring to Kant’s method of proof. The antinomy is professedly being stated from the realist standpoint, and ought not therefore to be complicated by any such reference. This objection applies, as we shall find, still more strongly to Kant’s proof of the second part of the thesis. The latter proof depends upon this subjectivist reference; the present proof does not.

Kant limits his problem to the past infinitude of time. The reason for this lies, of course, in the fact that he is concerned with the problem of creation. The limitation is, however, misleading.

Thesis *b*. — The world is limited in regard to space.

Proof. — Assume the opposite, namely, that the world is an infinite, given whole of coexisting parts. A magnitude not given within the determinate limits of an intuition can only be thought through the synthesis of its parts, and its totality through their completed synthesis. In order, therefore, that we may be able to think as a single whole the world which fills all space, the successive synthesis of the parts of an infinite world must be regarded as completed, *i.e.* an infinite must be regarded as having elapsed in the enumeration of all coexisting things. This, however, is impossible. An infinite aggregate of actual things cannot therefore be viewed as a given whole, nor as being given as coexistent. Consequently the world of spatial existences must be regarded as finite.

Criticism. — From the impossibility of traversing infinite space in thought by the successive addition of part to part, Kant here argues that “an infinite aggregate of actual things cannot be viewed as a given whole,” and consequently that the world cannot be infinitely extended in space. That is, from a *subjective impossibility of apprehension* he infers an *objective impossibility of existence*. But Kant has himself defined the infinite as involving this subjective impossibility; for in the proof of thesis a he has stated that the infinitude of a series consists in the very fact that it can never be completed through successive synthesis. Kant is therefore propounding against the *existence* of the infinite the very feature which by definition constitutes its infinitude. The implication would seem to be that the concept of the infinite is the concept of that which *ex definitione* cannot exist, and that there is therefore a contradiction in the very idea of the actual infinite.

Deferring for a moment the further objections to which such procedure lies open, we may observe that Kant, in arguing from a subjective to an objective impossibility, commits the fallacy of *ignoratio elenchi*. For when the conditions of objective existence are recognised in their distinction from those of mental

apprehension, the supposed contradiction vanishes, and the argument ceases to have any cogency. The use of the words ‘given’ and ‘whole’ is misleading. If space is infinite, it is without bounds, and cannot therefore exist as a whole in any usual meaning of that term. For the same reason it must be incapable of being given as a whole. Its infinitude is a presupposition which analysis of actually given portions of it constrains us to postulate, and has to be conceived in terms of the definition employed in thesis *a*. The given must always be conceived as involving what is not itself given and what is not even capable of complete construction. In terms of this presupposition an actual infinite, not given and not capable of construction, can be represented with entire consistency.

But to return to the main assumption upon which Kant’s proof would seem to rest: it is all-important to observe that Kant does not, either in the *Critique* or in any other of his writings, assert that the concept of the actual infinite is inherently self-contradictory. This is a matter in regard to which many of Kant’s critics have misrepresented his teaching. Kant’s argument may, as we have just maintained, be found on examination to involve the above assertion; but this, if clearly established, so far from commending the argument to Kant, would have led him to reject it as invalid. The passage in the *Dissertation* of 1770, which contains his most definite utterance on this point, represents the view from which he never afterwards departed. It may be quoted in full.

“Those who reject the actual mathematical infinite do so in a very casual manner. For they so construct their definition of the *infinite* that they are able to extract a contradiction from it. The infinite is described by them as *a quantity than which none greater is possible*, and the mathematical infinite as a multiplicity — of an assignable unit — than which none greater is possible. Since they thus substitute *maximum* for *infinitum*, and a greatest multiplicity is impossible, they easily conclude against this infinite which they have themselves invented. Or, it may be, they entitle an infinite multiplicity an *infinite number*, and point out that such a phrase is meaningless, as is, indeed, perfectly evident. But again they have fought and overthrown only the figments of their own minds. If, however, they had conceived the mathematical infinite as a quantity which, when related to measure, as its unity, is *a multiplicity greater than all number*; and if furthermore, they had observed that *measurability* here denotes only the relation [of the infinite] to the standards of the human intellect, which is not permitted to attain to a *definite conception of multiplicity* save by the successive addition of unit to unit, nor to the *sum-total* (which is called *number*) save by completing this progress in a finite time; they would have perceived clearly that what does not conform to the established law of some subject need not on that account exceed all intellection. An intellect may exist, though not indeed a human intellect, which perceives a multiplicity distinctly in one intuition [*uno obtutu*] without the successive application of a measure.”

The concluding sentences of this *Dissertation* passage may be taken as Kant’s own better and abiding judgment in regard to the question before us. We must not argue from the impossibility of mentally traversing the infinite to the impossibility of its existence. Indeed the essentials of the above passage are restated in the ‘Observation’ on this thesis. Thus the concept of the actual infinite is not only, as a concept, perfectly self-consistent, it is also one which, in view of the nature of time and of space, we are constrained to accept as a correct representation of the actually given. The thesis of this first antinomy runs directly counter to admitted facts. That Kant is here arguing in respect to the world, and not merely in respect to space and time, does not essentially alter the situation. For if space and time are necessarily to be viewed as infinite, there can be no *a priori* proof — none, at least, of the kind here attempted — that the world-series may not be so likewise.

Antithesis. — (*a*) The world has no beginning in time; (*b*) has no limits in space. In both these respects the world is infinite.

In these antitheses Kant assumes that space and time are actually infinite, and from that assumption advances to the proof that this is likewise true of the world in its spatial and temporal aspects. This, by itself, ought to be sufficient evidence that Kant does not regard the actual infinite as an inherently

impossible conception. As the antinomies are avowedly formulated from the realist, dogmatic standpoint of ordinary consciousness, Kant is also enabled to assume that if the world begins to be, it must have an antecedent cause determining it to exist at that moment rather than at another.

Antithesis *a*. Proof. — Let us assume the opposite, namely, that the world has a beginning. It will then be preceded by an empty time in which it was not. But in an empty time no becoming is possible, since in such a time no part possesses over any other any distinguishing condition of existence rather than of non-existence. The world must therefore be infinite as regards past time.

Criticism. — In this argument everything depends upon what is to be meant by the term 'world.' If Kant means by it merely the material world, the assumption of its non-existence does not leave only empty time and space. Other kinds of existence may be possible, and in these a sufficient cause of its first beginning may be found. The nature of creative action will remain mysterious and incomprehensible, but that is no sufficient reason for denying its possibility. If, on the other hand, Kant means by the world 'all that is,' the assumption of its non-existence is likewise the assumption of the non-existence of all its possible causes. That, however, is for ordinary consciousness a quite impossible assumption, since it runs counter to the causal principle which is taken as universally valid. From this point of view the argument consists in making an impossible assumption, and in then pointing out the impossible consequence which must follow. By such a mode of argument no conclusion can be reached. Kant's decision ought rather to have been that, as time is actually infinite, the world may be so likewise, but that though *reality* must in some form be eternally existent, the *material world* cannot be proved to be so by any *a priori* proof of the kind here given.

Antithesis *b*. Proof. — Let us assume the opposite, namely, that the world is finite, existing in an empty limitless space. There will then be not only a relation of things *in space*, but also of things *to space*. But as the world is a totality outside of which no object of intuition can be found, the relation of the world to empty space is a relation to *no object*. Such a relation is nothing. Consequently the opposite holds; the world must be infinitely extended.

Criticism. — That Kant himself felt the inadequacy of this argument, when taken from the dogmatic standpoint, is indicated by the lengthy note which he has appended to it, and which develops his own Critical view of space as not a real independent object, but merely the form of external intuition. From the standpoint of ordinary consciousness space is a self-existent entity, and there is no insuperable difficulty in conceiving a relation as holding between it and its contents. The introduction of the opposed standpoint of the *Aesthetic* therefore runs directly counter to Kant's own intention of expounding the antinomies from the dogmatic standpoint which involves this realist view of space, and of showing that they afford, in independence of the arguments of the *Aesthetic*, an indirect proof of the untenableness of that belief. The conclusion which ought to have been drawn is analogous to that above suggested for thesis *a*. As space is actually infinite, the material world may be so likewise; but that it actually is so, cannot be established by an *a priori* argument of the kind here attempted.

SECOND ANTINOMY

Thesis. — Every composite substance in the world consists of simple parts, and nothing anywhere exists save the simple or what is composed of it.

Proof. — Let us assume the opposite, namely, that substances do not consist of simple parts. If all composition be then removed in thought, no composite part, and (as there are no simple parts) also no simple part, and therefore nothing whatsoever, will remain. Consequently no substance will be given. Either, therefore, it is impossible to remove in thought all composition, or after its removal something that exists without composition, *i.e.* the simple, must remain. In the former case the composite would not itself consist of substances (with them composition is a merely accidental relation, and they must, as self-persisting beings, be able to exist independently of it). As this contradicts our assumption, only the latter alternative remains, namely, that the substantial compounds in the world consist of simple parts.

Criticism. — Kant here assumes, by his definition of terms, the point which he professes to establish by argument. The substance referred to, though never itself mentioned by name, is extended matter. Kant identifies it with 'composite substance.' Substance, he further dogmatically decides, is that which is capable of independent existence, and to which all relations of composition are therefore merely accidental. If these assumptions be granted, it at once follows that composition cannot be essential to matter, and that when all composition is thought away, its reality will be disclosed as consisting in simple parts. Kant, however, makes no attempt to prove that extended matter can be defined in any such terms. From the dogmatic point of view of ordinary consciousness, though not from the sophisticated standpoint of Leibniz, extension is of the very essence of matter; and, as Kant himself believed, the continuity of extension is such as to exclude all possibility of elimination of the composite. For he maintains that, however far division be carried, the parts remain no less composite than the whole from which the regress has started. On any such view the extended and the composite are not equivalent terms. The opposite of the composite is the simple; the opposite of the extended is the non-extended. Kant is here surreptitiously substituting a Leibnizian metaphysics in place of the empirical reality which is supposed to necessitate the argument.

In the *Observation* on this thesis Kant shows consciousness of the defects of his argument. It does not apply to space, time, or change.

"We ought not to call space a *compositum* but a *totum*, because its parts are possible only in the whole, not the whole through the parts."

As Kant further states, he is speaking only of the simples of the Leibnizian system. This thesis is "the dialectical principle of monadology." Again in the *Observation* on the antithesis, in commenting on the mathematical proof of the infinite divisibility of matter, Kant even goes so far as to declare that the argument of the thesis is based on an illegitimate substitution of things in themselves, conceived by the pure understanding, for the appearances with which alone the antinomy is concerned.

"...it is quite futile to attempt to overthrow, by sophistical manipulation of purely discursive concepts, the manifest, demonstrated truth of mathematics."

Antithesis. — No composite thing in the world consists of simple parts, and there nowhere exists in the world anything simple.

Proof. — Let us assume the opposite, namely, that a composite thing (as substance) consists of simple parts. As all external relation, and therefore all composition of substances, is only possible in space, space must consist of as many parts as there are parts of the composite that occupies it. Space, however, does not consist of simple parts, but of spaces. The simple must therefore occupy a space. Now as everything real which occupies a space contains in itself a manifold of constituents external to one another, and therefore is composite, and as a real composite is not composed of accidents (for without substance accidents could not be outside one another), but of substances, the simple would be a substantial composite, which is self-contradictory.

Criticism. — The Leibnizian standpoint is here completely deserted. Instead of proceeding to demonstrate the direct opposite of the thesis, Kant in this argument deals with the extended bodies of empirical intuition. The proof given ultimately reduces to an argument from the continuous nature of space to the continuous nature of the matter which occupies it. But as the thesis and the antithesis thus refer to different realities, the former to things in themselves conceived by pure understanding, and the latter to the sensuous, no antinomy has been shown to subsist. Antinomy presupposes that both the opposing assertions have the same reference. Kant, as already noted, argues in the *Observation* to this antithesis that all attempts "made by the monadists" to refute the mathematical proof of the infinite divisibility of matter are quite futile, and are due to their forgetting that in this discussion we are concerned only with appearances.

"The monadists have, indeed, been sufficiently acute to seek to avoid this difficulty by not treating space as a condition of the possibility of the objects of outer intuition (bodies), but by taking these and the

dynamical relation of substances as the condition of the possibility of space. But we have a concept of bodies only as appearances, and as such they necessarily presuppose space as the condition of the possibility of all outer appearance."

How Kant, after writing these words, should still have left standing the proof which he has given of the thesis may be partially explained as due to the continuing influence of his earlier view, according to which antinomy represents not a conflict between opposing views of the world of ordinary consciousness, but between the demands of pure thought and the forms of sensuous existence. That older view of antinomy here gains the upper hand, notwithstanding its lack of agreement with the general scheme of the *Dialectic*.

There is a further inconsistency in Kant's procedure which may perhaps be taken as indicating the early origin of this portion of the *Critique*. He presents the mathematical proof of the continuity of matter as conclusive. Yet in the *Metaphysical First Principles of Natural Science* (1786) he most emphatically states that "the infinite divisibility of matter is very far from being proved through proof of the infinite divisibility of space."

Russell, in discussing the thesis and antithesis on their merits, from the point of view of certain present-day mathematical theories, makes the following criticism of Kant's procedure.

"Here, again, the argument applies to things in space and time, and to all collections, whether existent or not.... And with this extension the proof of the proposition must, I think, be admitted; only that *terms* or *concepts* should be substituted for *substances*, and that, instead of the argument that relations between substances are accidental (*zufällig*), we should content ourselves with saying that relations imply terms and complexity implies relations."

Russell further argues that Kant's assumption in the antithesis, that "space does not consist of simple parts, but of spaces," cannot be granted. It

"...involves a covert use of the axiom of finitude, *i.e.* the axiom that, if a space does consist of points, it must consist of some finite number of points. When once this is denied, we may admit that no finite number of divisions of a space will lead to points, while yet holding every space to be composed of points. A finite space is a whole consisting of simple parts, but not of any finite number of simple parts. Exactly the same thing is true of the stretch between 1 and 2. Thus the antinomy is not specially spatial, and any answer which is applicable in Arithmetic is applicable here also. The thesis, which is an essential postulate of Logic, should be accepted, while the antithesis should be rejected."

But, as above observed, those mathematicians who adopt this view so alter the meaning of the term point that it would perhaps be equally true to say that the thesis, as thus interpreted by Russell, coincides with what Kant believes himself to be asserting in the antithesis.

THIRD ANTINOMY

Thesis. — Causality according to the laws of nature is not the only causality from which the appearances of the world can be deduced. There is also required for their explanation another, that of freedom.

Proof. — Let us assume the opposite. In that case everything that happens presupposes a previous state upon which it follows according to a rule. That previous state is itself caused in similar fashion, and so on *in infinitum*. But if everything thus happens according to the mere laws of nature, there can never be a first beginning, and therefore no completeness of the series on the side of the derivative causes. But the law of nature is that nothing happens without a cause *sufficiently* determined *a priori*. If, therefore, all causality is possible only according to the laws of nature, the principle contradicts itself when taken in unlimited universality. Such causality cannot therefore be the sole causality possible. We must admit an absolute spontaneity, whereby a series of appearances, that proceed according to laws of nature, begins by itself.

Criticism. — The vital point of this argument lies in the assertion that the principle of causality calls for a *sufficient* cause for each event, and that such sufficiency is not to be found in natural causes which are themselves derivative or conditioned. As the antecedent series of causes for an event can never be traced back to a first cause, it can never be completed, and can never, therefore, be sufficient to account for the event under consideration. Either, therefore, the principle of causality contradicts itself, or some form of free self-originative causality must be postulated. This argument cannot be accepted as valid. Each natural cause is sufficient to account for its effect. That is to say, the causation is sufficient *at each stage*. That the series of antecedent causes cannot be completed is due to its actual infinitude, not to any insufficiency in the causality which it embodies. To prove his point, Kant would have to show that the conception of the actual infinite is inherently self-contradictory; and that, as we have already noted, he does not mean to assert. His argument here lies open to the same criticism as we have already passed upon his argument in proof of the thesis of the first antinomy.

Antithesis. — There is no freedom; everything in the world proceeds solely in accordance with laws of nature.

Proof. — Let us assume the opposite. Free causality, *i.e.* the power of absolute origination, presupposes the possibility of a state of the cause which has no causal connection with its preceding state, and which does not follow from it. But this is opposed to the law of causality, and would render unity of experience impossible. Freedom is therefore an empty thought-entity (*Gedankending*), and is not to be met with in any experience.

Criticism. — We may first observe the strange relation in which the proof of the thesis stands to that of the antithesis. According to the former, freedom must be postulated because otherwise the principle of causality would contradict itself. According to the latter, freedom is impossible, and for the same reason. Now, as Erhardt has pointed out, a principle cannot be reconciled with itself through the making of an assumption which contradicts it. That would only be the institution of a second contradiction, not the removal of the previous conflict. If the proof of the thesis be correct, that of the antithesis must be false; if the proof of the antithesis be correct, that of the thesis must be invalid. For though the thesis and the antithesis may themselves contradict one another, such conflict must not exist between the grounds upon which they establish themselves. If the reasons cited in their support are contradictory of one another, the total argument is rendered null and void. The supporting proofs being contradictory of one another, nothing whatsoever has been established. There will remain as a pressing and immediate problem the task of distinguishing the truth from among the competing alternatives; and until this has been done, the argument cannot proceed. The assumption of freedom either does or does not contradict the principle of causality. Antinomy is not the simple assertion that both A and not-A are true, but that A and not-A, though contradictory of one another, can both be established by arguments in which such contradiction does not occur.

The proof given of the thesis would seem, as already noted, to be untenable. The principle of natural causality is not self-contradictory. What now is to be said regarding the proof of the antithesis? If the principle of natural causality be formulated as asserting that every event has an *antecedent* cause determining it to exist, then certainly free, spontaneous, or self-originating causality is excluded. Here, as in Kant’s proof of the antithesis of the first antinomy, everything depends upon definition of the terms employed. It must be borne in mind that the antinomies are asserted to exist only on the dogmatic level. Critical considerations must not, therefore, be allowed to intervene. Now for ordinary consciousness the concept of causality has a very indefinite meaning, and a very wide application. Causation may be spontaneous as well as mechanical, spiritual as well as material. All possibilities lie open, and no mere reference to the concept of causal dependence suffices to decide between them. Free causality, so far as *dogmatic* analysis of the causal postulate can show to the contrary, may or may not be possible. Kant has failed to establish the antithesis save by the surreptitious introduction of conclusions which presuppose

the truth of his Critical teaching. This is especially shown in the emphasis laid upon 'unity of experience.' The further statement that freedom means lawlessness is only true if Kant's teaching is mutilated by reduction merely to its assertion of the objective validity of the mechanistic principles of natural science. Kant is both running with the hare and hunting with the hounds.

Though this antinomy is chiefly concerned with the problem of freedom, *i.e.* of spontaneous origination *within* the world, the proof of the thesis refers only to the cosmological problem of a first cause. The reasons of this oscillation we shall have occasion to consider in dealing with the fourth antinomy. The terms world and nature play the same ambiguous part as in the antithesis of the first antinomy; they tend to be employed in the narrower, mechanistic sense of Kant's own Critical teaching.

FOURTH ANTINOMY

As the proofs of the thesis and antithesis proceed on lines identical with those of the third antinomy, I shall omit detailed statement of them. Kant again argues from the fact that every change has a condition which precedes it in time. There is no difference in the proofs themselves, but only in the nature of the inference which they are made to support. In the third antinomy they lead to the assertion and denial of free causality; in the fourth antinomy they lead to the assertion and denial of an absolutely necessary being. The assertion is required in order to save the principle of causality from self-contradiction; the denial is also necessary, and for the same reason. The illegitimacy of this procedure has already been pointed out. Though the thesis and the antithesis will, if antinomy be assumed to represent an actual conflict, contradict one another, no such conflict is allowable in the grounds which profess to establish them. We must not assert, as *argument*, that both A and not-A are true.

In the *Observation* on the antithesis Kant has himself taken notice of this "strange" situation.

"From the same ground on which, in the thesis, the existence of an original being was inferred, its non-existence is inferred, and that with equal stringency."

A necessary being is inferred to exist, because the past series of events cannot contain all the conditions of an event, unless the unconditioned is to be found among them. A necessary being is denied to exist, because the series of merely conditioned events contains all the conditions that there are. Kant's defence of this procedure is as follows:

"Nevertheless, the method of argument in both cases is entirely in conformity even with ordinary human reason, which frequently falls into conflict with itself from considering its object from two different points of view. M. de Mairan regarded the controversy between two famous astronomers, which arose from a similar difficulty in regard to choice of standpoint, as a sufficiently remarkable phenomenon to justify his writing a special treatise upon it. The one had argued that *the moon revolves on its own axis*, because it always turns the same side towards the earth. The other drew the opposite conclusion that *the moon does not revolve on its own axis*, because it always turns the same side towards the earth. Both inferences were correct, according to the point of view which each chose in observing the moon's motion."

This example is not really relevant. In spite of Kant's assertion to the contrary, the point of view is one and the same in thesis and in antithesis. In both cases the absolutely necessary being is viewed as the first of the changes in the world of sense. To maintain that when thus viewed it both is and is not demanded by the law of causality, is as impossible as to assert that in one and the same meaning of our terms the moon both does and does not revolve on its own axis.

That the proofs of the fourth antinomy are identical with those of the third is due to the fact that Kant, under the stress of his architectonic, is striving to construct four antinomies while only three are really distinguishable. The third and fourth antinomies coincide as formulations of the problem whether or not the conditioned implies, and originates in, the unconditioned. The precise determination of this unconditioned, whether as free causality or as a necessary being, or in any other way, is a further problem, and does not properly fall within the scope of the *cosmological* inquiries, which are alone in

place in this division of the *Critique*.

The manner in which Kant, in treating of freedom, makes the transition from the cosmological (or theological) unconditioned to the psychological is significant. The cosmological unconditioned is proved to exist by the argument of the thesis, and its existence is at once interpreted as establishing at least in this one case the actuality of free spontaneous causality. Kant remarks that this

"...transcendental Idea of freedom does not by any means constitute the entire content of the psychological concept of that name, which is mainly empirical, but only that of absolute spontaneity of action.... The necessity of a first beginning, due to freedom, of a series of appearances we have demonstrated only in so far as it is required for the conceivability of an origin of the world.... But as, after all, the power of spontaneously originating a series in time has thus been proved (though not understood), it is now permissible for us to admit within the course of the world different series as capable in their causality of beginning of themselves, and so to attribute to their substances a power of acting from freedom."

That each such successive series in the world can only have a relatively primary beginning, and must always be preceded by some other state of things, is no sufficient objection to such causality.

"For we are here speaking of an absolutely first beginning not in time, but in causality. If, for instance, I at this moment arise from my chair in complete freedom, without being necessarily determined thereto by the influence of natural causes, a new series, with all its natural consequences *in infinitum*, has its absolute beginning in this event, although the event itself is only, with regard to time, the continuation of a preceding series."

Thus Kant's proof of freedom in the thesis of the third antinomy is merely a corollary from his proof of the existence of a cosmological or theological unconditioned; and further, this freedom is not, like the cosmological unconditioned, proved to exist, but only to be "admissible" as a possibility. Similarly in the antithesis, the only disproof of freedom is the disproof of unconditioned causality *in general*. The antinomy deals with the general opposition and relation between the contingent and the unconditioned.

It is this same opposition exactly which constitutes the subject-matter of the fourth antinomy. The terms used are different, but their meanings are one and the same. For though Kant substitutes 'absolutely necessary being' for 'unconditioned causality,' the former is still conceived as belonging to the world of sense, as the unconditioned origin of its changes. And as Kant is careful to add, only the causal, cosmological argument can be employed to establish the existence of an absolutely necessary being; nothing can legitimately be inferred from the mere Idea. The verbal change is consequently verbal only; the argument of the fourth antinomy coincides in result no less than in method of proof with the argument of the third. It is impossible to define the unconditioned in any more specific fashion save by an enquiry which entirely transcends the scope of the argument that Kant is here presenting. Kant's procedure also lies open to the further objection that the conception of an absolutely necessary being, which he here introduces without preliminary analysis or explanation, is later shown by him to be devoid of significance. He employs it, but precludes himself from either investigating it or from drawing any serviceable consequences from it. The situation is not without the elements of comedy. In order to seem to mark a real distinction between the fourth and the third antinomies, Kant has perforce to trespass upon the domain of theology; but as he is aware that the trespass is forbidden, he seeks to mitigate the offence by returning from the foray empty-handed. To such unhappy straits is he again reduced by his over-fond devotion to architectonic.

SECTION III

THE INTEREST OF REASON IN THIS SELF-CONFLICT

This section, though extremely important, requires no lengthy comment. It is lucid and straightforward. It may be summarised as follows. The theses and the antitheses rest upon diverse and conflicting interests. The theses, though expressed in dry formulas, divested of the empirical features through which alone their true grandeur can be displayed, represent the proud pretensions of dogmatic Reason. The antitheses give expression to principles of pure empiricism. The former are supported by interests of a practical and popular character: upon them morals and religion are based. The latter, while conflicting with our spiritual interests, far exceed the theses in their intellectual advantages. This explains

"...the zelotic passion of the one party, and the calm assurance of the other, and why the world hails the one with eager approval, and is implacably prejudiced against the other."

No legitimate objection could be raised against the principles of the empirical philosopher, if he sought only to rebuke the rashness and presumption of Reason when it boasts of *knowledge*, and when it represents as *speculative insight* that which is grounded only in *faith*.

"But when empiricism itself, as frequently happens, becomes dogmatic ..., and confidently denies whatever lies beyond the sphere of its intuitive knowledge, it betrays the same lack of modesty; and that is all the more reprehensible owing to the irreparable injury which is thereby caused to the practical interests of Reason."

Each party asserts more than it knows. The one allows our practical interests to delude Reason as to its inherent powers; the other would so extend empirical knowledge as to destroy the validity of our moral principles. Kant regards the opposition as being historically typified by the contrasted systems of Platonism and Epicureanism. It befits us, as self-reflecting beings, to free ourselves, at least provisionally, from the partiality of those divergent interests, and by application of "the sceptical method," unconcerned about consequences, to penetrate to the primary sources of this perennial conflict. As Kant states in the next section, the conflict is of such a character as to be genuinely resolvable.

This section must have been written, or at least first sketched, at the time when Kant still intended to bring his whole criticism of the metaphysical sciences within the scope of his doctrine of antinomy.

SECTION IV

OF THE TRANSCENDENTAL PROBLEMS OF PURE REASON, IN SO FAR AS THEY ABSOLUTELY MUST BE CAPABLE OF SOLUTION

There are sciences the very nature of which requires that every question which can occur in them must be completely answerable from what can be presumed to be known. This is true of the science of ethics. When I ask to what course of action I am committed in moral duty, the question must be answerable in terms of the considerations which have led to its being propounded. For there can be no moral obligation in regard to that of which we cannot have knowledge. We must not plead that the problem is unanswerable; a solution must be found. Kant proceeds to argue that this is no less true of transcendental philosophy.

"...it is unique among speculative sciences in that no question which concerns an object given to pure Reason is insoluble for this same human Reason, and that no excuse of an unavoidable ignorance, or of the unfathomable depth of the problem, can release us from the obligation to answer it thoroughly and completely. That very concept which enables us to ask the question must also qualify us to answer it, since, as in the case of right and wrong, the object is not to be met with outside the concept."

The third and fourth paragraphs would seem to be later interpolations. The section, like Section III., must have been written at the time when Kant still regarded the doctrine of antinomy as covering the entire

field of metaphysics. Transcendental philosophy is identified with cosmology, as dealt with in the antinomies. But in the third paragraph the former is taken as a wider term. Also, in the first two paragraphs the problems of pure Reason are regarded as soluble because their objects are not to be met with outside the concepts of them; whereas in the third paragraph they are viewed as soluble because their object is given empirically. Again, in the second paragraph transcendental philosophy has been taken as unique among speculative [*i.e.* theoretical] sciences; in the fourth paragraph mathematics is placed alongside it.

Examination of this section as a whole (and the same is true of the immediately following section) justifies the conclusion that at the time when it was written Kant regarded the Ideas of Reason as having a purely and exclusively regulative function, and consequently as exhausting their inherent meaning in their empirical reference. He regards them as entirely lacking in metaphysical significance. They are invented by Reason for Reason's own satisfaction, and must therefore yield in their internal content the explanation of their existence, and must also supply a complete and thorough answer to all problems which are traceable to them. A dogmatic (*i.e.* ontological) solution of the antinomies is, as we have already found, impossible; the Critical solution considers the question subjectively,

"...in accordance with the foundation of the knowledge upon which it is based." "For your object is only in your brain, and cannot be given outside it; so that you have only to take care to be at one with yourself, and to avoid the amphiboly which transforms your Idea into a supposed representation of an object which is empirically given and therefore to be known according to the laws of experience."

Kant's argument in proof of this purely subjective interpretation of the Ideas consists in showing that they are not presented in any given appearances, and are not even necessary to explain appearances. The unconditioned, whether of quantity, of division, or of origination, has nothing to do with any experience, whether actual or possible.

"You would not, for instance, in any wise be able to explain the appearances of a body better, or even differently, if you assumed that it consists either of simple or of inexhaustibly composite parts; for neither a simple appearance nor an infinite composition can ever come before you. Appearances demand explanation only in so far as the conditions of their explanation are given in perception, [and the unconditioned can never be so given]."

This standpoint, at once sceptical and empirical, is further developed in the next section.

SECTION V

SCEPTICAL REPRESENTATION OF THE COSMOLOGICAL QUESTIONS

Applying the "sceptical method," Kant argues that even supposing one or other party could conclusively establish itself through final refutation of the other, no advantage of any kind would accrue. The victory would be a fruitless one, and the outcome "mere nonsense." The sole validity of the Ideas lies in their empirical reference; and yet that reference is one which proves them to be, when objectively interpreted, entirely meaningless. The cosmological Idea is always either too large or too small for any concept of the understanding. No matter what view is taken, the only possible object (viz. that yielded by experience) will not fit into it. If the world has no beginning, or is infinitely divisible, or has no first cause, the regress transcends all empirical concepts; while if the world has a beginning, is composed of simple parts, and has a first cause, it is too small for the concepts through which alone it can be experienced. In other words, the cosmological Ideas are always either too large or too small for the empirical regress, and therefore stand condemned by sense-experience, which can alone impart relation to an object, *i.e.* truth and meaning to any concept. For, as Kant explicitly states, *we must not reverse this*

relation and condemn empirical concepts, as being in the one case too small, and in the other case too large for the Idea. Experience, not Ideas, is the criterion alike of reality and of truth.

"The possible empirical concept is, therefore, the standard by which we must judge whether the Idea is mere Idea and thought-entity (*Gedankending*), or whether it finds its object in the world."

When two things are compared, that for the sake of which the other exists is the sole proper standard. We do not say "that a man is too long for his coat, but that the coat is too short for the man." We are thus confirmed in the view that the antinomies rest upon a false view of the manner in which the object of the cosmological Ideas can be given; and are set upon the track, followed out in the next section, of the illusion to which they are due.

This reduction of the Ideas to mere thought-entities is one of the two alternative views which, as we have already stated, compete with one another throughout the entire *Dialectic*. We may, for instance, compare the above explanation of the conflict between the Ideas and experience with that given in A 422 = B 450. In the latter passage the antinomies are traced to a conflict between Reason and understanding. If the unity is adequate to the demands of Reason, it is too great for the understanding; if it is adequate to the understanding, it is too small for Reason. Kant does not here allow that the claims of Reason are *ipso facto* condemned through the incapacity of experience to fulfil them. On the contrary, he implies that it is through the Ideas that we come to realise the merely phenomenal character of everything experienced.

Our task, in this Commentary, is only to distinguish the passages in which those two conflicting tendencies appear, and to trace the consequences which follow from Kant's alternation between them. Discussion of their significance had best be deferred to the close of the *Dialectic*, where Kant dwells upon the regulative function of Reason. At present we need merely note that the main content of the above sections, in which the sceptical view is expounded, is of early date, prior to the working out of the *Paralogisms* and of the *Ideal*.

SECTION VI

TRANSCENDENTAL IDEALISM AS THE KEY TO THE SOLUTION OF THE COSMOLOGICAL DIALECTIC

In this section subjectivism is dominant. The type of transcendental idealism expounded is that earlier and less developed form which connects with the doctrine of the transcendental object. It shows no trace of Kant's maturer teaching. No distinction is drawn between representation and the objects represented. To the transcendental object, the "purely intelligible cause" of appearances in general, and to it alone, Kant ascribes "the whole extent and connection of our possible perceptions." Appearances exist only in the degree to which they are constructed in experience. As they are mere representations, they cannot exist outside the mind. Independently of such construction, they may indeed be said to be given in the transcendental object, but they only become objects to us on the supposition that they can be reached through extension of the series of our actual perceptions. It is in this form alone, as conceived in a regressive series of possible perceptions, and not as having existed in itself, that even the immemorial past course of the world can be represented as real;

"...so that all events which have taken place in the immense periods that have preceded my own existence mean really nothing but the possibility of extending the chain of experience from the present perception back to the conditions which determine it in time."

A similar interpretation has to be given to all propositions which assert the present reality of that which has never been actually experienced.

"In outcome it is a matter of indifference whether I say that in the empirical progress in space I can

meet with stars a hundred times farther removed than the outermost now perceptible to me, or whether I say that they are perhaps to be met with in cosmical space even though no human being has ever perceived or ever will perceive them. For even if they were given as things in themselves, without relation to possible experience, they are still nothing for me, and therefore are not objects, save in so far as they are contained in the series of the empirical regress."

The distinction between appearances and things in themselves must always, Kant observes, be borne in mind when we are interpreting the meaning of our empirical concepts; and this is especially necessary when those concepts are brought into connection with the cosmological Idea of an unconditioned. The antinomies are due to a failure to appreciate this fundamental distinction, and the key to their solution lies in its recognition.

"It would be an injustice to ascribe to us that long-decried empirical idealism which, while it admits the genuine actuality of space, denies the existence of the extended beings in it...."

This is in line with the passages from the *Prolegomena* commented upon above.

SECTION VII

CRITICAL DECISION OF THE COSMOLOGICAL CONFLICT OF REASON WITH ITSELF

Kant's argument is as follows. The antinomies rest upon the principle that if the conditioned be given, the entire series of all its conditions is likewise given. If the objects of the senses were independently real, there would be no escape from this assumption, and the dialectical conflict would consequently be irresolvable. Transcendental idealism, as above stated, reveals a way out of the dilemma. As appearances are merely representations, their antecedent conditions do not exist *as appearances*, save in the degree in which they are mentally constructed. Though the appearances are given, their *empirical* conditions are not thereby given. The most that we can say is that a regress to the conditions, *i.e.* a continued empirical synthesis in that direction, is *commanded* or *required*. The cosmological argument can thus be shown to be logically invalid. The syllogism, which it involves, is as follows:

If the conditioned be given, the entire series of all its conditions is likewise given.

The objects of the senses are given.

Therefore the entire series of all their conditions is likewise given.

In the major premiss the concept of the conditioned is employed transcendently (Kant says transcendentally), in the minor empirically. But though the inference thus commits the logical fallacy of *sophisma figurae dictionis*, the ground of its occurrence, and the reason why it is not at once detected, lie in a natural and inevitable illusion which leads us to accept the sensible world in space as being independently real. Only through Critical investigation can the deceptive power of this illusion be overcome. Owing to its influence, the above fallacy has been committed by dogmatists and empiricists alike. It can be shown that in refuting each other

... "they are really quarrelling about nothing, and that a certain transcendental illusion has caused them to see a reality where none is to be found."

The existence of antinomy, Kant further argues, presupposes that theses and antitheses are contradictory opposites, *i.e.* that no third alternative is possible. When opposed assertions are not contradictories but contraries, the opposition, to use Kant's terms, is not analytical but dialectical. Both may be false; for the one does not merely contradict the other, but makes, in addition, a further statement on its own account. Now examination of the illusion above described enables us to perceive that the opposites, in reference to which antinomy occurs, are of this dialectical character. *Theses and antitheses are alike false.* Since the world does not exist as a thing in itself, it exists neither as an infinite whole nor as a finite whole, but only

in the degree in which it is constructed in an empirical regress. We must not apply “*the Idea of absolute totality, which is valid only as a condition of things in themselves*,” to appearances. (The words which I have italicised mark the emergence of Kant’s non-sceptical, non-empirical view of the nature and function of the Ideas of Reason.) Thus antinomy, rightly understood, does not favour scepticism, but only the “sceptical method,” and indeed yields an indirect proof of the correctness of Critical teaching. This proof may be presented in the form of a dilemma. If the world is a whole existing in itself, it is either finite or infinite. But the former alternative is refuted by the proofs given of the antitheses, and the latter alternative by the proofs of the theses. Therefore the world cannot be a whole existing in itself. From this it follows that appearances are nothing outside our representations; and that is what is asserted in the doctrine of transcendental idealism.

In A 499 = B 527 Kant uses ambiguous language, which can be interpreted as asserting that in the regress there can be no lack of given conditions. Such a statement would presuppose positive knowledge regarding the unknown transcendental object. The opposite, more correct, view is given in A 514-15 = B 542-3 and A 517 ff. = B 545 ff., though in the latter passage with a reversion to the above position.

The earlier manuscripts, which Kant has so far been employing, probably terminate either, as Adickes suggests, at the end of this section, or at the close of Section VIII., which is of doubtful date. Section IX. is certainly from a later period; it represents a more complex standpoint, in which Reason is no longer viewed as possessing a merely empirical function, and in which consequently the theses and antitheses are no longer indiscriminately denounced as being alike false. Under the influence of his later, more Idealistic preoccupations, Kant so far modifies the above solution as to assert *that in the ease of the last two antinomies both theses and antitheses are true, when properly interpreted*.

SECTION VIII

THE REGULATIVE PRINCIPLE OF PURE REASON IN REGARD TO THE COSMOLOGICAL IDEAS

The principle of pure Reason, correctly formulated, is that when the conditioned is given a regress upon the totality of its conditions is *set as a problem*. As such it is valid,

“...not indeed as an *axiom* ... but as a *problem* for the understanding ..., leading it to undertake and to continue, according to the completeness in the Idea, the regress in the series of conditions of any given conditioned.”

It does not anticipate, prior to the regress, what actually exists as object, but only postulates, in the form of a rule, how the understanding ought to proceed. It does not tell us whether or how the unconditioned exists, but how the empirical regress is to be carried out under the guidance of a mere Idea. Such a rule can be regulative only, and the Idea of totality which it contains must never be invested with objective reality. As the absolutely unconditioned can never be met with in experience, we know, indeed, beforehand that in the process of the regress the unconditioned will never be reached. But the duty of seeking it by way of such regress is none the less prescribed.

Kant proceeds to give a somewhat bewildering account of the familiar distinction between *progressus in infinitum* and *progressus in indefinitum*, and to draw a very doubtful distinction between the series in division of a given whole and the series in extension of it. The illustration from the series of human generations is an unfortunate one; the discovery that it began at some one point in the past would not necessarily violate any demand of Reason. Such a series is not comparable with those of space, time, and causality. The only important result of this digression is the conclusion that whatever demand be made, whether of regress *in infinitum* or of regress *in indefinitum*, in neither case can the series of conditions be regarded as being given as infinite in the object.

“The question, therefore, is no longer how great this series of conditions may be in itself, whether finite or infinite, for it is nothing in itself; but how we are to carry out the empirical regress, and how far we should continue it.”

We have already noted Kant’s ambiguous suggestion in A 499 = B 527, that in the empirical regress there can be no lack of given conditions. The statement, thus interpreted, is illegitimate. The most that he can claim is that, were further sensations not forthcoming, we should still have to conceive those last obtained as being preceded by empty space and time, and as lacking in any experienced cause. Under such circumstances we should experience neither finitude nor unconditionedness, but only incapacity to find a content suitable to the inexhaustible character of the spatial and temporal conditions of experience, or in satisfaction of our demand for causal antecedents. In A 514-15 = B 542-3 Kant shows consciousness of this difficulty, but in dealing with it adopts a half-way position which still lies open to objection. He recognises that, since no member of a series can be empirically given as absolutely unconditioned, a higher member is always *possible*, and that the search for it is therefore prescribed; none the less he asserts that in regard to *given wholes* we are justified in taking up a very different position, namely, that the regress in the series of their internal conditions does not proceed, as in the above case, *in indefinitum*, but *in infinitum*, *i.e.* that in this case more members *exist and are empirically given* than we can reach through the regress. In given wholes we are commanded to *find* more members; in serial extension we are justified only in *inquiring* for more. This half-way position is a makeshift, and is in no respect tenable. The evidence for the infinite extensibility of space and time is as conclusive as for their infinite divisibility. And when we consider sensuous existence under these forms, it is just as possible that the transcendental object may, beyond a certain point, fail to supply material for further division, as that it may fail to yield data for further expansion. What Kant asserts of the latter, that further advance must always remain as a possibility, and for that Reason must always call for the open mind of further inquiry, without any attempted anticipatory assertion either *pro* or *contra*, alone represents the true Critical standpoint. The cessation of data may really, however, be due to an increase in the subtlety of the conditioning processes that incapacitates them from acting upon our senses; by indirect means this disability may be overcome. Reason, in its conception of an unconditioned, prescribes to us a task that is inexhaustible in its demands. We have no right to lay down our intellectual arms before any barrier however baffling, or to despair before any chasm however empty and abrupt.

SECTION IX

THE EMPIRICAL EMPLOYMENT OF THE REGULATIVE PRINCIPLE OF REASON IN REGARD TO ALL COSMOLOGICAL IDEAS

SOLUTION OF THE FIRST AND SECOND ANTINOMIES

Statement. — The fundamental fact upon which, as Kant has already stated, the regulative principle of Reason is based, is that it is impossible to experience an absolute limit. It is always *possible* that a still higher member of the series may be found; and that being so, it is our duty to search for it. But as we are here dealing with possibilities only, the regress is *in indefinitum*, not *in infinitum*.

“...we must seek the concept of the quantity of the world only according to the rule which determines the empirical regress in it. This rule says no more than that however far we may have attained in the series of empirical conditions, we should never assume an absolute limit, but should subordinate every appearance, as conditioned, to another as its condition, and that we must then advance to this condition. This is the *regressus in indefinitum*, which, as it determines no quantity in the object, is clearly enough

distinguishable from the *regressus in infinitum*."

We are acquainted only with the rule, and not with the whole object. Any assertion, therefore, which we can make, must be dictated solely by the rule, and be an expression of it. Neither the thesis nor the antithesis of the first antinomy is valid; there is a third alternative. The sensible world is neither finite nor infinite in extent; it is infinitely extensible, in terms of the rule.

Unfortunately Kant is not content to leave his conclusion in this form. He complicates his argument, and bewilders the reader, by maintaining that this is a virtual acceptance of the antithesis, in that we assert negatively, that an absolute limit in either time or space is empirically impossible; and affirmatively, that the regress goes on *in indefinitum*, and consequently has no absolute quantity.

Kant also repeats the argument of the preceding section in regard to given wholes. When the problem is that of subdivision, the regress starts from a given whole, and therefore from a whole whose conditions (the parts) are given with it. The division is, therefore, *in infinitum*, and not merely *in indefinitum*. This does not, however, he argues, mean that the given whole consists of infinitely many parts. For though the parts are contained in the intuition of the whole, yet the whole division arises only through the regress that generates it. It is a *quantum continuum*, not a *quantum discretum*. This argument has been criticised above. Kant here ignores the possibility that the parts of matter, though extended, may be physically indivisible, or that they may be centres of force which control, but do not occupy, a determinate space.

REMARKS ON THE DISTINCTION BETWEEN THE MATHEMATICAL-TRANSCENDENTAL AND THE DYNAMICAL-TRANSCENDENTAL IDEAS

Statement. — Kant again introduces the distinction between the mathematical and the dynamical. The mathematical Ideas synthesise the homogeneous, the dynamical may connect the heterogeneous. In employing the former we must therefore remain within the phenomenal; through the latter we may be able to transcend it. The way is thus opened for propounding, in regard to the third and fourth antinomies, a solution in which the pretensions of Reason no less than those of understanding may find satisfaction. Whereas both the theses and the antitheses of the first and second antinomies have to be declared false, those of the third and fourth antinomies *may both be true* — the theses applying to the intelligible realm, and the antitheses to the world of sense.

Comment. — When the distinction between the mathematical and the dynamical is thus extended from the categories to the Ideas, its validity becomes highly doubtful. Space and time are certainly themselves homogeneous, and the categories of quality and quantity, in so far as they are mathematically employed, may perhaps be similarly described. But when the term is still further extended, to cover the pairs of correlative opposites with which the first two antinomies deal, those, namely, between the limited and the unlimited, the simple and the infinitely divisible, Kant would seem to be making a highly artificial distinction. The first two antinomies deal not with space and time as such, but with the sensible world in space and time; and within this sensible world, even in its quantitative aspects, qualitative differences have to be reckoned with. Common sense does, indeed, tend to assume that the unlimited and the simple must, like that which they condition, be in space and time, and so form with the conditioned a homogeneous series. But this assumption ordinary consciousness is equally disposed to make in regard to a first cause and to the unconditionally necessary.

Kant further attempts to distinguish between the mathematical and the dynamical by asserting that the dynamical antinomies are not concerned with the quantity of their object, but only with its *existence*. He admits, however, that in all four cases a series arises which is either too large or too small for the understanding; and that being so, in each case the problem arises as to the *existence* of an unconditioned.

The artificiality of Kant's distinction becomes clear when we recognise that the opposed solutions, which he gives of the two sets of antinomies, can be mutually interchanged. As the sensible world rests

upon intelligible grounds, both the theses and the antitheses of the first two antinomies may be true, the former in the intelligible realm and the latter in the sensuous. Similarly, both the theses and antitheses of the third and fourth antinomies may be false. In the sensible world, about which alone anything can be determined, the series of dynamical conditions forms neither a finite nor an infinite series. There is a third alternative, akin to that of the antitheses, but distinct in character from it, namely, that the series is infinitely extensible. Kant's differential treatment of the two sets of antinomies is arbitrary, and would seem to be due to his having attempted to superimpose, with the least possible modification, a later solution of the antinomies upon one previously developed. In the earlier view, as we have already had occasion to observe, Reason has a merely empirical application. Its Ideas are taken as existing "only in the brain." Only their empirical reference can substantiate them, or indeed give them the least significance. And as they are by their very nature incapable of empirical embodiment, all assertions which involve them must necessarily be false. Later, Kant came to regard Reason as having its own independent rights. Encouraged by his successful establishment of the objective validity of the categories, progressively more and more convinced of the importance of the distinction, which that proof reinforced, between appearances and things in themselves, and preoccupied with the problems of the spiritual life, his old-time faith in the absolute claims of pure thought reasserted itself. Through Reason we realise our kinship with noumenal realities, and through its demands the nature of the unconditioned is foreshadowed to the mind. The theses and antitheses, which throughout the entire history of philosophy have competed with one another, may both be true. Their perennial conflict demonstrates the need for some more catholic standpoint from which the two great authorities by which human life is controlled and directed, the intellectual and the moral, may be reconciled. Neither can be made to yield to the other; each is supreme in its own field. The distinction between appearances and things in themselves, recognition of which is the first step towards an adequate theory of knowledge, and without which the nature of the intellectual life remains self-contradictory and incomprehensible, itself affords the means of such a reconciliation. The understanding is the sole key to the world of appearance, the moral imperative to the realm of things in themselves. Reason with its demand for the unconditioned mediates between them, and enables us to realise our dual vocation.

This radical alteration of standpoint was bound to make the employment of manuscript representing the earlier and more sceptical attitude altogether unsatisfactory; and only Kant's constitutional unwillingness to sacrifice what he had once committed to paper can account for his retention of the older expositions. He allows his previous treatment of the first two antinomies to remain in its sceptical form, and, by means of the distinction between the mathematical and the dynamical, develops his newer, more Idealist view exclusively in reference to the third and fourth antinomies. That it is no less applicable to the others, we have already seen.

Though the Idealist view, *as here expounded*, may be thus described, relatively to the sceptical view of Reason, as later, that is not to be taken as meaning that it represents the latest stage in the development of Kant's Critical teaching. It seems to belong to the period prior to that in which the central sections of the *Analytic* were composed. The evidence for this consists chiefly in its subjectivist references to the nature of appearances. It would seem to be contemporary with Kant's doctrine of the transcendental object.

SOLUTION OF THE THIRD ANTINOMY

Statement. — As appearances are representations only, they must have a ground which is not itself an appearance; and though the effects of such an intelligible cause appear, and accordingly are determined through other appearances, its causality is not itself similarly conditioned. Both it and its causality lie outside the empirical series; only the effects fall within the realm of experience. And that causality, not being subject to time, does not require to stand under another cause as its effect. In this way Kant derives

from his transcendental idealism an explanation of the possibility of an action being at once free and causally determined. This explanation he takes as applying either to a first cause of the whole realm of natural phenomena or to a finite being regarded as a free agent. The proof of the possibility of this metaphysical, or, as Kant entitles it, "transcendental freedom," removes what has always been the real difficulty that lay in the way of "practical freedom." The conception of freedom is a transcendental Idea which can neither be derived from experience nor verified by it. It is created by Reason for itself; and reveals the *possibility* that in this third antinomy both thesis and antithesis may be true. The alternatives— "every effect must arise from nature," and "every effect must arise from freedom" — are not exclusive of one another. They may be true of one and the same event in different relations. The event may be free in reference to its intelligible cause, determined as an existence in space and time. Were appearances things in themselves, freedom and causality would necessarily conflict: by means of the above ontological distinction freedom can be asserted without any diminution in the scope allowed to the causal principle. All events, without a single possible exception, are subject to the law of natural determination; and yet every event may *at the same time* proceed from a free cause.

POSSIBILITY OF HARMONISING CAUSALITY THROUGH FREEDOM WITH THE UNIVERSAL LAW OF NATURAL NECESSITY

Statement. — The above conclusion is so seemingly paradoxical that Kant devotes this and the following section to its further elucidation. How can events be both free and determined? The answer lies in recognition of the two-sided character of every natural existence. It is, in one aspect, mere appearance; in another, it has at its foundation a transcendental object. It is an appearance of the latter, and for its complete comprehension this latter must be taken into account. Now there is nothing to *prevent* us from attributing to the transcendental object a causality which is not phenomenal. Such causality may make the appearance just that appearance which it is. In the world of sense every efficient cause must have a specific empirical character, since only so can it determine one effect rather than another according to the universal and invariable law expressive of its nature. We must similarly allow to the transcendental object an intelligible character, and trace to it all those appearances which as members of the empirical series stand to one another in unbroken causal connection. This transcendental object, owing to its intelligible character, is not in time. Its act does not either arise or perish, and is not, therefore, subject to the law of empirical determination which applies only to the changeable, *i.e.* to events subsequent upon previous states. Such supersensuous causality can find no place in the series of empirical conditions, and though it can be conceived only in terms of the empirical character which is its outcome, the difference between it and natural causality may be as complete as that which subsists between the transcendental and the empirical objects of knowledge. In its empirical character the action is a part of nature, and enters into a causal nexus which conforms to universal laws. All its effects are inevitably determined by antecedent natural conditions. In its intelligible character, however, this same active subject must be considered free from all influence of sensibility and from all determination through natural events. In so far as it is a noumenon, there can be no change in it, and therefore nothing which is capable of explanation in terms of natural causes. Even its empirical effects are not traceable to it as events in time. For as events these effects are always the results of antecedent empirical causes. What is alone due to noumenal causality is that empirical character in virtue of which appearances are what they are, and owing to which they stand in specific and necessary causal relations to one another.

"...the empirical character is *permanent*, while its effects, according to variation in the concomitant, and in part limiting conditions, appear in changeable forms."

Empirical causality is itself in its specific nature conditioned by an intelligible cause.

Statement. — No single appearance can be exempted from the law of natural causality. For it would then be placed outside all possible experience, and would be for us a fiction of the brain, or rather could not be conceived at all. Nothing, therefore, *in nature* can act freely or spontaneously. But while thus recognising that all *events* without exception are empirically conditioned, we may, as already pointed out, regard empirical causality as itself an effect of a non-empirical and intelligible power. In events there may be nothing but nature, and yet nature itself, or perhaps even some of the existences composing it, may rest upon powers of a noumenal order. Kant proceeds to show that such an hypothesis is not only allowable, but is indispensable for understanding the distinguishing features of human life in its practical aspect.

Man is a natural existence, and his activities are subject to empirical laws. Like all other objects of nature, he has an empirical character, and in virtue of it takes his place as an integral part of the system of nature. But man is unique among all natural existences in that he not only knows himself as a sensible existence, but also, through pure apperception, becomes aware of himself as possessing faculties of a strictly intelligible character. Such are the faculties of understanding and Reason, especially the latter in its practical employment. The "ought" of the moral imperative expresses a kind of necessity and a form of causation which we nowhere find in the world of nature. The understanding can know in nature only what actually is, has been, or will be. Nothing natural can be other than it is in the particular relations in which it is found. Moral action transcends the natural in that it finds its cause, not in an appearance or set of appearances, but in an Ideal of pure Reason. Such action must indeed be possible under natural conditions, but such conditions do not determine its rightness, and consequently cannot determine its causality.

"Reason ... does not here follow the order of things as they present themselves in appearance, but frames to itself with perfect spontaneity an order of its own according to Ideas, to which it adapts the empirical conditions, and according to which it declares actions to be necessary even although they have never yet taken place, and perhaps never will take place. And at the same time it also presupposes that Reason can have causality in regard to all these actions, since otherwise no empirical effects could be expected from its Ideas."

If such action of pure Reason be admitted to be possible, it will have to be viewed, purely intelligible though it be, as also possessing an empirical character, i.e. as conforming to the system of nature. Its empirical consequences will be the effects of antecedent appearances, and will empirically determine by natural necessity all subsequent acts. In this empirical character, therefore, there can be no freedom. Were our knowledge of the circumstances sufficiently extensive, every human action, so far as it is appearance, could be predicted and shown to be necessary. How, then, can we talk of actions as free, when from the point of view of appearances they must in all cases be regarded as inevitable? The solution is that which has already been given of the broader issue. The *entire* empirical character, the whole system of nature, is determined by the intelligible character. And the former results from the latter, not empirically, and therefore not according to any temporal, causal law. It does not arise or begin at a certain time. The intelligible character conditions the empirical series *as a series*, and not as if it were a first member of it.

"Thus what we have missed in all empirical series is disclosed as possible, namely, that the condition of a successive series of events may itself be empirically unconditioned."

The intelligible character lies *outside* the series of appearances. "Reason is the *abiding* (*beharrliche*) condition of all free actions...." Freedom ought not, therefore, to be conceived only negatively as independence of empirical conditions, but also positively as the power of originating a series of events. The empirical series is in time. Reason, which is its unconditioned condition, admits of nothing antecedent to itself; it knows neither before nor after. The series is the immediate effect of a non-temporal

reality.

In illustration of his meaning, not, as he is careful to add, with the profession of thereby confirming its truth, Kant points out that moral judgment upon a vicious action is not determined in view of the inheritance, circumstances and past life of the offender, but is passed just as if he might in each action be supposed to begin, quite by himself, a new series of effects. This, in Kant's view, shows that practical Reason is regarded as a cause completely capable, independently of all empirical conditions, of determining the act, and that it is present in all the actions of men under all conditions, and is always the same. To explain why the intelligible character should in any specific case produce just this particular empirical character, good or bad,

"...transcends all the powers of our Reason, indeed all its rights of questioning, just as if we were to ask why the transcendental object of our outer sense-intuition yields intuition in *space* only and no other."

In conclusion Kant states that his intention has not been to establish the reality of freedom, not even to prove its possibility. Freedom has been dealt with only as a transcendental Idea; and the only point established is that freedom is, so to speak, a *possible possibility*, in that it is *not contradicted* either by experience or by anything that can be proved to be a presupposition of experience.

Comment. — Adequate comment upon this section is difficult for many reasons. The section is full of archaic expressions from the earlier stages of Kant's Critical teaching. Secondly, the section anticipates a problem which is first adequately dealt with in the second *Critique*. And lastly, but not least, the discussion of freedom in connection with a cosmological antinomy leads Kant to treat it in the same manner as the general antinomy, and in so doing to ignore the chief difficulty to which human freedom, as an independent problem with its own peculiar difficulties, lies open. For it is comparatively easy to reconcile the universality of the causal principle with the unconditionedness of the transcendental ground upon which nature *as a whole* is made to rest. It is a very different matter to reconcile the spontaneous origination of *particular* causal series, or the freedom of *particular* existences, such as human beings, with the singleness and uniformity of a natural system in which every part is determined by every other. Self-consciousness, with the capacity which it confers of constructing rational ideals, certainly, as Kant rightly contends, creates a situation to which mechanical categories are by no means adequate. But the mere reference to the conceivability of distinct causal series, having each a pure conception as their intelligible ground, does not suffice to meet the fundamental difficulty that, on Kant's own admission, each such separate series must form an integral part of the unitary system of natural law. In only one passage does Kant even touch upon this difficulty. Speaking of Reason's power of originating a series of events, he adds that while nothing *begins* in Reason itself (as it admits of no conditions antecedent to itself in time), the new series must none the less have a beginning in the natural world. But the proviso, which he at once makes, indicates that he is aware that this statement is untenable. For he adds the qualification that though a beginning of the series, it is never an absolutely first beginning. In other words, it is not a beginning in any real sense of the term. As the argument of his next paragraph shows, it is the entire system of nature, and not any one series within it, which can alone account, in empirical terms, for any one action.

It is open to Kant to argue, as he has already done, that the transcendental object conditions each separate appearance as well as all appearances in their totality, and that the specific empirical character of each causal series is therefore no less noumenally conditioned than is nature as a whole. But this does not suffice to meet the difficulty — how, if all natural phenomena constitute a single closed system in which everything is determined by everything else, a moral agent, acting spontaneously, can be free to originate a genuinely new series of natural events. We seem constrained to conclude that Kant has failed to sustain his position. A solution is rendered impossible by the very terms in which he formulates the problem. If the spiritual and the natural be opposed to one another as the timeless and the temporal, and if

the natural be further viewed as a unitary system, individual moral freedom is no longer defensible. Only the "transcendental freedom" of the *cosmological* argument can be reckoned as among the open possibilities.

As regards the character of the Critical doctrine which underlies this section, we need only note that the statement in A 546-7 = B 574-5, that man knows himself through pure apperception as "a purely intelligible object," does not conform to Kant's final teaching. The section can be dated through its unwavering adherence to the subjectivist doctrine of the transcendental object.

SOLUTION OF THE FOURTH ANTINOMY

Statement. — The above solution is adopted. Both thesis and antithesis may be true, the latter of the world of sense and the former of its non-empirical ground. All things sensible are contingent, but the contingent series in its entirety may nevertheless rest upon an unconditionally necessary being. The unconditioned, since it is outside the series, does not require that any one link in the series should be itself unconditioned. "Reason follows its own course in the empirical, and again a peculiar course in its transcendental use," *i.e.* it limits itself by the law of causality in dealing with appearances, lest in losing the thread of the empirical conditions it should fall into idle and empty speculations; while, on the other hand, it limits that law to appearances, lest it should wrongly declare that what is useless for the explanation of appearances is therefore impossible in itself. This does not prove that an absolutely necessary being is really possible, but only that its impossibility must not be concluded from the necessary contingency of all things sensuous.

Comment. — Kant's method of distinguishing this conclusion from that of the preceding antinomy is again artificial. "Necessary being" is not in conception more *extramundanum* than "unconditioned cause." If Kant's distinction were valid, the argument of the fourth antinomy would no longer be cosmological; it would coincide with the problem of the *Ideal of Pure Reason*.

CONCLUDING NOTE ON THE WHOLE ANTINOMY OF PURE REASON

Statement. — When we seek the unconditioned entirely beyond experience, our Ideas cease to be cosmological; they become transcendent. They separate themselves off from all empirical use of the understanding, and create to themselves an object, the material of which is not taken from experience, and which is therefore a mere thing of the mind (*blosses Gedankending*). None the less the cosmological Idea of the fourth antinomy impels us to take this step. When sensuous appearances, as merely contingent, require us to look for something altogether distinct in nature from them, our only available instruments, in so doing, are those pure concepts of things in general which contingent experience involves. We use them as instruments in such manner as may enable us to form, through analogy, some kind of notion of intelligible things. Taken in abstraction from the forms of sense, they yield that notion of an absolutely necessary Being which is equivalent to the concept of the theological Ideal.

CONCLUDING COMMENT ON KANT'S DOCTRINE OF THE ANTINOMIES

We may now, in conclusion, briefly summarise the results obtained in this chapter. Kant fails to justify the assertion that on the dogmatic level there exist antinomies in which both the contradictory alternatives allow of cogent demonstration. His proofs are in every instance invalid. The real nature of antinomy must, as he himself occasionally intimates, be defined in a very different manner, namely, as a conflict between the demand of Reason for unity and system, and the specific nature of the conditions, especially of the spatial and temporal conditions, under which the sensuous exists. In this wider form it constitutes a genuine problem, which demands for its solution the fundamental Critical distinction between

appearances and things-in-themselves, and also a more thoroughgoing discussion than has yet been attempted of the nature of Reason and of the function of its Ideas. It is to these connected questions that Kant devotes his main attention in the remaining portions of the *Dialectic*, so that in passing to the *Ideal of Pure Reason* he is not proceeding to the treatment of a new set of problems, but to the restatement and to the more adequate solution of the fundamental conflict between understanding and Reason.

The observations which closed our comment upon the *Paralogisms* are thus again in order. The teaching of the sections on the *Antinomies*, no less than that of those on the *Paralogisms*, is incomplete, and if taken by itself is bound to mislead. The Ideas of an unconditioned self and of an unconditioned ground of nature have thus far been taken as at least conceptually possible, and as signifying what may perhaps be real existences. These Ideas are in certain of the remaining sections of the *Dialectic* called in question. They are there declared to be without inherent meaning. They are useful fictions — *heuristische Fiktionen* — and in their psychological nature are simply *schemata* of regulative principles. Their theoretical significance consists merely in their regulative and limitative functions. They must not be regarded, even hypothetically, as representing real existences. In the practical (*i.e.* ethical) sphere they do indeed acquire a very different standing. But with that the *Critique of Pure Reason* is not directly concerned. The reader may therefore be warned not to omit the chapter on the *Ideal of Pure Reason*, on the supposition that it embodies only a criticism of the Cartesian and teleological proofs of God's existence. It is an integral part of Critical teaching, and carries Kant's entire argument forward to its final conclusions. Only in view of the new and deeper considerations, which it brings to light, can his treatment even of the *Antinomies* be properly understood. Its main opening section (Section II.) is, indeed, among the most scholastically rationalistic in the entire *Critique*; but in the later sections it unfolds, with a boldness and consistency to which we find no parallel in the treatment of the *Paralogisms* and of the *Antinomies*, the full consequences of the more sceptical of Kant's alternating standpoints. It disintegrates the concepts of the unconditioned, which have hitherto been employed without analysis and without question; and upon their elimination from among the legitimate instruments of Reason, the situation undergoes entire transformation, the two points of view appearing for the first time in the full extent of their divergence and conflict. For Kant's Idealist view of Reason and of its Ideas still continues to find occasional statement, showing that he has not been able decisively to commit himself to this more sceptical interpretation of the function of Reason; that he is conscious that the Idealist view alone gives adequate expression to certain fundamental considerations which have to be reckoned with; and that unless the two views can in some manner be reconciled with one another, a really definitive and satisfactory solution of the problem has not been reached. When, therefore, we speak of Kant's final conclusions, we must be taken as referring to the twofold tendencies, sceptical and Idealist, which to the very last persist in competition with one another. The greater adequacy of Kant's argument in the chapter on the *Ideal of Pure Reason* and in the important *Appendix* attached to the *Dialectic* consists in its forcible and considered exposition of both attitudes. Most of the sections on the *Antinomies* must, as we have seen, be dated as among the earliest parts of the *Critique*. Their teaching is correspondingly immature. The chapter on the *Ideal* and the *Appendix*, on the other hand, were among the latest to be written, and contain, together with the central portions of the *Analytic*, our most authoritative exposition of Kant's Critical principles.

CHAPTER III

THE IDEAL OF PURE REASON

SECTIONS I and II

THE TRANSCENDENTAL IDEAL

THE statements of the first section cannot profitably be commented upon at this stage; they are of a merely general character. I pass at once to Section II., which, as above stated, is quite the most archaic piece of rationalistic argument in the entire *Critique*. It is not merely Leibnizian, but Wolffian in character. For Kant the Wolffian logic had an old-time flavour and familiarity that rendered it by no means distasteful; and he is here, as it were, recalling, not altogether without sympathy, the lessons of his student years. They enable him to render definite, by way of contrast, the outcome of his own Critical teaching.

As Kant here restates the Wolffian notion of the *Ens realissimum* in such fashion as is required to make it conform to his deduction of the theological Idea from the disjunctive syllogism, a preliminary statement of the more orthodox formulation will help to set Wolff's doctrine in a clearer light. In so doing, I shall follow Baumgarten, whose *Metaphysica* Kant used as a class text-book. Briefly summarised Baumgarten's statement is as follows. The *Ens perfectissimum* is that Being which possesses as many predicates, *i.e.* perfections, as can possibly exist together in a single thing, and in which every one of its perfections is as great as is anywhere possible. This most perfect Being must be a real Being, and its reality must be the greatest possible. It is that in which the most and the greatest realities are. But all realities are affirmative determinations, and no denial is a reality. Accordingly no reality can contradict another reality, and all realities can exist together in the same thing. The *Ens perfectissimum*, in possessing all the realities that can exist together, must therefore possess all realities without exception, and every one of them in the highest degree. The notion of an individual existence that is at once *perfectissimum* and also *realissimum* is thus determinable by pure Reason from its internal resources. It is the ground and condition of all other existences; all of them arise through limitation of its purely positive nature.

Kant seeks to justify his metaphysical deduction of the *Ideal* from the disjunctive syllogism, by recasting the above argument in the following manner. Since everything which exists is completely determined, it is subject to the principle of complete determination, according to which one of each of the possible pairs of contradictory predicates must be applicable to it. To be completely determined the thing must be compared with the sum total of all possible predicates. Although this idea of the sum total of all possible predicates, through reference to which alone any concept can be completely determined, seems itself indeterminate, we find nevertheless on closer examination that it individualises itself *a priori*, transforming itself into the concept of an individual existence that is completely determined by the mere Idea, and which may therefore be called an Ideal of pure Reason. That is proved as follows. No one can definitely think a negation unless he founds it on the opposite affirmation. A man completely blind cannot frame the smallest conception of darkness, because he has none of light. All negations are therefore derivative; it is the realities which contain the material by which a complete determination of anything becomes possible. The source, from which all possible predicates may be derived, can be nothing but the sum total of reality. And this concept of the *omnitudo realitatis* is the Idea of a Being that is single and

individual. As all finite beings derive the material of their possibility from it, they presuppose it, and cannot, therefore, constitute it. They are imperfect copies (*ectypa*), of which it is the sole Ideal. The Idea is also individual. Out of each possible pair of contradictory predicates, that one which expresses reality belongs to it. By these infinitely numerous positive predicates it is determined to absolute concreteness; and as it therefore possesses all that has reality, not only in nature but in man, it must be conceived as a personal and intelligent Primordial Being. The logical Ideal, thus determining itself completely by its own concept, appears not only as ideal but also as real, not only as logical but also as divine.

Kant so far anticipates his criticism of the ontological argument as to give, in the remaining paragraphs of this second section, a preliminary criticism of this procedure. For the purpose for which the Ideal is postulated, namely, the determination of all finite and therefore limited existences, Reason does not require to presuppose an existence corresponding to it. Its mere Idea will suffice.

"All manifoldness of things is only a correspondingly varied mode of limiting the concept of the highest reality which forms their common substratum, just as all figures are only possible as so many different modes of limiting infinite space."

This relation is not, however, that of a real existence to other things but of an Idea to concepts. The Idea is a mere fiction, necessary for comprehending the limited, not a reality that can be asserted, even hypothetically, as given along with the limited. None the less, owing to a natural transcendental illusion, the mind inevitably tends to hypostatise it, and so generates the object of rational theology.

Comment. — The explanation of this illusion, which Kant proceeds to give in the two concluding paragraphs, is peculiarly confusing. Though the concept of an all-comprehensive reality may, he argues, be required for the definition of sensible objects, such a concept must not for that reason be taken as representing a real existence. The teaching of the section on *Amphiboly* is here entirely ignored; and the reader is bewildered by the assumption, which Kant apparently makes, that something analogous to the Leibnizian Ideal is a prerequisite of possible experience.

These last remarks indicate the kind of criticism to which the argument of this section lays itself open. In expounding the teaching of the Leibnizian science of rational theology, Kant strives to represent its Ideal as being an inevitable Idea of human Reason; and in order to make this argument at all convincing he is constrained to treat as valid the presupposed ontology, though that has already been shown in the discussion of *Amphiboly* to be altogether untenable. Limitation is not merely negative; genuine realities may negate one another. Though the objects of sense presuppose the entire system to which they belong, the form of this presupposition is in no respect analogous to that which Wolff would represent as holding between finite existences and the *Ens realissimum*. The passage in the *Analytic* in which Kant directly controverts the above teaching is as follows:

"The principle, that realities (as pure assertions) never logically contradict each other ... has not the least meaning either in regard to nature or in regard to any thing-in-itself.... Although Herr von Leibniz did not, indeed, announce this proposition with all the pomp of a new principle, he yet made use of it for new assertions, and his followers expressly incorporated it in their Leibnizian-Wolffian system. According to this principle all evils, for instance, are merely consequences of the limitations of created beings, *i.e.* negations, because negations alone conflict with reality.... Similarly his disciples consider it not only possible, but even natural, to combine all reality, without fear of any conflict, in one being, because the only conflict which they recognise is that of contradiction, whereby the concept of a thing is itself removed. They do not admit the conflict of reciprocal injury in which each of two real grounds destroys the effect of the other — a process which we can represent to ourselves only in terms of conditions presented to us in sensibility."

Thus the Ideal which Kant here declares to be a necessary Idea of Reason is denounced in the *Analytic* as based on false principles peculiar to the Leibnizian philosophy, and as "without the least meaning in regard either to nature or to any thing in itself." The teaching of the *Analytic* will no more combine with

this scholastic rationalism than oil with water. The reader may safely absolve himself from the thankless task of attempting to render Kant's argumentation in these paragraphs consistent with itself. Fortunately, in the next section, Kant returns to the standpoint proper to the doctrine he is expounding, and lays bare, with remarkable subtlety and in a very convincing manner, the concealed dialectic by which the conclusions of this metaphysical science are really determined.

SECTION III

THE SPECULATIVE ARGUMENTS IN PROOF OF THE EXISTENCE OF A SUPREME BEING

Statement. — Though the Ideal is not arbitrary, but is presupposed in every attempt to define completely a finite concept, Reason would feel hesitation in thus transforming what is merely a logical concept into a Divine Existence, were it not that it is impelled from another direction to derive reality from such a source. All existences known in experience are contingent, and so lead us (owing to the constitution of our Reason) to assume an absolutely necessary Being as their ground and cause. Now when we examine our various concepts, to ascertain which will cover this notion of necessary existence, we find that there is one that possesses outstanding claims, namely, that Idea which contains a therefore for every wherefore, which is in no respect defective, and which does not permit us to postulate any condition. The concepts of the Ideal and of the necessary alone represent the unconditioned; and as they agree in this fundamental respect, they must, we therefore argue, be identical. And to this conclusion we are the more inclined, in that, by thus idealising reality, we are at the same time enabled to realise our Ideal.

This line of argument, which starts from the contingent, is as little valid as that which proceeds directly from the Ideal. But since these arguments express certain tendencies inherent in the human mind, they have a vitality which survives any merely forensic refutation. Though the conclusions to which they lead are false, they are none the less inevitably drawn. Our acceptance of them is due to a transcendental illusion which may be detected as such, but which, like the ingrained illusions of sense-experience, must none the less persist.

The opening paragraph of Section V is the natural completion of the above analysis. The ontological argument, in *starting* from the concept of the *Ens realissimum*, inverts the natural procedure. It is "a merely scholastic innovation," and would never have been attempted save for the need of finding some necessary Being, to which we may ascend from contingent existence. It maintains that this necessary Being must be unconditioned and *a priori* certain, and accordingly looks for a concept capable of fulfilling this requirement. Such a concept is supposed to exist in the Idea of an *Ens realissimum*, and this Idea is therefore used to gain more definite knowledge of that which has been previously and independently recognised, namely, the necessary Being,

"This natural procedure of Reason was concealed from view, and instead of ending with this concept, the attempt was made to begin with it, and so to deduce from it that necessity of existence which it was only fitted to complete. Thus arose the unfortunate ontological proof, which yields satisfaction neither to the natural and healthy understanding nor to the more academic demands of strict proof."

To return to Section III.: Kant breaks the continuity of his argument, and anticipates his discussion of the cosmological proof, by stopping to point out the illegitimacy of the assumption which underlies the first step in the above argument, namely, that a limited being cannot be absolutely necessary. Though the concept of a limited being does not contain the unconditioned, that does not prove that its existence is conditioned. Indeed each and every limited being may, for all their concepts show to the contrary, be

unconditionally necessary. The above argument is consequently inconclusive, and cannot be relied on to give us any concept whatever of the qualities of a necessary Being. But this is a merely logical defect, and, as already noted, it is not really upon logical cogency that the persuasive force of the argument depends.

In conclusion Kant points out that there are only three possible kinds of speculative (*i.e.* theoretical) proofs of the existence of God: (1) from definite experience and the specific nature of the world of sense as revealed in experience; (2) from indefinite experience, *i.e.* from the fact that any existence at all is empirically given; (3) the non-empirical *a priori* proof from mere concepts. The first is the *physico-theological* or *teleological* argument, the second is the *cosmological*, and the third is the *ontological*. Kant finds it advisable to reverse the order of the proofs, and to begin by consideration of the ontological argument. This would seem to indicate that the ‘scholastic innovation’ to which he traces the origin of the ontological proof has more justification than his remarks appear to allow.

SECTION IV

THE IMPOSSIBILITY OF AN ONTOLOGICAL PROOF

Statement. — Hitherto Kant has employed the concept of an absolutely necessary Being without question. He now recognises that the problem, from which we ought to start, is not whether the existence of an absolutely necessary Being can be demonstrated, but whether, and how, such a Being can even be conceived. And upon analysis he discovers that the assumed notion of an absolutely necessary, *i.e. unconditioned* Being is entirely lacking in intelligible content. For in eliminating all conditioning causes — through which alone the understanding can conceive necessity of existence — we also remove this particular kind of necessity. A verbal definition may, indeed, be given of the Idea, as when we say that it represents something the non-existence of which is impossible. But this yields no insight into the reasons which make its non-existence inconceivable, and such insight is required if anything at all is to be thought in the Idea.

“The expedient of removing all those conditions which the understanding indispensably requires in order to regard something as necessary, simply through the introduction of the word *unconditioned*, is very far from sufficing to show whether I am still thinking anything, or not rather perhaps nothing at all, in the concept of the unconditionally necessary.”

The untenableness of the concept has been in large part concealed through a confusion between logical and ontological necessity, that is, between necessity of judgment and necessity of existence. The fact that every proposition of geometry must be regarded as absolutely necessary was supposed to justify this identification. It was not observed that logical necessity refers only to *judgments*, not to *things* and their relations, and that the absolute necessity of the judgment holds only upon the assumption that the conditioned necessity of the thing referred to has previously been granted. If there be any such thing as a triangle, the assertion that it has three angles will follow with absolute necessity; but the existence of a triangle or even of space in general is contingent. In other words, the asserted necessity is only a form of logical sequence, not the unconditioned necessity of existence which is supposed to be disclosed in the Idea of Reason. All judgments, so far as they refer to existence, as distinct from mere possibility, are hypothetical, and serve to define a reality that is only contingently given. In adopting this position, Kant is in entire agreement with Hume. The contradictory of a matter of fact is always thinkable. There has, Kant claims, been no more fruitful source of illusion throughout the whole history of philosophy than the belief in an absolute necessity that is purely logical. In the ontological argument we have the most striking instance of such rationalistic exaggeration of the powers of thought.

Comment. — Had this criticism of the Idea of unconditioned necessity been introduced at an earlier stage in Kant's argument, much confusion would have been avoided. It involves the thorough revisal of his criticism of the third and fourth antinomies, as well as of the whole account hitherto given of the function of Reason and of its metaphysical dialectic. The principle, that if the conditioned be given, the whole series of conditions up to the unconditioned is likewise given, must no longer be accepted as a basis for argument. Indeed the very terms in which Reason has so far been defined, as the faculty of the unconditioned, become subject to question. In that definition the term unconditioned has tacitly been taken as equivalent to the unconditionally necessary, and on elimination of the element of necessity, it will reduce merely to the concept of totality, which is a pure form of the understanding. Those parts of the *Dialectic*, which embody the view that Reason is simply the understanding transcendently employed, will thus be confirmed; the alternative view of Reason as a separate faculty will have to be eliminated. But these are questions which Kant himself proceeds to raise and discuss. Meantime he applies the above results in criticism of the ontological argument.

Statement. — In an identical judgment it is contradictory to reject the predicate while retaining the subject. But there is no contradiction if we reject subject and predicate alike, for nothing is then left that can be contradicted. If we assume that there is a triangle, we are bound to recognise that it has three angles, but there is no contradiction in rejecting the triangle together with its three angles. The same holds true of an absolutely necessary Being. 'God is omnipotent' is an identical and therefore necessary judgment. But if we say, 'There is no God,' neither the omnipotence nor any other attribute remains; and there is therefore not the least contradiction in saying that God does not exist. The only way of evading this conclusion is to argue that there are subjects which cannot be removed out of existence. That, however, would only be another way of asserting that there exist absolutely necessary subjects, and that is the very assertion which is now in question, and which the ontological argument undertakes to prove. Our sole test of what cannot be removed is the contradiction which would thereby result; and the only possible instance which can be cited is the concept of the *Ens realissimum*. It remains, therefore, to establish the above criticism for this specific case.

At the start Kant points out that absence of internal contradiction, even if granted, proves only that the *Ens realissimum* is a *logically* possible concept (as distinguished from the *nihil negativum*); it does not suffice to establish the possibility of the object of the concept. But for the sake of argument Kant allows this initial assumption to pass. The argument to be disproved is that as reality comprehends existence, existence is contained in the concept of *Ens realissimum*, and cannot therefore be denied of it without removing its internal possibility. The really fundamental assumption of this argument is that existence is capable of being included in the concept of a *possible* being. If that were so, the assertion of its existence would be an analytic proposition, and the proof could not be challenged. (The assumption is partly concealed by alternation of the terms reality and existence: in their actual employment they are completely synonymous.) As the above assumption thus decides the entire issue, Kant sets himself to establish, in direct opposition to it, the thesis, that every proposition which predicates existence is synthetic, and that in consequence its denial can never involve a logical contradiction. Existence can never form part of the content of a conception, and therefore must not be regarded as a possible predicate. What logically corresponds to it in a judgment is a purely formal factor, namely, the copula. The proposition, 'God is omnipotent,' contains two concepts, each of which has its object — God and omnipotence. The word 'is' adds no new predicate, but only serves to posit the predicate in its relation to the subject. Similarly, when we take the subject together with all its predicates (including that of omnipotence), and say, 'God is' or 'there is a God,' we attach no new predicate to the concept of God, but only posit the subject in itself with all its predicates as being an object that stands in relation to our concept. In order that the proposition be true, the *content* of the object and of the concept must be one and the same. If the object contained more than the concept, the concept would not express the object, and the proposition would assert a relation

that does not hold. Or to state the same point in another way, the real must not contain more content than the possible. Otherwise it would not be the possible, but something different from the possible, which would then be taken as existing. A hundred real thalers do not contain the least coin more than a hundred possible thalers. Though my financial position is very differently affected by a hundred real thalers than by the thought of them only, a conceived hundred thalers are not in the least increased through acquiring existence outside my concept.

Kant presents his argument in still another form. If we think in a thing every kind of reality except one, the missing reality is not supplied by my saying that this defective thing exists. On the contrary, it exists with the same defect with which I have thought it. When, therefore, I think a Being as the highest reality, without any defect, the question still remains whether it exists or not. For though, in my concept, nothing may be lacking of the possible real *content* of a thing in general, something is still lacking in its relation to my whole state of thinking, namely, knowledge of its existence; and such knowledge can never be obtained save in an *a posteriori* manner. That is owing to the limitations imposed by the conditions of our sense-experience. We never confound the existence of a sensible object with its mere concept. The concept represents something that may or may not exist: to determine existence we must refer to actual experience. As Kant has already stated, the actual is always for us the accidental, and its assertion is therefore synthetic. A possible idea and the idea of a possible thing are quite distinct. A thing is known to be possible only when presented in some concrete experience, or when, though not actually experienced, it has been proved to be bound up, according to empirical laws, with given perceptions. It is not, therefore, surprising that if we try, as is done in the ontological argument, to think existence through the pure category, we cannot mention a single mark distinguishing it from a merely logical possibility. The concept of a Supreme Being is, in many respects, a valuable Idea, but just because it is an Idea of pure Reason, *i.e.* a mere Idea, we can no more extend our knowledge of real existence by means of it, than a merchant can better his position by adding a few noughts to his cash account.

There are many points of connection between this section and the first edition *Introduction*; and in view of these points of contact Adickes has suggested that the considerations which arose in the examination of the ontological argument may have been what brought Kant to realise that the various problems of the *Critique* can all be traced to the central problem of *a priori* synthesis.

SECTION V

THE IMPOSSIBILITY OF A COSMOLOGICAL PROOF OF THE EXISTENCE OF GOD

Statement. — Kant, as already noted, views the ontological proof as ‘a mere innovation of scholastic wisdom’ which restates, in a quite unnatural form, a line of thought much more adequately expressed in the cosmological proof. To discover the natural dialectic of Reason we must therefore look to this latter form of argument. It is composed of two distinct stages. In the first stage it makes no use of specific experience: if *anything* is given us as existing, *e.g.* the self, there must exist an absolutely necessary Being as its cause. Then, in the second stage, it is argued that as such a Being must be altogether outside experience, Reason must leave experience entirely aside, and discover from among pure concepts what properties an absolutely necessary Being ought to possess, *i.e.* which among all possible things contains in itself the conditions of absolute necessity. The requisite enlightenment is believed by Reason to be derivable only from the concept of an *Ens realissimum*, and Reason therefore at once concludes that this concept must represent the absolutely necessary Being.

Now in that final conclusion the truth of the ontological argument is assumed. If the concept of a Being of the highest reality is so completely adequate to the concept of necessary existence that they can be

regarded as identical, the latter must be capable of being derived from the former, and that is all that is maintained in the ontological proof. To make this point clearer, Kant states it in scholastic form. If the proposition be true, that every absolutely necessary Being is at the same time the most real Being (and this is the *nervus probandi* of the cosmological proof in so far as it is also theological), it must, like all affirmative propositions, be capable of conversion, at least *per accidens*. This gives us the proposition that some *Entia realissima* are at the same time absolutely necessary Beings. One *Ens realissimum*, however, does not differ from another, and what applies to one applies to all. In this case, therefore, we must employ simple conversion, and say that every *Ens realissimum* is a necessary Being. Thus the cosmological proof is not only as illusory as the ontological, but also less honest. While pretending to lead us by a new road to a sound conclusion, it brings us back, after a short circuit, into the old path. If the ontological argument is correct, the cosmological is superfluous; and if the ontological is false, the cosmological cannot possibly be true.

But the first stage of the cosmological argument, that by which it is distinguished from the ontological, is itself fallacious. A whole nest of dialectical assumptions lies hidden in its apparently simple and legitimate inference from the contingent to the necessary. To advance from the contingent to the necessary, from the relative to the absolute, from the given to the transcendent, is just as illegitimate as the opposite process of passing from Idea to existence. The necessity of thought, which is in both cases the sole ground of the inference, is found on examination to be of merely subjective character. No less than three false assumptions are involved in this inference. In the first place, the principle that everything must have a cause, which can be proved to be valid only within the world of sense, is here applied to the sensible world as a whole; and is therefore employed in the wider form which coincides with the fundamental principle of the higher faculty of Reason. We assume, that if the conditioned be given, the totality of its conditions *up to the unconditioned* is given likewise. No such principle can be granted. As it is synthetic, it could be established only as a condition of the possibility of experience. But no such proof is offered: the principle is based upon a purely intellectual concept. Secondly, the inference to a first cause rests on the kindred assumption that an infinite series of empirical causes is impossible. That conclusion can never be drawn, even within the realm of experience. How, then, can we rely upon it in advancing beyond experience? Certainly, no one can prove that the empirical series is infinite, but just as little can we establish the opposite. In discussing the third and fourth antinomies Kant has shown that the existence of a first cause or of an absolutely necessary Being, though possible (or rather, possibly possible), is never demonstrable. Thirdly — as has been shown in A 592-3 = B 620-1 — in inferring to an unconditioned cause, it is blindly assumed that the removal of all conditions does not at the same time remove the very concept of necessity. Our only notion of necessity is derived from experience, and therefore depends on those finite conditions which the argument would deny to us. The concept of unconditioned necessity is entirely null and void.

The fourth defect, which Kant enumerates, refers to the second stage of the cosmological argument, and has already been considered. He ought also to have mentioned a still further assumption underlying its first stage, namely, that a concept which represents a limited being, as, for instance, that of matter, cannot represent necessary existence. This also is an assumption which it cannot justify. This objection Kant has himself stated in A 586 = B 614 and A 588 = B 616.

Comment. — We are apt to overlook the wider sweep which Kant's criticism takes in this section, owing to his omission to notify the reader that he is here calling in question a principle which he has hitherto been taking for granted, namely, the principle in terms of which he has in the opening sections of the *Dialectic* defined the faculty of Reason, that if the conditioned be given the totality of conditions up to the unconditioned is given likewise. The first step in his rejection of this principle occurs as merely incidental to his criticism of the ontological argument. It is there shown that the concept of the unconditionally necessary is without meaning. Now, in this present section, he calls in question the

principle itself. It must be rejected not only, as stated in the third of the above objections, because the concept of the unconditioned, which tacitly implies the factor of absolute necessity, is without real significance, but also for two further reasons — those above cited in the first and second objections. How very differently the problems of the *Dialectic* appear, and how very differently the Ideas of Reason have to be regarded, when this principle, and also the concept of the unconditioned of which it is the application, are thus called in question, will be shown in the sequel.

DISCOVERY AND EXPLANATION OF THE TRANSCENDENTAL ILLUSION IN ALL TRANSCENDENTAL PROOFS OF THE EXISTENCE OF A NECESSARY BEING

Statement. — We do not properly fulfil the task prescribed by Critical teaching in merely disproving the cosmological argument. We must also explain its hold upon the mind. If it is, as Kant insists, more natural to the mind than the ontological, and yet, as we have just seen, is more fallacious; if it has not been invented by philosophers, but is the instinctive reasoning of the natural man, it must rest, like all dialectical illusion, upon a misunderstanding of the legitimate demands of pure Reason. *Reason demands the unconditioned, and yet cannot think it*.

"Unconditioned necessity, which we so indispensably require as the last bearer of all things, is for human Reason the veritable abyss.... We can neither help thinking, nor can we bear the thought, that a Being — even if it be the one which we represent to ourselves as supreme amongst all Beings — should, as it were, say to itself: 'I am from eternity to eternity, and outside me there is nothing save what is through my will; *but whence am I*?' All support here fails us; and *supreme* perfection, no less than the *least* perfection, is unsubstantial and baseless for the merely speculative Reason...."

We are obliged to think something as necessary for all existence, and yet at the same time are unable to think anything as in itself necessary — God as little as anything else.

The explanation of this strange fact must be that which follows as a corollary from the limitation of our knowledge to sense-experience, namely, that our concepts of necessity and contingency do not concern things in themselves, and cannot therefore be applied to them in accordance with either of the two possible alternatives. Each alternative must express a subjective principle of Reason; and the two together (that something exists by necessity, and that everything is only contingent) must form complementary rules for the guidance of the understanding. These rules will then be purely heuristic and regulative, relating only to the formal interests of Reason, and may well stand side by side. For the one tells us that we ought to philosophise as if there were a necessary first ground for everything that exists, *i.e.* that we ought to be always dissatisfied with relativity and contingency, and to seek always for what is unconditionally necessary. The other warns us against regarding any single determination in things (such, for instance, as impenetrability or gravity) as absolutely necessary, and so bids us keep the way always open for further derivation. In other words, Reason guides the understanding by a twofold command. The understanding must derive phenomena and their existence from other phenomena, just as if there were no necessary Being at all; while at the same time it must always strive towards the completeness of that derivation, just as if such a necessary Being were presupposed. It is owing to a transcendental illusion or subreption that we view the latter principle as constitutive, and so think its unity as hypostatised in the form of an *Ens realissimum*. The falsity of this substitution becomes evident as soon as we consider *that unconditioned necessity, as a thing in itself, cannot even be conceived, and that the "Idea" of it cannot, therefore, be ascribed to Reason save as a merely formal principle, regulative of the understanding in its interpretation of given experience*.

Comment. — The reader may observe that, when Kant is developing this sceptical view of the Ideal of Reason, the explanation of dialectical illusion in terms of transcendental idealism falls into the background. The illusion is no longer traced to a confusion between appearances and things in

themselves, but to the false interpretation of regulative principles as being constitutive. When it is the cosmological problem with which we are dealing, the two illusions do, indeed, coincide. If we view the objects of sense-experience as things in themselves, we are bound to regard the Ideal completion of the natural sciences as an adequate representation of ultimate reality. But in Rational Theology, which is professedly directed towards the definition of a Being distinct from nature and conditioning all finite existence, it is not failure to distinguish between appearance and things in themselves, but the mistaking of a merely formal Ideal for a representation of reality, that is alone responsible for the conclusions drawn.

In A 617-18 = B 645-6 Kant makes statements which conflict with the teaching of A 586 = B 614 and A 588 = B 616. In the latter passages he has argued that the concept of a limited being may not without specific proof be taken as contradictory of absolute necessity. He now categorically declares that the philosophers of antiquity are in error in regarding matter as primitive and necessary; and the reason which he gives is that the regulative principle of Reason forbids us to view extension and impenetrability, “which together constitute the concept of matter,” as ultimate principles of experience. But obviously Kant is here going further than his regulative principle will justify. It demands only that we should always look for still higher principles of unity, and so keep open the way for possible further derivation; it does not enable us to assert that such will actually be found to exist. Notwithstanding the Ideal demands of the regulative principle, matter may be primordial and necessary, and its properties of extension and impenetrability may not be derivable from anything more ultimate.

In this connection we may raise the more general question, how far the Ideal demand for necessity and unity in knowledge and existence can be concretely pictured. Kant gives a varying answer. Sometimes — when he is emphasising the limitation of our theoretical knowledge to sense-experience — he reduces the speculative Idea of Divine Existence to a purely abstract maxim for the regulation of natural science. When the Ideal occupies the mind on its own account, and so attracts our attention away from our sense-knowledge, it is an unreality, and perverts the understanding; it yields genuine light and leading only as a quite general maxim within the sphere of natural science. From this point of view necessary Being, even as an Ideal, can by no means be identified with a personal God. It signifies only the highest possible system and unity of the endlessly varied natural phenomena in space and time, and can be approximately realised in the most various ways. Its significance is entirely cosmological. It is an Ideal of positive science, and signifies only systematic unity in the object known. In being transformed from a scientific ideal into a subject of theological enquiry, it has inevitably given rise to dialectical illusion. At other times, — when he is concerned to defend the concept of Divine Existence as at least possible, and so to prepare the way for its postulation as implied in the moral law, or when he is seeking, as in the *Critique of Judgment*, to render comprehensible the complete adaptation of phenomenal nature in its material aspect to the needs of our understanding — Kant insists that we are ultimately compelled, by the nature of our faculties, to conceive the Ideal of Reason as a personal God, as an Intelligence working according to purposes. Only by such a personal God, he maintains, can the demands of Reason be genuinely satisfied.

These two interpretations of the Ideal of Reason are in conflict with one another; and so far as the *Critique of Pure Reason* is concerned, a very insufficient attempt is made to justify the frequent assertion that the Idea of God is *the* Ideal of Reason, and not merely one possible, and highly problematic, interpretation of it. If the Idea of God is a necessary Idea, it cannot be adequately expressed through any merely regulative maxim. It demands not only system in knowledge but also perfection in the nature of the known. It is not a merely logical Ideal such as might be satisfied by any rational system, but an Ideal which concerns matter as well as form, man as well as nature, our moral needs as well as our intellectual demands. If Kant is to maintain that the only genuine function of theoretical Reason is to guide the understanding in its scientific application, he is debarred from asserting that a concrete interpretation of its regulative principles is unavoidable. And he is also precluded by his own limitation of all knowledge to sense-experience from seeking to define by any positive predicate the transcendent nature of the thing in

itself.

Such justification as Kant can offer in support of his assertion that the Idea of God, of Intelligent Perfection, is an indispensable Idea of human Reason, is chiefly based upon the teleological aspect of nature which is dealt with in the physico-theological proof. Mechanical science implies only the cosmological Idea: teleological unity presupposes the theological Ideal. Further enquiry, then, into the necessity of the Idea of God as a regulative principle, and its dangers as a source of dialectical illusion, we must defer until we have examined the one remaining argument.

SECTION VI

THE IMPOSSIBILITY OF THE PHYSICO-THEOLOGICAL PROOF

Statement. — The teleological proof starts from our definite knowledge of the order and constitution of the sensible world. The actual world presents such immeasurable order, variety, fitness, and beauty, that we are led to believe that here at least is sufficient proof of the existence of God. Kant's attitude towards this argument is at once extremely critical and extremely sympathetic. Though he represents it as the oldest, the clearest, and the most convincing, he is none the less prepared to show that it contains every one of the fallacies involved in the other two proofs, as well as some false assumptions peculiar to itself. It possesses overpowering persuasive force, not because of any inherent logical cogency, but because it so successfully appeals to feeling as to silence the intellect. It would, Kant declares, be not only comfortless, but utterly vain to attempt to diminish its influence.

"[The mind is] aroused from the indecision of all melancholy reflection, as from a dream, by one glance at the wonders of nature and the majesty of the universe...."

Meantime, however, we are concerned with its merely logical force. We have to decide whether, as theoretical proof, it can claim assent on its own merits, requiring no favour, and no help from any other quarter. On the basis of empirical facts the argument makes the following assertions. (1) There are everywhere in the world clear indications of adaptation to a definite end. (2) As this adaptation cannot be due to the working of blind, mechanical laws, and accordingly cannot be explained as originating in things themselves, it must have been imposed upon them from without; and there must therefore exist, apart from the sensible world, an intelligent Being who has arranged it according to ideas antecedently formed. (3) As there is unity in the reciprocal relations of the parts of the universe as portions of a single edifice, and as the universe is infinite in extent and inexhaustible in variety, its intelligent cause must be single, all-powerful, all-wise, i.e. God.

Now, even granting for the sake of argument the admissibility of these assertions, they enable us to infer only an intelligent author of the purposive form of nature, not of its matter, only an architect who is very much hampered by the inadaptability of the material in which he has to work, not a Creator to whose will everything is due. To prove the contingency of matter itself, we should have to establish the truth of the cosmological proof.

But the assumptions implied even in the demonstration that God exists as a *formative* power, are by no means beyond dispute. Why may not nature be regarded as giving form to itself by its blindly working forces? Can it really be proved that nature is a work of art that demands an artificer as certainly as does a house, or a ship, or a clock? Kant's argument is at this point extremely brief, and I shall so far digress from the statement of it, which he here gives, as to supplement it from his other writings. Even so-called dead matter is not merely inert. By its inherent powers of gravity and chemical attraction it spontaneously gives rise to the most wonderful forms. When Clarke and Voltaire, in their first enthusiasm over Newton's

great discovery, asserted that the planetary system must have been divinely created, each planet being launched in the tangent of its orbit by the finger of God, just as a wheel must be fixed into its place by the hand of the mechanician, they under-estimated the organising power of blind inanimate nature. As Kant argued in his early treatise, the planetary system can quite well have arisen, and, as it would seem, actually has come into existence, through the action of blindly working laws. The mechanical principles which account for its present maintenance will also account for its origin and development. But it is when we turn to animate nature, which is the chief source from which arguments for design are derived, that the insufficiency of the teleological argument becomes most manifest. As Kant points out in the *Critique of Judgment*, the differentia distinguishing the living from the lifeless, is not so much that it is organised as that it is self-organising. When, therefore, we treat an organism as an analogon of art we completely misrepresent its essential nature. In regarding it as put together by an external agent we are ignoring its internal self-developing power. As Hume had previously maintained in his *Dialogues on Natural Religion*, the facts of the organic world not only agree with the facts of the inorganic world in *not* supporting the argument of the teleological proof, but are in direct conflict with it.

But to return to Kant's immediate statement of the argument. Setting the above objection aside, and granting for the present that nature may be regarded as the outcome of an external artificer, we can argue only to a cause adequate to its production, *i.e.* to an extraordinarily wise and wonderfully powerful Being. Even if we ignore the existence of evil and defect in nature, the step from great power to omnipotence, and from great wisdom to omniscience, is one that can never be justified on empirical grounds. Since the Ideas of Reason, and above all the completely determined, individual Ideal of Reason, transcend experience, experience can never justify us in inferring their reality. The teleological argument can, indeed, only lead us to the point of admiring the greatness, wisdom, and power of the author of the world. In proceeding further it abandons experience altogether, and reasons, not from particular kinds and excellencies of natural design, but from the contingency of all such adaptation to the existence of a necessary Being, exactly in the manner of the cosmological argument. And it ends by assuming, in agreement with the ontological proof, that the only possible necessary Being is the Ideal of Reason. Thus after committing a number of fallacies on its own account, the teleological argument itself endorses all those that are involved in the more *a priori* proofs. The teleological argument rests on the cosmological, and the cosmological on the ontological, which therefore would be the only proof possible, were the proof of a completely transcendent proposition ever possible at all. The strange fact that the convincing force of the arguments thus varies inversely with their validity shows, Kant maintains, that we are correct in concluding that they do not really depend upon their logical cogency, and merely express, in abstract terms, beliefs deep-rooted in the human spirit.

SECTION VII

CRITICISM OF ALL THEOLOGY BASED ON SPECULATIVE PRINCIPLES OF REASON

A 631-3 = B 659-66. — On the distinction between "theist" and "deist," cf. *Encyclopædia Britannica*, vii. :

"The later distinction between 'theist' and 'deist,' which stamped the latter word as excluding the belief in providence or in the immanence of God, was apparently formulated in the end of the eighteenth century by those rationalists who were aggrieved at being identified with the naturalists."

A 633-4 = B 661-2. — Kant here does no more than indicate that by way of practical Reason it may be possible to postulate, though not theoretically to comprehend, a Supreme Being. On the distinction between postulates and hypotheses, cf. A 769 ff. = B 797 ff., and below, ff. Cf. also ff.

A 634 = B 662. — On relative necessity, cf. below, p, 571 ff.

A 635-9 = B 663-7 only summarises points already treated.

A 639-42 = B 667-70. — Kant concludes by declaring that the Ideal, in addition to its regulative function, possesses two further prerogatives. In the first place, it supplies a standard, in the light of which any knowledge of Divine Existence, acquired from other sources, can be purified and rendered consistent with itself. For it is "an Ideal without a flaw," the true crown and culmination of the whole of human knowledge.

"If there should be a moral theology ... transcendental theology ... will then prove itself indispensable in determining its concept and in constantly testing Reason which is so often deceived by sensibility, and which is frequently out of harmony with its own Ideas."

And secondly, though the Ideal fails to establish itself theoretically, the arguments given in its support suffice to show the quite insufficient foundations upon which all atheistic, deistic, and anthropomorphic philosophies rest.

Comment. — These concluding remarks cannot be accepted as representing Kant's true teaching. The Ideal, by his own showing, is by no means without a flaw. In so far as it involves the concept of unconditioned necessity, it is meaningless; it is purely logical, and therefore contains no indication of real content; it embodies a false view of the nature of negation, and therefore of the relation of realities to one another. In short, it is constituted in accordance with the false, un-Critical principles of Leibnizian metaphysics, and is found on examination to be non-existent even as a purely mental entity. Reduced to its proper terms, it becomes a mere schema regulative of the understanding in the extension of experience, and does not yield even a negative criterion for the testing of our ideals of Divine Existence. The criterion, which Kant really so employs, is not that of an *Ens realissimum*, but the concept of an Intuitive Understanding, which, as he has indicated in the chapter on *Phenomena and Noumena*, is our most adequate Ideal of completed Perfection. This latter is not itself, however, a spontaneously formed concept of natural Reason, and does not justify the assertion that the Idea of God is a necessary Idea of the human mind. In attempting to defend such a thesis, Kant is unduly influenced by the almost universal acceptance of deistic beliefs in the Europe of his time. His criticism of the Ideal of Reason and of rational theology is much more destructive, and really allows that theology much less value, even as natural dialectic, than he is willing to admit. Architectonic forbids that the extreme radical consequences of the teaching of the *Analytic* should be allowed to show in their full force. These shortcomings are, however, in great part remedied in the elaborate *Appendix* which Kant has attached to the *Dialectic*.

APPENDIX TO THE TRANSCENDENTAL DIALECTIC

THE REGULATIVE EMPLOYMENT OF THE IDEAS OF PURE REASON

Before we proceed to deal with this *Appendix* it will be of advantage to consider the section in the *Methodology* on *the Discipline of Pure Reason in regard to Hypotheses*. That section affords a very illuminating introduction to the problems here discussed, and is extremely important for understanding Kant's view of metaphysical science as yielding either complete certainty or else nothing at all. This is a doctrine which he from time to time suggests, to the considerable bewilderment of the modern reader. In discussing it he starts from the obvious objection, that though nothing can be known through Reason in its pure *a priori* employment, metaphysics may yet be possible in an empirical form, as consisting of hypotheses, constructed in conjectural explanation of the facts of experience. Kant replies by defining the conditions under which alone hypotheses can be entertained as such. There must always be something completely certain, and not only invented or merely "opined," namely, the *possibility* of the object to

which the hypothesis appeals. Once that is proved, it is allowable, on the basis of experience, to form opinions regarding its reality. Then, and only then, can such opinions be entitled hypotheses. Otherwise we are not employing the understanding to explain; we are simply indulging the imagination in its tendency to dream. Now since the categories of the pure understanding do not enable us to invent *a priori* the concept of a dynamical connection, but only to apprehend it when presented in experience, we cannot by means of these categories invent a single object endowed with a new quality not empirically given; and cannot, therefore, base an hypothesis upon any such conception.

"Thus it is not permissible to invent any new original powers, as, for instance, an understanding capable of intuiting its objects without the aid of senses; or a force of attraction without any contact; or a new kind of substance existing in space and yet not impenetrable. Nor is it legitimate to postulate any other form of communion of substances than that revealed in experience, any presence that is not spatial, any duration that is not temporal. In a word our Reason can employ as conditions of the possibility of things only the conditions of possible experience; it can never, as it were, *create* concepts of things, independently of those conditions. Such concepts, though not self-contradictory, would be without an object."

This does not, however, mean that the concepts of pure Reason can have no valid employment. They are, it is true, Ideas merely, with no object corresponding to them in any experience; but then it is also true that they are not hypotheses, referring to imagined objects, supposed to be possibly real. They are purely problematic. They are heuristic fictions (*heuristische Fiktionen*), the sole function of which is to serve as principles regulative of the understanding in its systematic employment. Used in any other manner they reduce to the level of merely mental entities (*Gedankendinge*) whose very possibility is indemonstrable, and which cannot therefore be employed as hypotheses for the explanation of appearances. Given appearances can be accounted for only in terms of laws known to hold among appearances. To explain natural phenomena by a transcendental hypothesis — mental processes by the assumption of the soul as a substantial, simple, spiritual being, or order and design in nature by the assumption of a Divine Author — is never admissible.

"...that would be to explain something, which in terms of known empirical principles we do not understand sufficiently, by something which we do not understand at all."

And Kant adds that the wildest hypotheses, if only they are physical, are more tolerable than a hyperphysical one. They at least conform to the conditions under which alone hypothetical explanation as such is allowable. "Outside this field, to form opinions, is merely to play with thoughts...."

A further condition, required to render an hypothesis acceptable, is its adequacy for determining *a priori* all the consequences which are actually given. If for that purpose supplementary hypotheses have to be called in, the force of the main assumption is proportionately weakened. Thus we can easily explain natural order and design, if we are allowed to postulate a Divine Author who is absolutely perfect and all-powerful. But that hypothesis lies open to all the objections suggested by defects and evils in nature, and can only be preserved through new hypotheses which modify the main assumption. Similarly the hypothesis of the human soul as an abiding and purely spiritual being, existing in independence of the body, has to be modified to meet the difficulties which arise from the phenomena of growth and decay. But the new hypotheses, then constructed, derive their whole authority from the main hypothesis which they are themselves defending.

Such is Kant's criticism of metaphysics when its teaching is based on the facts of experience hypothetically interpreted. In regard to transcendent metaphysics, there are, in Kant's view, only two alternatives. Either its propositions must be established independently of all experience in purely *a priori* fashion, and therefore as absolutely certain; or they must consist in hypotheses empirically grounded. The first alternative has in the *Analytic* and *Dialectic* been shown to be impossible; the second alternative he rejects for the above reasons.

But this does not close Kant's treatment of metaphysical hypotheses. He proceeds to develop a doctrine which, in its fearless confidence in the truth of Critical teaching, is the worthy outcome of his abiding belief in the value of a "sceptical method." As Reason is by its very nature dialectical, outside opponents are not those from whom we have most to fear. Their objections are really derived from a source which lies in ourselves, and until these have been traced to their origin, and destroyed from the root upwards, we can expect no lasting peace. Our duty, therefore, is to encourage our doubts, until by the very luxuriance of their growth they enable us to discover the hidden roots from which they derive their perennial vitality.

"External tranquillity is a mere illusion. The germ of these objections, which lies in the nature of human Reason, must be rooted out. But how can we uproot it, unless we give it freedom, nay, nourishment, to send out shoots so that it may discover itself to our eyes, and that we may then destroy it together with its root? Therefore think out objections which have never yet occurred to any opponent; lend him, indeed, your weapons, or grant him the most favourable position which he could possibly desire. You have nothing to fear in all this, but much to hope for; you may gain for yourselves a possession which can never again be contested."

In this campaign to eradicate doubt by following it out to its furthermost limits, the hypotheses of pure Reason, "leaden weapons though they be, since they are not steeled by any law of experience," are an indispensable part of our equipment. For though hypotheses are useless for the establishment of metaphysical propositions, they are, Kant teaches, both admirable and valuable for their defence. That is to say, their true metaphysical function is not dogmatic, but polemical. They are weapons of war to which we may legitimately resort for the maintenance of beliefs otherwise established. If, for instance, we have been led to postulate the immaterial, self-subsistent nature of the soul, and are met by the difficulty that experience would seem to prove that both the growth and the decay of our mental powers are due to the body, we can weaken this objection by formulating the hypothesis that the body is not the cause of our thinking, but only a restrictive condition of it, peculiar to our present state, and that, though it furthers our sensuous and animal faculties, it acts as an impediment to our spiritual life. Similarly, to meet the many objections against belief in the eternal existence of a finite being whose birth depends upon contingencies of all kinds, such as the food supply, the whims of government, or even vice, we can adduce the transcendental hypothesis that life has neither beginning in birth nor ending in death, the entire world of sense being but an image due to our present mode of knowledge, an image which like a dream has in itself no objective reality. Such hypotheses are not, indeed, even Ideas of Reason, but simply concepts *invented* to show that the objections which are raised depend upon the false assumption that the possibilities have been exhausted, and that the mere laws of nature comprehend the whole field of possible existences. These hypotheses at least suffice to reveal the uncertain character of the doubts which assail us in our practical beliefs.

"[Transcendental hypotheses] are nothing but private opinions. Nevertheless, we cannot properly dispense with them as weapons against the misgivings which are apt to occur; they are necessary even to secure our inner tranquillity. We must preserve to them this character, carefully guarding against the assumption of their independent authority or absolute validity, since otherwise they would drown Reason in fictions and delusions."

We may now return to A 642-68 = B 670-96. The teaching of this section is extremely self-contradictory, wavering between a subjective and an objective interpretation of the Ideas of Reason. The probable explanation is that Kant is here recasting older material, and leaves standing more of his earlier solutions than is consistent with his final conclusions. We can best approach the discussion by considering Kant's statements in A 645 = B 673 and in A 650 ff. = B 678 ff. They expound, though unfortunately in the briefest terms, a point of view which Idealism has since adopted as fundamental. Kant himself, very

strangely, never develops its consequences at any great length. The Idea, which Reason follows in the exercise of its sole true function, the systematising of the knowledge supplied by the understanding, is that of a unity in which the thought of the whole precedes the knowledge of its parts, and contains the conditions according to which the place of every part and its relation to the other parts are determined *a priori*. This Idea specialises itself in various forms, and in all of them directs the understanding to a knowledge that will be that of no mere aggregate but of a genuine system. Such concepts are not derived from nature; we interrogate nature *according to them*, and consider our knowledge defective so long as it fails to embody them. In A 650 = B 678 Kant further points out that this Idea of Reason does not merely direct the understanding to search for such unity, but also claims for itself objective reality. And he adds,

"...it is difficult to understand how there can be a logical principle by which Reason prescribes the unity of rules, unless we also presuppose a transcendental principle whereby such systematic unity is *a priori* assumed to be necessarily inherent in the objects."

For how could we treat diversity in nature as only disguised unity, if we were also free to regard that unity as contrary to the actual nature of the real?

"Reason would then run counter to its own vocation, proposing as its aim an Idea quite inconsistent with the constitution of nature."

Nor is our knowledge of the principle merely empirical, deduced from the unity which we find in contingent experience. On the contrary, there is an inherent and necessary law of Reason compelling us, antecedently to all specific experience, to look for such unity.

"...without it we should have no Reason at all, and without Reason no coherent employment of the understanding, and in the absence of this no sufficient criterion of empirical truth. In order, therefore, to secure an empirical criterion we are absolutely compelled to presuppose the systematic unity of nature as objectively valid and necessary." "It might be supposed that this is merely an economical contrivance of Reason, seeking to save itself all possible trouble, a hypothetical attempt, which, if it succeeds, will, through the unity thus attained, impart probability to the presumed principle of explanation. But such a selfish purpose can very easily be distinguished from the Idea. For in the latter we presuppose that this unity of Reason is in conformity with nature itself; and that, although we are indeed unable to determine the limits of this unity, Reason does not here beg but command."

This last alternative, that Reason is here propounding a tentative hypothesis, in order by trial to discover how far it can be empirically verified — an alternative which Kant in the above passage rejects as unduly subjective, and as consequently failing to recognise the objective claims and *a priori* authority of the Ideas of Reason, — is yet a view which he himself adopts and indeed develops at considerable length in this same section. This, as already stated, affords evidence of the composite character and varying origins of the material here presented.

The *Dissertation* of 1770 gives a purely subjectivist interpretation of the regulative principles, among which, from its pre-Critical standpoint, it classes the principle of causality and the principle of the conservation of matter.

"[We adopt principles] which delude the intellect into mistaking them for arguments derived from the object, whereas they are commended to us only by the peculiar nature of the intellect, owing to their convenience for its free and ample employment. They therefore ... rest on *subjective* grounds ... namely, on the conditions under which it seems easy and expeditious for the intellect to make use of its insight.... These rules of judging, to which we freely submit and to which we adhere as if they were axioms, solely for the reason that *were we to depart from them almost no judgment regarding a given object would be permissible to our intellect, I entitle principles of convenience*.... [One of these is] the popularly received canon, *principia non esse multiplicanda praeter summam necessitatem*, to which we yield our adhesion, not because we have insight into causal unity in the world either by reason or by experience, but because we seek it by an impulse of the intellect, which seems to itself to have advanced in the

explanation of phenomena only in the degree in which it is granted to it to descend from a single principle to the greatest number of consequences.”

This, in essentials, is the view which we find developed in A 646-9 = B 674-8. Reason is the faculty of deducing the particular from the general. When the general is admitted only as *problematical*, as a mere idea, while the particular is certain, we determine the universality of the rule by applying it to the particulars, and then upon confirmation of its validity proceed to draw conclusions regarding cases not actually given. This Kant entitles the *hypothetical* use of Reason. Reason must never be employed constitutively. It serves only for the introduction, as far as may be found possible, of unity into the particulars of knowledge. It seeks to make the rule *approximate* to universality. The unity which it demands

“...is a *projected* unity, to be regarded not as given in itself, but as a problem only. This unity aids us in discovering a principle for the manifold and special employment of the understanding, drawing its attention to cases which are not given, and thus rendering it more coherent.”

The unity is merely logical, or rather methodological. To postulate, in consequence of its serviceableness, real unity in the objects themselves would be to transform it into a transcendental principle of Reason, and to render

“...the systematic unity necessary, not only subjectively and logically, as method, but objectively also.”

The above paragraphs are intercalated between A 645 = B 673 and A 650-63 = B 678-91, in which, as we have already seen, the directly opposite view is propounded, namely, that such principles are *not* merely hypothetical, *nor* merely logical. In all cases they claim reality, and rest upon transcendental principles; they condition the very possibility of experience; and may therefore be asserted to be *a priori* necessary and to be objectively valid. To quote two additional passages:

“...we can conclude from the universal to the particular, only if universal qualities are ascribed to things as the foundation upon which the particular qualities rest.” “The foundation of these laws [cf. below, p-1] is not due to any secret design of making an experiment by putting them forward as merely tentative suggestions.... It is easily seen that they contemplate the parsimony of fundamental causes, the manifoldness of effects, and the consequent affinity of the parts of nature, as being in themselves both rational and natural. Hence these principles carry their recommendation directly in themselves, and not merely as methodological devices.”

Thus, in direct opposition to the preceding view of Reason’s function as hypothetical, Kant is now prepared to maintain that the maxims of Reason are without meaning and without application save in so far as they can be grounded in a transcendental principle.

Let us follow Kant’s detailed exposition of this last thesis. The logical maxim, to seek for systematic unity, rests upon the transcendental principle that the apparently infinite variety of nature does not exclude identity of species, that the various species are varieties of a few genera, and these again of still higher genera. This is the scholastic maxim: *entia praeter necessitatem non esse multiplicanda*. Upon this principle rests the possibility of concepts, and therefore of the understanding itself. It is balanced, however, by a second principle, no less necessary, the transcendental law of specification, namely, that there must be manifoldness and diversity in things, that every genus must specify itself in divergent species, and these again in sub-species. Or as it is expressed in its scholastic form: *entium varietates non temere esse minuendas*. This principle is equally transcendental. It expresses a condition no less necessary for the possibility of the understanding, and therefore of experience. As the understanding knows all that it knows by concepts only, however far it may carry the division of genera, it can never know by means of pure intuition, but always again by lower concepts. If, therefore, there were no lower concepts, there could be no higher concepts; the gap existing between individuals and genera could never be bridged; or rather, since neither individuals nor universals could then be apprehended, neither would

exist for the mind. As the higher concepts acquire all their content from the lower, they presuppose them for their own existence.

"Every concept may be regarded as a point which, in so far as it represents the standpoint of a spectator, has its own horizon.... This horizon must be capable of containing an infinite number of points, each of which again has its own narrower horizon; that is, every species contains sub-species, according to the principle of specification, and the logical horizon consists exclusively of smaller horizons (sub-species), never of points which possess no extent (individuals)."

Combining these two principles, that of *homogeneity* and that of *specification*, we obtain a third, that of *continuity*. The logical law of the *continuum formarum logicarum* presupposes the transcendental law, *lex continui in natura*. It provides that homogeneity be combined with the greatest possible diversity by prescribing a continuous transition from every species to every other, or in other words by requiring that between any two species or sub-species, however closely related, intermediate species be always regarded as possible. (The paragraph at the end of A 661 = B 689, with its proviso that we cannot make any definite empirical use of this law, is probably of later origin; it connects with the concluding parts of the section.) That this third law is also *a priori* and transcendental, is shown by the fact that it is not derived from the prior discovery of system in nature, but has itself given rise to the systematised character of our knowledge.

The psychological, chemical, and astronomical examples which Kant employs to illustrate these laws call for no special comment. They were taken from contemporary science, and in the advance of our knowledge have become more confusing than helpful. The citation in A 646 = B 674 of the concepts of "pure earth, pure water, pure air" as being "concepts of Reason" is especially bewildering. They are, even in the use which Kant himself ascribes to them, simply empirical hypotheses, formulated for the purposes of purely physical explanation; they are in no genuine sense universal, regulative principles.

In passing to A 663-8 = B 691-6 we find still another variation in the substance of Kant's teaching. He returns, though with a greater maturity of statement, and with a very different and much more satisfactory terminology, to the more sceptical view of A 646-9 = B 674-7. The interest of the above principles, Kant continues to maintain, lies in their transcendentality. Despite the fact that they are mere Ideas for the guidance of understanding, and can only be approached asymptotically, they are synthetic *a priori* judgments, and would seem to have an objective, though indeterminate, validity. So far his statements are in line with the preceding paragraphs. But he proceeds to add that this objective validity consists exclusively in their heuristic function. They differ fundamentally from the dynamical, no less than from the mathematical, principles of understanding, in that no schema of sensibility can be assigned to them. In other words, their object can never be exhibited *in concreto*; it transcends all possible experience. For this reason they are incapable of a transcendental deduction. They are among the conditions indispensably necessary to the possibility, not of each and every experience, but only of experience as systematised *in the interest of Reason*. In place of a schema they can possess only what may be called the *analogon* of a schema, that is, they represent the Idea of a *maximum*, which the understanding in the subjective interest of Reason — or, otherwise expressed, in the interest of a certain possible perfection of our knowledge of objects — is called upon to realise *as much as possible*. Thus they are at once *subjective* in the source from which they arise, and also *indeterminate* as to the conditions under which, and the extent to which, they can obtain empirical embodiment. The fact that in this capacity they represent a *maximum*, does not justify any assertion either as to the degree of unity which experience on detailed investigation will ultimately be found to verify, or as to the noumenal reality by which experience is conditioned.

In A 644-5 = B 672-3 Kant employs certain optical analogies to illustrate the illusion which the Ideas, in the absence of Critical teaching, inevitably generate. When the understanding is regulated by the Idea of a *maximum*, and seeks to view all the lines of experience as converging upon and pointing to it, it necessarily regards it, *focus imaginarius* though it be, as actually existing. The illusion, by which objects

are seen behind the surface of a mirror, is indispensably necessary if we are to be able to see what lies behind our backs. The transcendental illusion, which confers reality upon the Ideas of Reason, is similarly incidental to the attempt to view experience in its greatest possible extension.

ON THE FINAL PURPOSE OF THE NATURAL DIALECTIC OF HUMAN REASON

This section is thoroughly unified and consistent in its teaching. Its repetitious character is doubtless due to Kant's personal difficulty either in definitively accepting or in altogether rejecting the constructive, Idealist interpretation of the function of Reason. He at least succeeds in formulating a view which, while not asserting anything more than is required in the scientific extension of experience, indicates the many possibilities which such experience fails to exclude. As the Ideas of Reason are not merely empty thought-entities (*entia rationis ratiocinantis*), but have a certain kind of objective validity (*i.e.* are *entia rationis ratiocinatae*), they demand a transcendental deduction. What this deduction is, and how it differs from that of the categories, we must now determine. Its discovery will, Kant claims, crown and complete our Critical labours.

Kant begins by drawing a distinction between representing *an object absolutely*, and representing *an object in the Idea*.

"In the former case our concepts are employed to determine the object, in the latter case there is in truth only a schema for which no object, not even a hypothetical one, is directly given, and which only enables us to represent to ourselves indirectly other objects in their systematic unity, by means of their relation to this Idea."

An Idea is only a schema (Kant in terms of A 655 = B 693 ought rather to have said *analogon* of a schema) whereby we represent to ourselves, as for instance in the concept of a Highest Intelligence, not an objective reality but only such perfection of Reason as will tend to the greatest possible unity in the empirical employment of understanding.

With this introduction, Kant ushers in his famous "*als ob*" doctrine. We must view the things of the world *as if* they derived their existence from a Highest Intelligence. That Idea is heuristic only, not expository. Its purpose is not to enable us to comprehend such a Being, or even to think its existence, but only to show us how we should seek to determine the constitution and connection of the objects of experience. The three transcendental Ideas do not determine an object corresponding to them, but, *under the presupposition of such an object in the Idea*, lead us to systematic unity of *empirical* knowledge. When they are thus strictly interpreted as merely regulative of empirical enquiry, they will always endorse experience and never run counter to it. Reason, which seeks completeness of explanation, must therefore always act in accordance with them. Only thereby can experience acquire its fullest possible extension. This is the transcendental deduction of which we are in search. It establishes the indispensableness of the Ideas of Reason for the completion of experience, and their legitimacy as regulative principles.

We may here interrupt Kant's exposition so far as to point out that this argument does not do justice to the full force of his position. The true Critical contention — and only if we interpret the passage in the light of this contention can the proof be regarded as transcendental in the strict sense — is that the Ideas are necessary to the possibility of each and every experience, involved together with the categories as conditions of the very existence of consciousness. They are not merely regulative, but are regulative of an experience which they also help to make possible. They express the standards in whose light we condemn all knowledge which does not fulfil them; and we have consequently no option save to endeavour to conform to their demands. In other words, they are not derivative concepts obtained by merely omitting the restrictions essential to our empirical consciousness, but represent a presupposition necessarily involved in all consciousness. Some such restatement of the argument is demanded by the position which

Kant has himself outlined in A 645 = B 673 and in A 650 ff. = B 678 ff. Unfortunately he does not return to it. The more sceptical view which he has meantime been developing remains dominant. The deduction is left in this semi-Critical form.

A 672-6 = B 700-4 give a fuller statement of the "*als ob*" doctrine. In psychology we must proceed *as if* the mind were a simple substance endowed with personal identity (in this life at least), not in order to derive explanation of its changing states from the soul so conceived, but to derive them from each other in accordance with the Idea. In cosmology and theology (we may observe the straits to which Kant is reduced in his attempt to distinguish them) we ought to consider all phenomena both in their series and in their totality *as if* they were due to a highest and all-sufficient unitary ground. In so doing we shall not derive the order and system in the world from the object of the Idea, but only extract from the Idea the rule whereby the understanding attains the greatest possible satisfaction in the connecting of natural causes and effects.

In A 676-7 = B 704-5 Kant resorts to still another distinction — between *suppositio relativa* and *suppositio absoluta*. This distinction is suggested by the semi-objectivity of principles that are merely regulative. Though we have to recognise them as necessary, such necessity does not justify the assertion of their independent validity. When we admit a supreme ground as the source of the order and system which the principles demand, we do so only in order to think the universality of the principles with greater definiteness. Such supposition is relative to the needs of Reason in its *empirical* employment: not absolute, as pointing to the existence of such a being in itself.

"This explains why, in relation to what is given to the senses as existing, we require the Idea of a primordial Being necessary in itself, and yet can never form the slightest concept of it or of its absolute necessity."

This last statement leads to the further problem to which Kant here gives his final solution, how if, as has been shown in the *Dialectic*, the concepts of absolute necessity and of unconditionedness are without meaning, the Ideas of Reason can be entertained at all, even mentally. What is their actual content and how is it possible to conceive them? Kant's reply is developed in terms of the semi-Critical subjectivist point of view which dominates this section. The Ideas are mere Ideas. They yield not the slightest concept either of the internal possibility or of the necessity of any object corresponding to them. They only seem to do so, owing to a transcendental illusion. On examination we find that the concepts which we employ in thinking them as independently real, are one and all derived from experience. That is to say, we judge of them after the analogy of reality, substance, causality, and necessity in the sensible world.

"[They are consequently] *analoga* only of real things, not real things in themselves. We remove from the object of the Idea the conditions which limit the concept of the understanding, but which at the same time alone make it possible for us to have a determinate concept of anything. What we then think is, therefore, a something of which, as it is in itself, we have no concept whatsoever, but which we none the less represent to ourselves as standing in a relation to the sum-total of appearances analogous to that in which appearances stand to one another."

They do not carry our knowledge beyond the objects of possible experience, but only extend the empirical unity of experience. They are the schemata of regulative principles. In them Reason is concerned with nothing but its own inherent demands; and as their unity is the unity of a system which is to be sought only in experience, qualities derived from the sensible world can quite legitimately be employed in their specific determination. They are not inherently dialectical; their demands have the rationality which we have a right to expect in the Ideals of Reason. When Critically examined, they propound no problem which Reason is not in itself entirely competent to solve. It is to their misemployment that transcendental illusion is due. In the form in which they arise from the natural disposition of our Reason they are good and serviceable.

To the question what is the most adequate form in which the regulative schema can be represented, Kant gives an answer which shows how very far he is from regarding the Leibnizian *Ens realissimum* as the true expression of the Ideal of Reason. It is through the employment of teleological concepts that we can best attain the highest possible form of systematic unity.

"The highest formal unity ... is the *purposive* unity of things. The *speculative* [*i.e.* theoretical] interest of Reason makes it necessary to regard all order in the world *as if* it had originated in the purpose of a Supreme Reason. Such a principle opens out to our Reason, as applied in the field of experience, altogether new views as to how the things of the world may be connected according to teleological laws, and so enables it to arrive at their greatest systematic unity. The assumption of a Supreme Intelligence, as the one and only cause of the universe, though in the Idea alone, can therefore always benefit Reason and can never injure it."

For so long as this assumption is employed only as a regulative principle, even error cannot be really harmful. The worst that can happen is that where we expected a teleological connection, a merely mechanical or physical one is met with. If, on the other hand, we leave the solid ground of experience, and use the assumption to explain what we are unable to account for in empirical terms, we sacrifice all real insight, and confound Reason by transforming a concept, which is anthropomorphically determined for the purposes of empirical orientation, into a means of explaining order as non-natural and as imposed from without on the material basis of things.

This is a point of sufficient importance to call for more detailed statement. Hume in his *Dialogues* points out that the main defect in the teleological proof of God's existence is its assumption that order and design are foreign to the inherent constitution of things, and must be of non-natural origin. The argument is therefore weakened by every advance in the natural sciences. It also runs directly counter to the very phenomena, those of animal life, upon which it is chiefly based, since the main characteristic of the organic in its distinction from the inorganic is its inner wealth of productive and reproductive powers. With these criticisms Kant is in entire agreement. From them, in the passage before us, he derives an argument in support of a strictly regulative interpretation of his "*als ob*" doctrine. The avowed intention of the teleological argument is to prove *from nature* the existence of an intelligent supreme cause. If therefore its standpoint be held to with more consistency than its own defenders have hitherto shown, it will be found to rest upon the regulative principle, that we must study nature as if an *inherent* order were *native* to it, and so seek to approach by degrees, in proportion as such *natural unity* is empirically discovered, the absolute perfection which inspires our researches. But if we transform our Ideal into an instrument of explanation, beginning with what ought properly to be only our goal, we delude ourselves with the belief that what can only be acquired through the slow and tentative labours of empirical enquiry is already in our possession.

"If I begin with a supreme purposive Being as the ground of all things, the unity of nature is really surrendered, as being quite foreign and accidental to the nature of things, and as not to be known from its own general laws. There thus arises a vicious circle: we are assuming just that very point which is mainly in dispute."

Such a method of argument is self-destructive, since if we do not find order and perfection in the nature of things, and *therefore in their general and necessary laws*, we are not in a position to infer such a Being as the source of all causality.

To the question whether we may not interpret natural order, once it has been discovered by empirical investigation, as due to the divine will, Kant replies that such procedure is allowable only on the condition that it is the same to us whether we say that God has wisely willed it or that nature has wisely arranged it. We may admit the Idea of a Supreme Being only in so far as it is required by Reason as the regulative principle of all investigation of *nature*;

"...and we cannot, therefore, without contradicting ourselves, ignore the general laws of nature in view

of which the Idea was adopted, and look upon the purposiveness of nature as contingent and hyper-physical in its origin. For we were not justified in assuming above nature a Being of those qualities, but only in adopting the Idea of it in order to be able to view the appearances, according to the analogy of a causal determination, as systematically connected with one another." "Thus pure Reason, which at first seemed to promise nothing less than the extension of knowledge beyond all limits of experience, contains, if properly understood, nothing but regulative principles...."

CONCLUDING COMMENT ON THE DIALECTIC

I may now summarise Kant's answer to the three main questions of the *Dialectic*: (1) Whether, or in what degree, the so-called Ideas of Reason are concepts due to a faculty altogether distinct from the understanding, and how far, as thus originating in pure Reason, they allow of definition; (2) how far they are capable of a transcendental deduction; (3) what kind of objective validity this deduction proves them to possess.

These questions are closely interconnected; the solution of any one determines the kind of solution to be given to all three. Kant, as we have found, develops his final position through a series of very subtle distinctions by which he contrives to justify and retain, though in a highly modified form, the more crudely stated divisions between Ideas and categories, between Reason and understanding, upon which the initial argument of the *Dialectic* is based.

The answer amounts in essentials to the conclusion that understanding, in directing itself by means of Ideals, exercises a function so distinct from that whereby it conditions concrete and specific experience, that it may well receive a separate title; that the Ideas in terms of which it constructs these Ideals, though schematic (*i.e.* sensuous and empirical in content), are not themselves empirical, and so far from being merely extended concepts of understanding, express transcendental conditions upon which all use of the understanding rests.

Now if this position is to be justified, Kant ought to show that the fundamental Idea of Reason, that of the unconditioned, is altogether distinct from any concept of the understanding, and in particular that it must not be identified with the category of totality, nor be viewed as being merely the concept of conditioned existence with its various empirical limitations thought away. Needless to say, Kant does not fulfil these requirements in any consistent manner. The *Critique* contains the material for a variety of different solutions; it does not definitively commit itself to any one of them.

If the argument of A 650 ff. = B 678 ff. were developed we should be in possession of what may be called the Idealist solution. It would proceed somewhat as follows. Consciousness as such is always the awareness of a whole which precedes and conditions its parts. Such consciousness cannot be accounted for on the assumption that we are first conscious of the conditioned, and then proceed to remove limitations and to form for ourselves, by means of the more positive factors involved in this antecedent consciousness, an Idea of the totality within which the given falls. The Idea of the unconditioned, distinct from all concepts of understanding, is one of the *a priori* conditions of possible experience, and is capable of a transcendental deduction of equal validity with, and of the same general nature as, that of the categories. It is presupposed in the possibility of our contingently given experience.

As this Idea conditions all subordinate concepts, it cannot be defined in terms of them. That does not, however, deprive it of all meaning; its significance is of a unique kind; it finds expression in those Ideals which, while guiding the mind in the construction of experience, also serve as the criteria through which experience is condemned as only phenomenal.

But this, as we have found, is not a line of argument which Kant has developed in any detail. The passages which point to it occur chiefly in the introductory portions of the *Dialectic*; in its later sections they are both brief and scanty. When he sets himself, as in the chapter on the *Ideal of Pure Reason* and in the subsequent *Appendix*, to define his conclusions, it is a much more empirical, and indeed sceptical, line that he almost invariably follows. There are, he then declares, strictly no pure, *a priori* Ideas. The supposed Ideas of unconditionedness and of absolute necessity are discovered on examination to be without the least significance for the mind. The Ideas, properly defined, are merely schemata of regulative principles, and their whole content reduces without remainder to such categories as totality, substance,

causality, necessity, transcendently applied. As *Ideas*, they are then without real meaning; but they can be employed by analogy to define an Ideal which serves an indispensable function in the extension of experience. From this point of view, the transcendental deduction of the Ideas is radically distinct from that of the categories. The proof is not that they are necessary for the possibility of experience, but only that they are required for its perfect, or at least more complete, development. And as Kant is unable to prove that such completion is really possible, the objective validity of the Ideas is left open to question. They should be taken only as heuristic principles; the extent of their truth, even in the empirical realm, cannot be determined by the *a priori* method that is alone proper to a *Critique of Pure Reason*.

The first view is inspired by the fundamental teaching of the *Analytic*, and is the only view which will justify Kant in retaining his distinction between appearance and things in themselves. All that is positive in the second view can be combined with the first view; but, on the other hand, the negative implications of the second view are at variance with its own positive teaching. For when the Ideas are regarded as empirical in origin no less than in function, their entire authority is derived from experience, and cannot be regarded as being transcendental in any valid sense of that term. In alternating between these two interpretations of the function of Reason, Kant is wavering between the Idealist and the merely sceptical view of the scope and powers of pure thought. On the Idealist interpretation Reason is a metaphysical faculty, revealing to us the phenomenal character of experience, and outlining possibilities such as may perhaps be established on moral grounds. From the sceptical standpoint, on the other hand, Reason gives expression to what may be only our subjective preference for unity and system in the ordering of experience. According to the one, the criteria of truth and reality are bound up with the Ideas; according to the other, sense-experience is the standard by which the validity even of the Ideas must ultimately be judged. From the fact that Kant should have continued sympathetically to develop two such opposite standpoints, we would seem to be justified in concluding that he discerned, or at least desiderated, some more complete reconciliation of their teaching than he has himself thus far been able to achieve, and that no solution which would either subordinate the Ideal demands of thought, or ignore the gifts of experience, could ever have been definitively accepted by him as satisfactorily meeting the issues at stake. The Idealist solution is that to which his teaching as a whole most decisively points; but he is as conscious of the difficulties which lie in its path as he is personally convinced of its ultimate truth. His continuing appreciation of the value of sceptical teaching is a tacit admission that the Idealist doctrines, in the form which he has so far been able to give to them, are not really adequate to the complexity of the problems. As further confirmation of the tentative character of Kant’s conclusions in the *Critique of Pure Reason*, we have his own later writings. In the *Critique of Judgment*, published nine years later, in teaching less sceptical and more constructive, though still delicately balanced between the competing possibilities, and always, therefore, leaving the final decision to moral considerations, Kant ventures upon a restatement of the problems of the *Dialectic*. To this restatement both of the above tendencies contribute valuable elements.

APPENDICES

APPENDIX A

TRANSCENDENTAL DOCTRINE OF METHODS

CHAPTER I

THE DISCIPLINE OF PURE REASON

KANT is neither an intellectualist nor an anti-intellectualist. Reason, the proper duty of which is to prescribe a discipline to all other endeavours, itself requires discipline; and when it is employed in the metaphysical sphere, independently of experience, it demands not merely the correction of single errors, but the eradication of their causes through "a separate negative code," such as a Critical philosophy can alone supply. In the *Transcendental Doctrine of Elements* this demand has been met as regards the *materials* or *contents* of the Critical system; we are now concerned only with its *methods* or *formal conditions*.

This distinction is highly artificial. As already indicated, it is determined by the requirements of Kant's architectonic. The entire teaching of the *Methodology* has already been more or less exhaustively expounded in the earlier divisions of the *Critique*.

SECTION I

THE DISCIPLINE OF PURE REASON IN ITS DOGMATIC EMPLOYMENT

In dealing with the distinction between mathematical and philosophical knowledge, Kant is here returning to one of the main points of his *Introduction* to the *Critique*. His most exhaustive treatment of it is, however, to be found in a treatise which he wrote as early as 1764, his *Enquiry into the Clearness of the Principles of Natural Theology and Morals*. The continued influence of the teaching of that early work is obvious throughout this section, and largely accounts for the form in which certain of its tenets are propounded.

"...one can say with Bishop Warburton that nothing has been more injurious to philosophy than mathematics, that is, than the imitation of its method in a sphere where it is impossible of application...."

So far from being identical in general nature, mathematics and philosophy are, Kant declares, fundamentally opposed in all essential features. For it is in their methods, and not merely in their subject-matter, that the essential difference between them is to be found. Philosophical knowledge can be acquired only through *concepts*, mathematical knowledge is gained through the *construction* of concepts. The one is discursive merely; the other is intuitive. Philosophy can consider the particular only in the general; mathematics studies the general in the particular. Philosophical concepts, such as those of substance and causality, are, indeed, capable of application in transcendental synthesis, but in this employment they yield only empirical knowledge of the sensuously given; and from empirical concepts the universal and necessary judgments required for the possibility of metaphysical science can never be obtained.

The exactness of mathematics depends on definitions, axioms, and demonstrations, none of which are obtainable in philosophy. To take each in order.

I. Definitions. — To define in the manner prescribed by mathematics is to represent the *complete* concept of a thing. This is never possible in regard to empirical concepts. We are more certain of their denotation than of their connotation; and though they may be *explained*, they cannot be defined. Since new observations add or remove predicates, an empirical concept is always liable to modification.

"What useful purpose could be served by defining an empirical concept, such, for instance, as that of

water? When we speak of water and its properties, we do not stop short at what is thought in the word water, but proceed to experiments. The word, with the few marks which are attached to it, is more properly to be regarded as merely a designation than as a conception. The so-called definition is nothing more than a determining of the word."

Exact definition is equally impossible in regard to *a priori* forms, such as time or causality. Since they are not framed by the mind, but are *given* to it, the completeness of our analysis of them can never be guaranteed. Though they are known, they are known only as problems.

"As Augustine has said, 'I know well what time is, but if any one asks me, I cannot tell.'"

Mathematical definitions *make* concepts; philosophical definitions only explain them. Philosophy cannot, therefore, imitate mathematics by beginning with definitions. In philosophy the incomplete exposition must precede the complete; definitions are the final outcome of our enquiry, and not as in mathematics the only possible beginning of its proofs. Indeed, the mathematical concept may be said to be given by the very process in which it is constructively defined; and, as thus originating in the process of definition, it can never be erroneous. Philosophy, on the other hand, swarms with faulty definitions, which are none the less serviceable.

"In mathematics definition belongs *ad esse*, in philosophy *ad melius esse*. It is desirable to attain it, but often very difficult. Jurists are still without a definition of their concept of Right."

II. Axioms. — This paragraph is extremely misleading as a statement of Kant's view regarding the nature of geometrical axioms. In stating that they are self-evident, he does not really mean to assert what that phrase usually involves, namely, absolute *a priori* validity. For Kant the geometrical axioms are merely descriptions of certain *de facto* properties of the given intuition of space. They have the merely hypothetical validity of all propositions that refer to the contingently given. For even as a pure intuition, space belongs to the realm of the merely factual. This un-Critical opposition of the self-evidence of geometrical axioms to the synthetic character of such "philosophical" truths as the principle of causality is bound up with Kant's unreasoned conviction that space in order to be space at all, must be Euclidean. Kant's reference in this paragraph to the propositions of arithmetic is equally open to criticism. For though he is more consistent in recognising their synthetic character, he still speaks as if they could be described as self-evident, *i.e.* as immediately certain. The cause of this inconsistency is, of course, to be found in his intuitional theory of mathematical science. Mathematical propositions are obtained through intuition; those of philosophy call for an elaborate and difficult process of transcendental deduction. When modern mathematical theory rejects this intuitional view, it is really extending to mathematical concepts Kant's own interpretation of the function of the categories. Concepts condition the *possibility* of intuitional experience, and find in this conditioning power the ground of their objective validity. Here, as in the *Aesthetic*, Kant fails adequately to distinguish between the problems of pure and applied mathematics.

III. Demonstrations. — Kant again introduces his very unsatisfactory doctrine of the construction of concepts: and he even goes so far as to maintain, in complete violation of his own doctrine of transcendental deduction, that where there is no intuition, there can be no demonstration. Apodictic propositions, he declares, are either *dogmata* or *mathemata*; and the former are beyond the competence of the human mind. But no sooner has he made these statements than he virtually withdraws them by adding that, though apodictic propositions cannot be established directly from concepts, they can be indirectly proved by reference to something purely contingent, namely, possible experience. Thus the principle of causality can be apodictically proved as a condition of possible experience. Though it may not be called a *dogma*, it can be entitled a *principle*! In explanation of this distinction, which betrays a lingering regard for the self-evident maxims of rationalistic teaching, Kant adds that the principle of causality, though a principle, has itself to be proved.

"...it has the peculiarity that it first makes possible its own ground of proof, namely, experience...."

This, as we have noted, is exactly what mathematical axioms must also be able to do, if they are to establish their objective validity.

SECTION II

THE DISCIPLINE OF PURE REASON IN ITS POLEMICAL EMPLOYMENT

This section contains an admirable defence of the value of scepticism.

"Even poisons have their use. They serve to counteract other poisons generated in our system, and must have a place in every complete pharmacopeia. The objections against the persuasions and complacency of our purely speculative Reason arise from the very nature of Reason itself, and must therefore have their own good use and purpose, which ought not to be disdained. Why has Providence placed many things which are closely bound up with our highest interests so far beyond our reach, that we are only permitted to apprehend them in a manner lacking in clearness and subject to doubt, in such fashion that our enquiring gaze is more excited than satisfied? It is at least doubtful whether it serves any useful purpose, and whether it is not, indeed, perhaps even harmful to venture upon bold interpretations of such uncertain appearances. But there can be no manner of doubt that it is always best to grant Reason complete liberty, both of enquiry and of criticism, so that it may be without hindrance in attending to its own proper interests. These interests are no less furthered by the limitation than by the extension of its speculations; and they will always suffer when outside influences intervene to divert it from its natural path, and to constrain it by what is irrelevant to its own proper ends." "Whenever I hear that a writer of real ability has demonstrated away the freedom of the human will, the hope of a future life, and the existence of God, I am eager to read the book, for I expect him by his talents to increase my insight into these matters."

SECTION IV
THE DISCIPLINE OF PURE REASON IN REGARD TO ITS PROOFS

This section merely restates the general nature and requirements of transcendental proof. The exposition is much less satisfactory than that already given in the *Analytic* and *Dialectic*. The only really new factor is the distinction between apagogical and direct proof. The former may produce conviction, but cannot enable us to comprehend the grounds of the truth of our conviction. Also, outside mathematics, it is extremely dangerous to attempt to establish a thesis by showing its contradictory to be impossible. This is especially true in the sphere of our Critical enquiries, since the chief danger to be guarded against is the confounding of the subjectively necessary with the independently real. In this field of investigation it is never permissible to attempt to justify a synthetic proposition by refuting its opposite. Such seeming proofs can easily be secured, and have been the favourite weapons of dogmatic thinkers.

"Each must defend his position directly, by a legitimate proof that carries with it transcendental deduction of the grounds upon which it is itself made to rest. Only when this has been done, are we in a position to decide how far its claims allow of rational justification. If an opponent relies on subjective grounds, it is an easy matter to refute him. The dogmatist cannot, however, profit by this advantage. His own judgments are, as a rule, no less dependent upon subjective influences; and he can himself in turn be similarly cornered. But if both parties proceed by the direct method, *either* they will soon discover the difficulty, nay, the impossibility, of showing reason for their assertions, and will be left with no resort save to appeal to some form of prescriptive authority; *or* the *Critique* will the more easily discover the illusion to which their dogmatic procedure is due; and pure Reason will be compelled to relinquish its

exaggerated pretensions in the realm of speculation, and to withdraw within the limits of its proper territory — that of practical principles.”

CHAPTER II

THE CANON OF PURE REASON

SECTION I

THE ULTIMATE END OF THE PURE USE OF OUR REASON

The problems of the existence of God, the freedom of the will, and the immortality of the soul have, Kant declares, little *theoretical* interest. For, as he has already argued, even if we were justified in postulating God, freedom, and immortality, they would not enable us to account for the phenomena of sense-experience, the only objects of possible knowledge. But the three problems are also connected with our *practical* interests, and in that reference they constitute the chief subject of metaphysical enquiry. The practical is whatever is possible through freedom; and the decision as to *what we ought to do* is the supreme interest of pure Reason in its highest employment.

"...the ultimate intention of Nature in her wise provision for us has indeed, in the constitution of our Reason, been directed to our moral interests alone."

This is the position which Kant endeavours to establish in his *Foundations of the Metaphysics of Morals*, and in the *Critique of Practical Reason*. The very brief outline which he here gives of his argument is necessarily incomplete; and is in consequence somewhat misleading. He first disposes of the problem of freedom; and does so in a manner which shows that he had not, when this section was composed, developed his Critical views on the nature of moral freedom. He is for the present content to draw a quite un-Critical distinction between transcendental and practical freedom. The latter belongs to the will in so far as it is determined by Reason alone, independently of sensuous impulses. Reason prescribes objective *laws of freedom*, and the will under the influence of these laws overcomes the affections of sense. Such practical freedom can, Kant asserts, be proved by experience to be a natural cause. Transcendental freedom, on the other hand, *i.e.* the power of making a new beginning in the series of phenomena, is a problem which can never be empirically solved. It is a purely speculative question with which Reason in its practical employment is not in the least concerned. The canon of pure Reason has therefore to deal only with the two remaining problems, God and immortality. Comment upon these assertions can best be made in connection with the argument of the next section.

SECTION II

THE IDEAL OF THE HIGHEST GOOD, AS A DETERMINING GROUND OF THE ULTIMATE END OF PURE REASON

Reason in its speculative employment transcends experience, but solely for the sake of experience. In other words, speculative Reason has a purely empirical function. (This is the explanation of the somewhat paradoxical contention, to which Kant has already committed himself, that the problems of God and immortality, *though seemingly speculative in character*, really originate in our practical interests.) But pure Reason has also a practical use; and it is in this latter employment that it first discloses the genuinely metaphysical character of its present constitution and ultimate aims. The moral consciousness, in

revealing to us an Ideal of absolute value, places in our hands the only available key to the mysteries of existence. As this moral consciousness represents the deepest reality of human life, it may be expected to have greater metaphysical significance than anything else in human experience; and since the ends which it reveals also present themselves as *absolute* in value, and are indeed the only absolute values of which we can form any conception, this conclusion would seem to be confirmed.

Happiness has natural value; morality, *i.e.* the being worthy to be happy, has absolute value. The means of attaining the former obtain expression in prudential or pragmatic laws that are empirically grounded. The conditions of the latter are embodied in a categorical imperative of an *a priori* character. The former *advise* us how best to satisfy our natural desire for happiness; the latter *dictates* to us how we must behave in order to deserve happiness.

Kant's further argument is too condensed to be really clear, and if adequately discussed would carry us quite beyond the legitimate limits of this *Commentary*. I shall therefore confine myself to a brief and free restatement of his general position. The Critical teaching can be described as resulting in a new interpretation of the function of philosophy. The task of the philosopher, properly viewed, does not consist in the solution of *speculative* problems; such problems transcend our human powers. All that philosophy can reasonably attempt is to analyse and define the situations, cognitive and practical, in which, owing to the specific conditions of human existence, we find ourselves to be placed. Upon analysis of the cognitive situation Kant discovers that while all possibilities are open, the theoretical data are never such as to justify ontological assertions. When, however, he passes to the practical situation, wider horizons, definitely outlined, at once present themselves. The moral consciousness is the key to the meaning of the entire universe as well as of human life. Its values are the sole ultimate values, and enable us to interpret in *moral* terms (even though we cannot comprehend in any genuinely *theoretical* fashion) the meaning of the dispensation under which we live. The moral consciousness, like sense-experience, discloses upon examination a systematic unity of presupposed conditions. In the theoretical sphere this unity cannot be proved to be more than a postulated Ideal of *empirical* experience; and it is an Ideal which, even if granted to have absolute validity, is too indefinite to enable us to assert that ultimate reality is spiritual in character, or is teleologically ordered. The underlying conditions, on the other hand, of practical experience have from the start a purely noumenal reference. They have no other function than to define, in terms of the moral consciousness, the ultimate meaning of reality as a whole. They postulate a universe in which the values of spiritual experience are supported and conserved.

But the main difference in Kant's treatment of the two situations, cognitive and practical, only emerges into view when we recognise the differing modes in which the transcendental method of proof is applied in the two cases. The *a priori* forms of sensibility, understanding, and Reason are proved by reference to possible experience, as being its indispensable conditions. In moral matters, however, we must not appeal to experience. The actual is no test of the Ideal; "what is" is no test of what ought to be. And secondly, the moral law, if valid at all, must apply not merely within the limits of experience, but with absolute universality to all rational beings. The moral law, therefore, can neither be given us in experience, nor be proved as one of the conditions necessary to its possibility. Its validity, in other words, can be established neither through experience nor through theoretical reason.

Though such is Kant's own method of formulating the issue, it exaggerates the difference of his procedure in the two *Critiques*, and is very misleading as a statement of his real position. In one passage, in the *Critique of Practical Reason*, Kant does, indeed, assert that the moral law requires no deduction. It is, he claims, a *fact* of which we are *a priori* conscious: so far from itself requiring proof, it enables us to prove the reality of freedom. Yet in the very same section he argues that the deduction of freedom from the moral law is a credential of the latter, and is a sufficient substitute for all *a priori* justification. According to the first statement we have an immediate consciousness of the validity of the moral law; according to the second statement the moral law proves itself indirectly, by serving as a principle for the deduction of

freedom. The second form of statement alone harmonises with the argument developed in the third section of the *Foundations of the Metaphysics of Morals*, and more correctly expresses the intention of Kant's central argument in the *Critique of Practical Reason*. For the difference between the two transcendental proofs in the two *Critiques* does not really consist in any diversity of method, but solely in the differing character of the premisses from which each starts. The ambiguity of Kant's argument in the second *Critique* seems chiefly to be caused by his failure clearly to recognise that the moral law, though a form of pure Reason, exercises, in the process of its transcendental proof, a function which exactly corresponds to that which is discharged by possible experience in the first *Critique*. Our consciousness of the moral law is, like sense-experience, a given fact. It is *de facto*, and cannot be deduced from anything more ultimate than itself. But as given, it enables us to deduce its transcendental conditions. This does not mean that our immediate consciousness of it *as given* guarantees its validity. The nature of its validity is established only in the process whereby it reveals its necessary implications. The objects of sense-experience are assumed by ordinary consciousness to be absolutely real; in the process of establishing the transcendental conditions of such experience they are discovered to be merely phenomenal. The pure principles of understanding thus gain objective validity as the conditions of a given experience which reveals only appearances. Ordinary consciousness similarly starts from the assumption of the absolute validity of the moral law. But in this case the consciousness of the law is discovered on examination to be explicable, *even as a possibility*, only on the assumption that it is due to the autonomous activity of a noumenal being. By its existence it proves the conditions through which alone it is explicable. Its mere existence suffices to prove that its validity is objective in a deeper and truer sense than the principles of understanding. *The notion of freedom, and therefore all the connected Ideas of pure Reason, gain noumenal reality as the conditions of a moral consciousness which is incapable of explanation as illusory or even phenomenal*. Since the consciousness of the moral law is thus noumenally grounded, it has a validity with which nothing in the phenomenal world can possibly compare. It is the one form in which noumenal reality directly discloses itself to the human mind.

Obviously the essential crux of Kant's argument lies in the proof that the moral consciousness *is* only explicable in this manner, as the self-legislation of a noumenal being. Into the merits of his argument we cannot, however, here enter; and I need only draw attention to the manner in which it conflicts with the statement of the preceding section, that the possibility of transcendental freedom is a purely speculative question with which practical Reason is not concerned. The reality of freedom, as a form of noumenal activity, is the cardinal fact of Kant's metaphysics of morals. For though our consciousness of the moral law is the *ratio cognoscendi* of freedom, transcendental freedom is the *ratio essendi* of the moral law.

"With this faculty [of practical Reason], transcendental freedom is also established; freedom, namely, in that absolute sense in which speculative Reason required it, in its use of the concept of causality, in order to escape the antinomy into which it inevitably falls, when in the chain of cause and effect it tries to think the *unconditioned*.... Freedom is the only one of all the Ideas of the speculative Reason of which we *know* the possibility *a priori* (without, however, understanding it), because it is the condition of the moral law which we know." "[Freedom] is the only one of all the Ideas of pure Reason whose object is a thing of fact and to be reckoned among the *scibilia*." "It is thus very remarkable that of the three pure rational Ideas, God, freedom, and immortality, that of freedom is the only concept of the supersensible which (by means of the causality that is thought in it) proves its objective reality in nature by means of the effects it can produce there; and thus renders possible the connection of both the others with nature, and of all three with one another so as to form a Religion.... The concept of freedom (as fundamental concept of all unconditioned practical laws) can extend Reason beyond those bounds within which every natural (theoretical) concept must inevitably remain confined."

Thus freedom is for Kant a demonstrated fact, and in that respect differs from the Ideas of God and immortality, which are merely problematic conceptions, and which can be postulated only as articles of

“practical faith.”

This brings us to the final question, upon what grounds Kant ascribes validity to the Ideas of God and immortality. At this point in his argument Kant introduces the conception of the *Summum Bonum*. Reason, in prescribing the moral law, prescribes, as the final and complete end of all our actions, the *Summum Bonum*, *i.e.* happiness proportioned to moral worth. *Owing to the limitations of our faculties*, the complete attainment of this supreme end is conceivable by us only on the assumption of a future life wherein perfect worthiness may be attained, and of an omnipotent Divine Being who will apportion happiness in accordance with merit.

“[This Divine Being] must be omnipotent, in order that the whole of nature and its relation to morality ... may be subject to his will; omniscient, that he may know our innermost sentiments and their moral worth; omnipresent, that he may be immediately present for the satisfying of every need which the highest good demands; eternal, that this harmony of nature and freedom may never fail, etc.”

The moral ideal thus supplies us with a ground for regarding the universe as systematically ordered according to moral purposes, and also with a principle that enables us to infer the nature and properties of its Supreme Cause. In place of a demonology, which is all that physical theology can establish, we construct upon moral grounds a genuine theology.

The concepts thus obtained are, however, anthropomorphic; and for that reason alone must be denied all speculative value. This is especially evident in regard to the Idea of God. Owing to our incapacity to comprehend how moral merit can condition happiness, we conceive them as *externally* combined through the intervention of a supreme Judge and Ruler. As Kant indicates, we must not assert that this represents the actual situation. He himself seems to have inclined to a more mystical interpretation of the universe, conceiving the relation of happiness to virtue as being grounded in a supersensuous but necessary order that may, indeed, be bodied forth in the inadequate symbols of the deistic creed, but which in its true nature transcends our powers of understanding. So far as the Ideas of God and immortality are necessary to define the moral standpoint, they have genuine validity for all moral beings; but if developed on their own account as speculative dogmas, they acquire a definiteness of formulation which is not essential to their moral function, and which lays them open to suspicion even in their legitimate use.

These considerations also indicate Kant’s further reason for entitling the *Summum Bonum*, God and immortality, Ideas of *faith*. Though they can be established as presuppositions of the moral situation in which we find ourselves, such demonstration itself rests upon the acceptance of the moral consciousness as possessing a supersensuous sanction; and that in turn is determined by features in the moral situation not deducible from any higher order of considerations.

“Belief in matters of faith is a belief in a pure practical point of view, *i.e.* a moral faith, which proves nothing for theoretical, pure, rational cognition, but only for that which is practical and directed to the fulfilment of its duties; it in no way extends speculation.... If the supreme principle of all moral laws is a postulate, the possibility of its highest Object ... is thereby postulated along with it.” “So far, as practical Reason has the right to yield us guidance, we shall not look upon actions as obligatory because they are the commands of God, but shall regard them as divine commands because we have an inward obligation to them.... Moral theology is thus of immanent use only. It enables us to fulfil our vocation in this present world by showing us how to adapt ourselves to the system of all ends, and by warning us against the fanaticism and indeed the impiety of abandoning the guidance of a morally legislative Reason in the right conduct of our lives, in order to derive guidance directly from the Idea of the Supreme Being. For we should then be making a transcendent employment of moral theology; and that, like a transcendent use of pure speculation, must pervert and frustrate the ultimate ends of Reason.”

SECTION III

Kant first distinguishes between conviction (*Ueberzeugung*) and persuasion (*Ueberredung*). A judgment which is objectively grounded, and which is therefore valid for all other rational beings, is affirmed with conviction. When the affirmation is due only to the peculiar character of the subject, the manner in which it is asserted may be entitled persuasion. Persuasion is therefore “a mere illusion.” Conviction exists in three degrees, opinion, belief, and knowledge. In opinion we are conscious that the judgment is insufficiently grounded, and that our conviction is subjectively incomplete. In belief the subjective conviction is complete, but is recognised as lacking in objective justification. In knowledge the objective grounds and the subjective conviction are alike complete.

After pointing out that opinion is not permissible in judgments of pure Reason, Kant develops the further distinction between *pragmatic or doctrinal belief* and *moral belief*. When a belief is contingent (*i.e.* is affirmed with the consciousness that on fuller knowledge it may turn out to be false), and yet nevertheless supplies a ground for the employment of means to certain desired ends, it may be called *pragmatic* belief. Such belief admits of degree, and can be tested by wager or by oath. What may be called *doctrinal* belief is analogous in character, and is taken by Kant, in somewhat misleading fashion, as describing our mode of accepting such doctrines as the existence of God and the immortality of the soul. They are adopted as helpful towards a contingent but important end, the discovery of order in the system of nature. This account of the nature of Ideas is in line with Kant’s early view of them as *merely* regulative. Taken in connection with his repeated employment of the term ‘moral sentiments’ (*moralische Gesinnungen*), it tends to prove that this section is early in date of writing.

In *moral belief* the end, the *Summum Bonum*, is absolutely necessary, and as there is only one condition under which we can conceive it as being realised, namely, on the assumption of the existence of God and of a future life, the belief in God and immortality possesses the same certainty as the moral sentiments.

“The belief in a God and another world is so interwoven with my moral sentiment that as there is little danger of my losing the latter, there is equally little cause for fear that the former can ever be taken from me.”

As I have just suggested, this basing of moral belief upon subjective sentiments, which, as Kant very inconsistently proceeds to suggest, may possibly be lacking in certain men, marks this section as being of early origin. But in concluding the section, in reply to the objection that, in thus tracing such articles of faith to our “natural interest” in morality, philosophy admits its powerlessness to advance beyond the ordinary understanding, Kant propounds one of his abiding convictions, namely, that in matters which concern all men without distinction nature is not guilty of any partial distribution of her gifts, and that in regard to the essential ends of human nature the highest philosophy cannot advance beyond what is revealed to the common understanding. The reverence which Kant ever cherished for the memory of his parents, and for the religion which was so natural to them, must have predisposed him to a recognition of the widespread sources of the spiritual life. But Kant has himself placed on record his sense of the great debt which in this connection he also owed to the teaching of Rousseau.

“I am by disposition an enquirer. I feel the consuming thirst for knowledge, the eager unrest to advance ever further, and the delights of discovery. There was a time when I believed that this is what confers real dignity upon human life, and I despised the common people who know nothing. Rousseau has set me right. This imagined advantage vanishes. I learn to honor men, and should regard myself as of much less use than the common labourer, if I did not believe that my philosophy will restore to all men the common rights of humanity.”

The sublimity of the starry heavens and the imperative of the moral law are ever present influences on the life of man; and they require for their apprehension no previous initiation through science and philosophy. The naked eye reveals the former; of the latter all men are immediately aware. In their

universal appeal they are of the very substance of human existence. Philosophy may avail to counteract the hindrances which prevent them from exercising their native influence; it cannot be a substitute for the inspiration which they alone can yield.

CHAPTER III

THE ARCHITECTONIC OF PURE REASON

Adickes very justly remarks that "this is a section after Kant's own heart, in which there is presented, almost unsought, the opportunity, which he elsewhere so frequently creates for himself, of indulging in his favourite hobby." The section is of slight scientific importance, and is chiefly of interest for the light which it casts upon Kant's personality. Moreover the distinctions which Kant here draws are for the most part not his own philosophical property, but are taken over from the Wolffian system.

The distinctions may be exhibited in tabular form as follows:

KNOWLEDGE

1= 2= 3=

Kant further distinguishes between the "scholastic" and the "universal" or traditional meaning of the term philosophy. In the former sense philosophy is viewed from the point of view of its *logical* perfection, and the philosopher appears as an *artist* of Reason. Philosophy in the broader and higher sense is "the science of the relation of all knowledge to the essential ends of human Reason." The philosopher then appears as the *lawgiver* of human Reason. Of the essential ends, the *ultimate* end is man's moral destiny; to this the other essential ends of human Reason are subordinate means. For though the legislation of human Reason concerns nature as well as freedom, and has therefore to be dealt with by a philosophy of nature, *i.e.* of *all that is*, as well as by a philosophy of morals, *i.e.* of *that which ought to be*, the former is subordinate to the latter in the same degree in which in human life knowledge is subordinate to moral action. Whereas speculative metaphysics serves rather to ward off errors than to extend knowledge, in the metaphysics of morals "all culture [*Kultur*] of human Reason" finds its indispensable completion.

Empirical psychology is excluded from the domain of metaphysics. It is destined to form part of a complete system of anthropology, the pendant to the empirical doctrine of nature.

CHAPTER IV

THE HISTORY OF PURE REASON

This title, as Kant states, is inserted only to mark the place of the present chapter in a complete system of pure reason. The very cursory outline, which alone Kant here attempts to give, merely repeats the main historical distinctions of which the *Critique* has made use. The contrast between the sensationalism of Epicurus and the intellectualism of Plato has been developed in A 465 ff. = B 493 ff. The contrast between Locke and Leibniz is dwelt upon in A 43 ff. = B 60 ff. and A 270 ff. = B 326 ff. Under the title 'naturalist of pure Reason' Kant is referring to the 'common sense' school, which is typically represented by Beattie. In his *Logic* Kant gives a fuller account of his interpretation of the history of philosophy.

APPENDIX B

A MORE DETAILED STATEMENT OF KANT'S RELATIONS TO HIS PHILOSOPHICAL PREDECESSORS

The development of philosophy, prior to Kant, had rendered two problems especially prominent — the problem of sense-perception and the problem of judgment. The one raises the question of the interrelation of mind knowing and objects known; the other treats of the connection holding between subject and predicate in the various forms of judgment. The one enquires how it is possible to know reality; the other seeks to determine the criterion of truth. These two problems are, as Kant discovered, inseparable from one another; and the logical is the more fundamental of the two. Indeed it was Hume's analysis of the judgment involved in the causal principle that enabled Kant to formulate his Critical solution of the problem of perception. In this Appendix I propose to follow these problems as they rise into view in the systems of Descartes and his successors.

Galileo's revolutionary teaching regarding the nature of motion was the immediate occasion of Descartes' restatement of the problem of perception. That teaching necessitated an entirely new view of the nature of matter, and consequently of the interrelation of mind and body. Questions never before seriously entertained now became pressing. The solutions had to be as novel as the situation which they were designed to meet.

These new problems arose in the following manner. According to the medieval view, motion may properly be conceived on the analogy of human activity. It comes into being, exhausts itself in exercise, and ceases to be. It is a fleeting activity; only its "material" and "formal" conditions have any permanence of existence. According to Galileo's teaching, on the other hand, motion is as different from human activity as matter is from mind. It is ingenerable and indestructible. We know it only through the effect which in some incomprehensible fashion it produces in those bodies into which it enters, namely, their translation from one part of space to another. That this translatory motion is called by the same name as the power which generates it, doubtless in some degree accounts for the fact that our understanding of the one tends to conceal from us our entire ignorance of the other. We have only to reflect, however, in order to realise that motion is completely mysterious in its intrinsic dynamical nature. We cannot, for instance, profess to comprehend, even in the least degree, how motion, though incapable of existing apart from matter, should yet be sufficiently independent to be able to pass from one body to another.

Descartes, following out some of the chief consequences of this new teaching, concluded that matter is

passive and inert, that it is distinguished neither by positive nor by negative properties from the space which it fills, and that it is to motion that all the articulated organisation of animate and inanimate nature is due. Descartes failed, indeed, to appreciate the dynamical character of motion, and by constantly speaking as if it were reducible to the translatory motion, in which it manifests itself, he represented it as known in all its essential features. None the less, the rôles previously assigned to matter and motion are, in Descartes' system, completely reversed. Matter is subordinated to motion as the instrument to the agency by which it is directed and shaped. On the older view, material bodies had, through the possession of formative and vital forces, all manner of intrinsic powers. By the new view these composite and nondescript existences are resolved into two elements, all the properties of which can be quantitatively defined — into a matter which is uniform and homogeneous, and into motion whose sole effect is the translation of bodies in space. Matter is the passive and inert substance out of which motion, by its mere mechanical powers, can produce the whole range of material forms.

This revolutionary change in the physical standpoint involved restatement of the philosophical issues. But the resulting difficulties were found thoroughly baffling. Though Descartes and his successors were willing to adopt any hypothesis, however paradoxical, which the facts might seem to demand, their theories, however modified and restated, led only deeper into a hopeless *impasse*. The unsolved problems of the Cartesian systems formed the discouraging heritage to which Kant fell heir. If matter is always purely material, and motion is its sole organising power, there can be no real kinship between body and mind. The formative and vital forces, which in the Scholastic philosophy and in popular thought serve to maintain the appearance of continuity between matter and mind, can no longer be credited. Motion, which alone is left to mediate between the opposites, is purely mechanical, and (on Descartes' view) is entirely lacking in inner or hidden powers. The animal body is exclusively material, and is therefore as incapable of feeling or consciousness as any machine made by human hands. The bodily senses are not 'sensitive'; the brain cannot think. Mental experiences do, of course, accompany the brain-motions. But why a sensation should thus arise when a particular motion is caused in the brain, or how a mental resolution can be followed by a brain state, are questions to which no satisfactory answer can be given. The mental and the material, the spiritual and the mechanical, fall entirely apart.

The difficulties arising out of this incomprehensibility of the causal interrelations of mind and body are not, however, in themselves a valid argument against a dualistic interpretation of the real. The difficulties of accounting for the causal relation are, in essential respects, equally great even when the interaction is between homogeneous existences. The difficulties are due to the nature of causal action as such, not to the character of the bodies between which it holds. This, indeed, was clearly recognised by Descartes, and was insisted upon by his immediate successors. The transference of motion by impact is no less incomprehensible than the interaction of soul and body. If motion can exist only in matter, there is no possible method of conceiving how it can make the transition from one discrete portion of matter to another. Causal action is thus a problem which no philosophy can pretend to solve, and which every philosophy, whether monistic or dualistic, must recognise as transcending the scope of our present knowledge.

It is in another and more special form that Descartes' dualism first reveals its fatal defects, namely, in its bearing upon the problem of sense-perception. Descartes can solve the problem of knowledge only by first postulating the doctrine of representative perception. That doctrine is rendered necessary by the dualism of mind and body. Objects can be known only mediately by means of their action upon the sense-organs, and through the sense-organs upon the brain. The resulting brain states are in themselves merely forms of motion. They lead, however, in a manner which Descartes never professes to explain, to the appearance of sensations in the mental field. Out of these sensations the mind then constructs mental images of the distant bodies; and it is these mental images alone which are directly apprehended. Material bodies are invisible and intangible; they are knowable only through their mental duplicates. Thus,

according to the doctrine of representative perception, each mind is segregated in a world apart. It looks out upon a landscape which is as mental and as truly inward as are its feelings and desires. The apparently ultimate relation of mind knowing and object known is rendered complex and problematic through the distinction between mental objects and real things. Mental objects are in all cases images merely. They exist only so long as they are apprehended; and they are numerically and existentially distinct in each individual mind. Real things are not immediately perceived; they are hypothetically inferred. To ordinary consciousness the body which acts on the sense-organ is the object known; when reflective consciousness is philosophically enlightened, the object immediately known is recognised as a merely mental image, and the external object sinks to the level of an assumed cause.

The paradoxical character of this doctrine is accentuated by Galileo's distinction between primary and secondary qualities. Those physical processes, which are entitled light and heat, bear no resemblance to the sensations through which they become known. The many-coloured world of ordinary consciousness is an illusory appearance which can exist only in the human mind. We must distinguish between the sensible world which, though purely mental, appears, through an unavoidable illusion, to be externally real, and that very different world of matter and motion which reveals its independent nature only to reflective thinking. In the latter world the rich variety of sensuous appearance can find no place. There remain only the quantitative, mechanical properties of extension, figure and motion; and even these have to be interpreted in the revolutionary fashion of physical science.

The doctrine of representative perception cannot, however, defend successfully the positions which it thus involves. It wavers in unstable equilibrium. The facts, physical and physiological, upon which it is based, are in conflict with the conclusions in which it results. This has been very clearly demonstrated by many writers in recent times. The conflict manifested itself in the period between Descartes and Kant only through the uneasy questionings of Locke and Berkeley. The problem, fundamental though it be, is almost completely ignored by Spinoza, Leibniz, and Wolff.

Stated in modern terms, the inherently contradictory character of the doctrine consists in its unavoidable alternation between the realist attitude to which it owes its origin, and the idealist conclusion in which it issues. Such oscillation is due to the twofold simultaneous relation in which it regards ideas as standing to the objects that they are supposed to represent. The function of sensations is cognitive; their origin is mechanical. As cognitive they stand to objects in a relation of inclusion; they reveal the objects, reduplicating them in image before the mind. Yet in their origin they are effects, mechanically generated by the action of material bodies upon the sense-organs and brain. As they are effects mechanically generated, there is no guarantee that they resemble their causes; and if we may argue from other forms of mechanical causation, there is little likelihood that they do. They stand to their first causes in a relation of exclusion, separated from them by a large number of varying intermediate processes. There is thus a conflict between the function of sensations and their origin. Their origin in the external objects is supposed to confer upon them a representative power; and yet the very nature of this origin invalidates any such claim.

This irreconcilability of the subjectivist consequences of the doctrine with its realist basis was seized upon by Berkeley. To remove the contradiction, he denied the facts from which the doctrine had been developed. That is to say, starting from its results he disproved its premisses. Arguing from the physical and physiological conditions of perception Descartes had concluded that only sensations can be directly apprehended by the mind. Berkeley starts from this conclusion, and virtually adopts it as an assumption which cannot be questioned, and which does not call for proof. Since, he contends, we know only sensations, the assertion that they are due to material causes is mere hypothesis, and is one for which there may be no valid grounds. As Descartes himself had already suggested, there is a second possible method of interpreting the relevant facts. There may exist an all-powerful Being who produces the sensations in our minds from moment to moment; and provided that they are produced in the same order as now, the

whole material world might be annihilated without our being in the least aware that so important an event had taken place. Since we can experience only sensations, any hypothesis which will account for the order of their happening is equally legitimate. The whole question becomes one of relative simplicity in the explanation given. The simpler analysis, other things being equal, must hold the field.

Berkeley reinforces this argument by pointing to the many embarrassing consequences to which Descartes' dualism must lead. We postulate bodies in order to account for the origin of our sensations, and yet are unable to do so by their means. The dualistic theory creates more difficulties than it solves, without a single counter-advantage, save perhaps — so Berkeley argues — that it seems to harmonise better with the traditional prejudices of the philosophic consciousness.

If we grant Berkeley his premisses, the main lines of his argument are fairly cogent, however unconvincing may be his own positive views. The crux, however, of the Berkeleian idealism lies almost exclusively in the establishment of its fundamental assumption, that only ideas (*i.e.* images) can be known by the mind. This assumption Berkeley, almost without argument, takes over from his predecessors. It was currently accepted, and from it, therefore, he believed that he could safely argue. It rests, however, upon the assumption of facts which he himself questions. In rejecting the Cartesian dualism he casts down the ladder by which alone it is possible to climb into his position. For save through the facts of physics and physiology there seems to be no possible method of disproving the belief of ordinary consciousness, that in perception we apprehend independent material bodies. And until that belief can be shown to be false and ungrounded, the Berkeleian idealism is without support. It cannot establish the fundamental assumption upon which its entire argument proceeds. Thus, though Berkeley convincingly demonstrates the internal incoherence of the doctrine of representative perception — the inconsistency of its conclusions with the physical and physiological facts upon which alone it can be based — he cannot himself solve the problem in answer to which that doctrine was propounded. His services, like those of so many other reformers, were such as he did not himself foresee. In simplifying the problem, he prepared the way for the more sceptical treatment of its difficult issues by Hume.

At this point, in the philosophy of Hume, the problem of perception comes into the closest possible connection with the logical problem, referred to above. The question, how mind knowing is related to the objects known, is found to depend upon the question, how in certain crucial cases predicates may legitimately be referred to their subject. This logical problem arises in two forms, a narrower and a wider. The narrower issue concerns only the principle of causality. With what right do we assert that every event must have a cause? What is the ground which justifies us in thus predicating of events a causal character? Obviously, this logical question is fundamental, and must be answered before we can hope to solve the more special problem, as to our right to interpret sensations as effects of material bodies. Hume was the first to emphasise the vital interconnection of these two lines of enquiry.

The wider issue is the generating problem of Kant's *Critique*: How in a judgment can a predicate be asserted of a subject in which it is not already involved? In other words, what is it that in such a case justifies us in connecting the predicate with the subject? Though this problem was never directly raised by any pre-Kantian thinker, not even by Hume, it is absolutely vital to all the pre-Kantian systems. Thus Descartes' philosophy is based upon a distinction, nowhere explicitly drawn but everywhere silently assumed, between abstract and fruitful ideas. The former contain just so much content and no more; this content may be explicitly unfolded in a series of judgments, but no addition is thereby made to our knowledge. The latter, on the other hand, are endowed with an extraordinary power of inner growth. To the attentive mind they disclose a marvellous variety of inner meaning. The chief problem of scientific method consists, according to Descartes, in the discovery of these fruitful ideas, and in the separation of them from the irrelevant accompaniments which prevent them from unfolding their inner content. Once they are discovered, the steady progress of knowledge is assured. They are the springs of knowledge, and from them we have only to follow down the widening river of truth.

Descartes professed to give a complete list of the possible fruitful ideas. They are, he claimed, better known than any other concepts. They lie at the basis of all experience, and no one can possibly be ignorant of them; though, owing to their simplicity and omnipresence, their philosophical importance has been overlooked. When, however, Descartes proceeded to classify them, he found that while such ideas as space, triangle, number, motion, contain an inexhaustible content that is progressively unfolded in the mathematical sciences, those ideas, on the other hand, through which we conceive mental existences, — the notions of mind, thought, self — do not by any means prove fruitful upon attentive enquiry. As Malebranche later insisted, we can define mind only in negative terms; its whole meaning is determined through its opposition to the space-world, which alone is truly known. Though it is the function of mind to know, it cannot know itself. And when we remove from our list of ideas those which are not really fruitful, we find that only mathematical concepts remain. They alone have this apparently miraculous property of inexhaustibly developing before the mind. Scientific knowledge is limited to the material world; and even there, the limits of our mathematical insight are the limits of our knowledge.

Malebranche believed no less thoroughly than Descartes in the asserted power and fruitfulness of mathematical concepts. Under the influence of this belief, he developed, as so many other thinkers from Plato onwards have done, a highly mystical theory of scientific knowledge. It is a revelation of eternal truth, and yet is acquired by inner reflection, not laboriously built up by external observation. It comes by searching of the mind, not by exploration of the outer world. But Malebranche was not content, like Descartes, merely to accept this type of knowledge. He proceeded to account for it in metaphysical terms. The fruitfulness of mathematical ideas is due, he claimed, to the fundamental concept of extension in which they all share. This idea, representing, as it does, an infinite existence, is too great to be contained within the finite mind. Through it the mind is widened to the apprehension of something beyond itself; we know it through consciousness of its archetype in the mind of God. It is the one point at which consciousness transcends its subjective limits. Its fruitfulness is due to, and is the manifestation of, this divine source. The reason why we are condemned to remain ignorant of everything beyond the sphere of quantity is that extension alone holds this unique position. It is the only fruitful idea which the mind possesses, and other concepts, such as triangle, circle, or number, are fruitful only in proportion as they share in it. We can acquire no genuine knowledge even of the nature of the self. Being ignorant of mind, we cannot comprehend the self which is one of its modes. It is as if we sought to comprehend the nature of a triangle, in the absence of any conception of space. Were we in possession of the archetypal idea of mind, we should not only be able to deduce from it those various feelings and emotions which we have already experienced, and those sensations of the secondary qualities which we falsely ascribe to the influence of external objects, but we should also be able to discover by pure contemplation innumerable other emotions and qualities, which entirely transcend our present powers. And all of these would then be experienced in their ideal nature, and not, as now, merely through feeble and confused feeling. If mathematicians destroy their bodily health through absorption in the progressive clarification of the mysteries of space, what might not happen if the archetypal idea of mind were revealed to us? Could we attend to the preservation of a body which would incessantly distract us from the infinite and overwhelming experiences of our divine destiny?

This romantic conception of the possibilities of rational science reveals more clearly than any other Cartesian doctrine the real bearing and perverse character of the rationalistic preconceptions which underlie the Cartesian systems. The Cartesians would fain make rational science, conceived on the analogy of the mathematical disciplines, coextensive with the entire realm of the real. This grotesque enterprise is conceived as abstractly possible even by so cautious a thinker as John Locke. His reason for condemning the physical sciences as logically imperfect is that they fail to conform to this rationalistic ideal. Hence those sentences which sound so strangely in the mouth of Locke, the sensationalist.

"It is the contemplation of our abstract ideas that alone is able to afford us general knowledge." "The

true method of advancing knowledge is by considering our abstract ideas.” “[Did we know the real essence of gold] it would be no more necessary that gold should exist, and that we should make experiments upon it, than it is necessary for the knowing of the properties of a triangle, that a triangle should exist in any matter: the idea in our minds would serve for the one as well as for the other.” “In the knowledge of bodies, we must be content to glean what we can from particular experiments, since we cannot, from a discovery of their real essences, grasp at a time whole sheaves, and in bundles comprehend the nature and the properties of whole species together.”

Locke’s empirical doctrine of knowledge is thus based upon a rationalistic theory of the real. It is not, he holds, the constitution of reality, but the *de facto* limitations of our human faculties which make empirical induction the only practicable mode of discovery in natural science. Indeed, Locke gives more extreme expression than even Descartes does, to the mystically conceived mathematical method. Being ignorant of mathematics, and not over well-informed even in the physical sciences, Locke was not checked by any too close acquaintance with the real character and necessary limits of this method; and he accordingly makes statements in that unqualified fashion which seldom fails to betray the writer who is expounding views which he has not developed for himself by first-hand study of the relevant facts.

But though the unique character of mathematical knowledge thus forced itself upon the attention of all the Cartesian thinkers, and in the above manner led even the most level-headed of Descartes’ successors to dream strange dreams, no real attempt was made (save in the neglected writings of Leibniz) to examine, in a sober spirit, the grounds and conditions of its possibility. In the English School, Locke’s eulogy of abstract ideas served only to drive his immediate successors to an opposite extreme. Both Berkeley and Hume attempted to explain away, in an impossible manner, those fundamental differences, which, beyond all questioning, profoundly differentiate mathematical from empirical judgments. It is not surprising that Kant, who had no direct acquaintance with Hume’s *Treatise*, should have asserted that had Hume realised the bearing of his main teaching upon the theory of mathematical science, he would have hesitated to draw his sceptical conclusions. Such, however, was not the case. Hume’s theory of mathematical reasoning undoubtedly forms the least satisfactory part of his philosophy. He did, however, perceive the general bearing of his central teaching. It was in large degree his ignorance of the mathematical disciplines that concealed from him the thorough unsatisfactoriness of his general position, and which prevented him from formulating the logical problem in its full scope — the problem, namely, how judgments which make additions to our previous knowledge, and yet do not rest upon mere sensation, are possible. He treated it only as it presents itself in those judgments which involve the concept of causality. But this analysis of causal judgments awoke Kant from his dogmatic slumber, and so ultimately led to the raising of the logical problem in its widest form: — how synthetic *a priori* judgments, whether mathematical, physical, or metaphysical, are possible.

Hume discussed the causal problem both in regard to the general principle of causality and in its bearing upon our particular judgments of causal relation. The problems concerned in these two discussions are essentially distinct. The first involves immensely wider issues, and so far as can be judged from the existing circumstantial evidence, it was this first discussion, not as has been so often assumed by Kant’s commentators the second and more limited problem, which exercised so profound an influence upon Kant at the turning-point of his speculations. In stating it, it will be best to take Hume’s own words.

“To begin with the first question concerning the necessity of a cause: ’Tis a general maxim in philosophy, that *whatever begins to exist*, must have a cause of existence. This is commonly taken for granted in all reasonings, without any proof given or demanded. ’Tis supposed to be founded on intuition, and to be one of those maxims, which though they may be deny’d with the lips, ’tis impossible for men in their hearts really to doubt of. But if we examine this maxim by the idea of knowledge above explain’d we shall discover in it no mark of any such intuitive certainty; but on the contrary shall find, that ’tis of a

nature quite foreign to that species of conviction."

The principle that every event must have a cause, is neither intuitively nor demonstratively certain. So far from there existing a *necessary* connection between the idea of an event as something happening in time and the idea of a cause, no connection of any kind is discoverable by us. We can conceive an object to be non-existent at this moment, and existent the next, without requiring to conjoin with it the altogether different idea of a productive source.

This had been implicitly recognised by those few philosophers who had attempted to give demonstrations of the principle. By so doing, however, they only reinforce Hume's contention that it possesses no rational basis. When Hobbes argues that as all the points of time and place in which we can suppose an object to begin to exist, are in themselves equal, there must be some cause determining an event to happen at one moment rather than at another, he is assuming the very principle which he professes to prove. There is no greater difficulty in supposing the time and place to be fixed without a cause, than in supposing the existence to be so determined. If the denial of a cause is not intuitively absurd in the one case, it cannot be so in the other. If the first demands a proof, so likewise must the second. Similarly with the arguments advanced by Locke and Clarke. Locke argues that if anything is produced without a cause, it is produced by nothing, and that that is impossible, since nothing can never be a cause any more than it can be something, or equal to two right angles. Clarke's contention that if anything were without a cause, it would produce *itself*, *i.e.* exist before it existed, is of the same character. These arguments assume the only point which is in question.

"When we exclude all causes we really do exclude them, and neither suppose nothing nor the object itself to be the causes of the existence, and consequently can draw no argument from the absurdity of these suppositions to prove the absurdity of that exclusion."

The remaining argument, that every effect must have a cause, since this is implied in the very idea of an effect, is "still more frivolous."

"Every effect necessarily presupposes a cause; effect being a relative term, of which cause is the correlative. But this does not prove that every being must be preceded by a cause; no more than it follows, because every husband must have a wife, that therefore every man must be married."

The far-reaching conclusion, that the principle of causality has no possible rational basis, Hume extends and reinforces through his other doctrines, viz. that synthetic reason is merely generalised belief, and that belief is in all cases due to the ultimate instincts and propensities which *de facto* constitute our human nature. The synthetic principles which lie at the basis of our experience are non-rational in character. Each is due to a 'blind and powerful instinct,' which, demanding no evidence, and ignoring theoretical inconsistency for the sake of practical convenience, necessitates belief.

"Nature by an absolute and uncontrollable necessity has determined us to judge as well as to breathe and feel." "All these operations are a species of natural instincts, which no reasoning or process of the thought and understanding is able either to produce or to prevent."

Reason is "nothing but a wonderful and unintelligible instinct in our souls." It justifies itself by its practical uses, but can afford no standard to which objective reality must conform.

It is from this point of view that Hume states his answer to the problem of perception. Our natural belief in the permanence and identity of objects, as expressed through the principle of substance and attribute, leads us to interpret the objects of sense-perception as independent realities. We interpret our subjective sensations as being qualities of independent substances. Our other natural belief, in the dynamical interdependence of events, as expressed through the principle of causality, leads, however, to the opposite conclusion, that the known objects are merely mental. For by it we are constrained to interpret sensations, not as objective qualities, but only as subjective effects, expressive of the reactions of our psycho-physical organism. The Cartesian problems owe their origin to the mistaken attempt to harmonise, in a theoretical fashion, these two conflicting principles. The conflict is inevitable and the

antinomy is insoluble, so long as the two principles are regarded as objectively valid. The only satisfactory solution comes through recognition that reason is unable to account, save in reference to practical ends, even for its own inevitable demands. The principle of substance and attribute and the principle of causality co-operate in rendering possible such organisation of our sense-experience as is required for practical life. But when we carry this organisation further than practical life itself demands, the two principles at once conflict.

Kant shows no interest in this constructive part of Hume's philosophy; and must, indeed, have been almost entirely ignorant of it, since it finds only very imperfect expression in the *Enquiry*, and is ignored in Beattie's *Nature of Truth*. Accordingly, Kant does not regard Hume as offering a positive explanation of knowledge, but rather as representing the point of view of thoroughgoing scepticism. But even had he been acquainted at first hand with Hume's *Treatise*, he would undoubtedly have felt little sympathy with Hume's naturalistic view of the function of reason. His training in the mathematical sciences would have enabled him to detect the inadequacy of Hume's treatment of mathematical knowledge, and his strong moral convictions would have led him to rebel against the naturalistic assumptions which underlie Hume's entire position. The Berkeley-Hume comedy is thus repeated with reversed rôles. Just as Berkeley's anti-materialistic philosophy was mainly influential as a step towards the naturalism of Hume, and as such still survives in the philosophies of John Stuart Mill, Herbert Spencer, Huxley, Mach and Karl Pearson, so in turn Hume's anti-metaphysical theory of knowledge was destined to be one of the chief contributory sources of the German speculative movement.

We may now turn to Hume's treatment of the narrower problem — that of justifying our *particular* causal judgments. Hume's attitude towards this question is predetermined by the more fundamental argument, above stated, which precedes it in the *Treatise*, but which is entirely omitted from the corresponding chapters of the *Enquiry*. As the general principle of causality is of an irrational character, the same must be true of those particular judgments which are based upon it. Much of Hume's argument on this question is, indeed, merely a restatement of what had already been pointed out by his predecessors. There is no necessary connection discoverable between *any* cause and its effect. This is especially evident as regards the connection between brain states and mental experiences. No explanation can be given why a motion in the brain should produce sensations in the mind, or why a mental resolution should produce movements in the body. Such sequences may be empirically verified; they cannot be rationally understood. That this likewise holds, though in less obvious fashion, of the causal interrelations of material bodies, had been emphasised by Geulincx, Malebranche, Locke, and Berkeley. The fact that one billiard ball should communicate motion to another by impact is, when examined, found to be no less incomprehensible than the interaction of mind and body. Hume, in the following passage, is only reinforcing this admitted fact, in terms of his own philosophy.

"We fancy that were we brought on a sudden into this world we could at first have inferred that one billiard ball would communicate motion to another upon impulse; and that we needed not to have waited for the event, in order to pronounce with certainty upon it. Such is the influence of custom, that, where it is strongest, it not only covers our natural ignorance, but even conceals itself, and seems not to take place merely because it is found in the highest degree."

Nor are we conscious of any causal power within the self. When Berkeley claims that mind has the faculty of producing images at will, he is really ascribing to it creative agency. And such creation, as Malebranche had already pointed out, is not even conceivable.

"I deny that my will produces in me my ideas, for I cannot even conceive how it could produce them, since my will, not being able to act or will without knowledge, presupposes my ideas and does not make them." "Is there not here," Hume asks, "either in a spiritual or material substance, or both, some secret mechanism or structure of parts, upon which the effect depends, and which, being entirely unknown to us, renders the power or energy of the will equally unknown and incomprehensible?"

But the fact that Hume thus restates conclusions already emphasised by his predecessors will not justify us in contending (as certain historians of philosophy seem inclined to do) that in his treatment of the causal problem he failed to make any important advance upon the teaching of the Occasionalists. Hume was the first to perceive the essential falsity of the Cartesian, rationalistic view of the causal nexus. For Descartes, an effect is that which can be deduced with logical necessity from the concept of its cause. The Occasionalists similarly argued that because natural events can never be deduced from one another they must in all cases be due to supernatural agency; like Descartes, they one and all failed to comprehend that since by an effect we mean that which follows *in time* upon its cause, and since, therefore, the principle of causality is the law of *change*, the nature of causality cannot be expressed in logical terms. Hume was the first to appreciate the significance of this fundamental fact; and an entirely new set of problems at once came into view. If causal connection is not, as previous thinkers had believed, logical in character, if it does not signify logical dependence of the so-called effect upon its cause, its true connotation must lie elsewhere; and until this has been traced to its hidden source, any attempted solution of metaphysical problems is certain to involve many false assumptions. The answer that is given to the problem of the origin and content of the causal concept must determine our interpretation alike of sense-experience and of pure thought.

The problem presents on examination, however, a most paradoxical aspect. As Hume has already shown, every effect is an event distinct from its cause, and there is never any connection, beyond that of mere sequence, discoverable between them. We observe only sequence; we assert necessary connection. What, then, is in our minds when this latter assertion is made? And how, if the notion of necessitated connection cannot be gained through observation of the external events, is it acquired by us? Hume again propounds a naturalistic solution. Causation, *i.e. necessitated* sequence in time, is not in any sense a conception; it is not a comprehended relation between events, but a misunderstood feeling in our minds. We cannot form any, even the most remote, conception of how one event can produce another. Neither imagination nor pure thought, however freely they may act, are capable of inventing any such notion. But nature, by the manner in which it has constituted our minds, deludes us into the belief that we are in actual possession of this idea. The repeated sequence of events, in fixed order, generates in us the feeling of a tendency to pass from the perception or idea of the one to the idea of the other. This feeling, thus generated by custom, and often in somewhat confused fashion combined with the feeling of ‘animal nisus,’ which is experienced in bodily effort, is mistaken by the mind for a definite concept of force, causality, necessary connection. As mere feeling it can afford no insight into the relation holding between events, and as merely subjective can justify no inference in regard to that relation. The terms force, causality, necessitated sequence in time, have a practical value, as names for our instinctive, natural expectations; but when employed as instruments for the *theoretical* interpretation of experience, they lead us off on a false trail.

This is one of the fundamental points upon which Hume reveals a deeper speculative insight than either Malebranche, Geulincx, or Locke. Though these latter insist upon our ignorance of the relation holding between events, they still assume that causation and natural necessity are concepts which have a quite intelligible meaning; and in consequence they fail to draw the all-important conclusion, that the general principle of causality has neither intuitive nor demonstrative validity. For that is the revolutionary outcome of Hume’s analysis of the notion of necessitated connection. The principle of causality is a synthetic judgment in which no connection is discoverable between its subject and its predicate. That is the reason why it is neither self-evident nor capable of being established upon more ultimate grounds.

As has already been stated, the wider problem concerning the *principle* of causality is developed only in the *Treatise*; the problem regarding the *concept* of causality is discussed both in the *Treatise* and in the *Enquiry*. An appreciation of the wider problem is required, however, in order to set this second problem in its true light, for it is only through its connection with the wider issue that Hume’s reduction of the

concept of causality to a merely instinctive, non-rational expectation acquires its full significance. Hume's analysis then amounts, as Kant was the first to realise, to an attack upon the objective validity of all constructive thinking. Not only rationalism, but even such metaphysics as may claim to base its conclusions upon the teaching of experience, is thereby rendered altogether impossible. The issue is crucial, and must be honestly faced, before metaphysical conclusions, no matter what their specific character may be, whether *a priori* or empirical, can legitimately be drawn. If we may not assert that an event must have some cause, even the right to enquire for a cause must first be justified. And if so fundamental a principle as that of causality is not self-evident, are there any principles which can make this claim?

The account which we have so far given of Hume's argument covers only that part of it which is directed against the rationalist position, and which was therefore so influential in turning Kant on to the line of his Critical speculations. But Hume attacked with equal vigour the empiricist standpoint; and as this aspect of his teaching, constituting as it did an integral part of Kant's own philosophy, must undoubtedly have helped to confirm Kant in his early rationalist convictions, we may profitably dwell upon it at some length. In opposition to the empiricists, Hume argues that experience is incapable of justifying any inference in regard to matters of fact. It cannot serve as a basis from which we can inductively extend our knowledge of facts beyond what the senses and memory reveal. Inductive inference, when so employed, necessarily involves a *petitio principii*; we assume the very point we profess to have proved.

The argument by which Hume establishes this important contention is as follows. All inductive reasoning from experience presupposes the validity of belief in causal connection. For when we have no knowledge of causes, we have no justification for asserting the continuance of uniformities. Now it has been shown that we have no experience of any necessary relation between so-called causes and their effects. The most that experience can supply are sequences which repeat themselves. In regarding the sequences as causal, and so as universally constant, we make an assertion for which experience gives no support, and to which no amount of repeated experience, recalled in memory, can add one jot of real evidence. To argue that because the sequences have remained constant in a great number of repeated experiences, they are therefore more likely to remain constant, is to assume that constancy in the past is a ground for inferring it in the future; and that is the very point which demands proof. In drawing the conclusion we virtually assume that there is a necessary connection, *i.e.* an absolutely constant relation, between events. But since no *single* experience of causal sequence affords ground for inferring that the sequence will continue in the future, no number of repeated experiences, recalled in memory, can contribute to the strengthening of the inference. It is meaningless to talk even of likelihood or probability. The fact that the sun has without a single known exception arisen each day in the past does not (if we accept the argument disproving all knowledge of necessary connection) constitute *proof* that it will rise to-morrow.

"None but a fool or a madman will be unaffected in his expectations or natural beliefs by this constancy, but he is no philosopher who accepts this as in the nature of evidence."

Since, for all that we know to the contrary, bodies may change their nature and mode of action at any moment, it is vain to pretend that we are scientifically assured of the future because of the past.

"My practice, you say, refutes my doubts. But you mistake the purport of my question. As an agent, I am quite satisfied in the point; but as a philosopher, who has some share of curiosity, I will not say scepticism, I want to learn the foundation of this inference. No reading, no enquiry has yet been able to remove my difficulty or give me satisfaction in a matter of such importance. Can I do better than propose the difficulty to the public, even though, perhaps, I have small hopes of obtaining a solution? We shall at least, by this means, be sensible of our ignorance, if we do not augment our knowledge."

Kant was the first, after thirty years, to take up this challenge. Experience is no source of evidence until

the causal postulate has been *independently* proved. Only if the principle of causality can be established prior to all specific experience, only if we can predetermine experience as necessarily conforming to it, are empirical arguments valid at all. Hume's enquiry thus directly leads to the later, no less than to the earlier form of Kant's epoch-making question. In its earlier formulation it referred only to *a priori* judgments; in its wider application it was found to arise with equal cogency in connection with empirical judgments. And as thus extended, it generated the problem: How is sense-experience, regarded as a form of *knowledge*, possible at all? By showing that the principle of causality has neither intuitive nor demonstrative validity, Hume cuts the ground from under the rationalists; by showing that sense-experience cannot by itself yield conclusions which are objectively valid, he at the same time destroys the empiricist position. In this latter contention Kant stands in complete agreement with Hume. That the sensuously given is incapable of grounding even probable inferences, is a fundamental presupposition (never discussed, but always explicitly assumed) of the Critical philosophy. It was by challenging the sufficiency of Hume's other line of argument, that which is directed against the rationalists, that Kant discovered a way of escape from the sceptical dilemma. The conditions of experience can be proved by a transcendental method, which, though *a priori* in character, does not lie open to Hume's sceptical objections. Each single experience involves rational principles, and consequently even a single empirical observation may suffice to justify an inductive inference. Experience conforms to the demands of pure *a priori* thought; and can legitimately be construed in accordance with them.

We may now pass to the philosophy in which Kant was educated. It gave to his thinking that rationalist trend, to which, in spite of all counter-influences, he never ceased to remain true. It also contributed to his philosophy several of its constructive principles. Only two rationalist systems need be considered, those of Leibniz and of Wolff. Kant, by his own admission, had been baffled in his attempts (probably not very persevering) to master Spinoza's philosophy. It was with Wolff's system that he was most familiar; but both directly and indirectly, both in his early years and in the 'seventies, the incomparably deeper teaching of Leibniz must have exercised upon him a profoundly formative influence. In defining the points of agreement and of difference between Hume and Leibniz, we have already outlined Leibniz's general view of the nature and powers of pure thought, and may therefore at once proceed to the relevant detail of his main tenets.

Upon two fundamental points Leibniz stands in opposition to Spinoza. He seeks to maintain the reality of the contingent or accidental. These terms are indeed, as he conceives them, synonymous with the actual. Necessity rules only in the sphere of the possible. Contingency or freedom is the differentiating characteristic of the real. This point of view is bound up with his second contention, namely, that the real is a kingdom of ends. It is through divine choice of the best among the possible worlds that the actual present order has arisen. There are thus two principles which determine the real: the principle of contradiction which legislates with absolute universality, and the principle of the best, or, otherwise formulated, of sufficient reason, which differentiates reality from truth, limiting thought, in order that, without violating logic, it may freely satisfy the moral needs. Leibniz thus vindicates against Spinoza the reality of freedom and the existence of ends.

Though Leibniz agrees with Spinoza that the philosophically perfect method would be to start from an adequate concept of the Divine Being, and to deduce from His attributes the whole nature of finite reality, he regards our concept of God as being too imperfect to allow of such procedure. We are compelled to resort to experience, and by analysis to search out the various concepts which it involves. By the study of these concepts and their interrelations, we determine, in obedience to the law of contradiction, the nature of the possible. The real, in contradistinction from the possible, involves, however, the notion of ends. The existence of these ends can never be determined by logical, but only by moral considerations. The chief problem of philosophical method is, therefore, to discover the exact relation in which the logical and the teleological, the necessary and the contingent, stand to one another.

The absence of contradiction is in itself a sufficient guarantee of possibility, *i.e.* even of the possibility of real existence. How very far Leibniz is willing to go on this line is shown by his acceptance of the ontological argument. The whole weight of his system rests, indeed, upon this proof. The notion of God is, he maintains, the sole concept which can determine itself in a purely logical manner not only as possible but also as real. If we are to avoid violating the principle of contradiction, the *Ens perfectissimum* must be regarded as possessing the perfection of real existence. And since God is perfect in moral as in all other attributes, His actions must be in conformity with moral demands. In creating the natural order God must therefore have chosen that combination of possibilities which constitutes the best of all possible worlds. By means of this conceptual bridge we are enabled to pass by pure *a priori* thinking from the logically possible to the factually real.

Pure logical thinking is thus an instrument whereby ultimate reality can be defined in a valid manner. *Pure thought is speculative and metaphysical in its very essence.* It uncovers to us what no experience can reveal, the wider universe which exists eternally in the mind of God. Every concept (whether mathematical, dynamical, or moral), provided only that it is not self-contradictory, is an eternal essence, with the intrinsic nature of which even God must reckon in the creation of things. When, therefore, we are determining the unchanging nature of the eternally possible, there is no necessary reference to Divine existence. The purely logical criterion suffices as a test of truth. Every judgment which is made in regard to such concepts must express only what their content involves. All such judgments must be analytic in order to be true.

When, however, we proceed from the possible to the real, that is to say, from the necessary to the contingent, the logical test is no longer sufficient; and only by appeal to the second principle, that of sufficient reason, can judgments about reality be logically justified. Whether or not the principle of sufficient reason is deducible, as Wolff sought to maintain, from the principle of contradiction, is a point of quite secondary importance. That is a question which does not deserve the emphasis which has been laid upon it. What is chiefly important is that for Leibniz, as for Wolff, both principles are principles of analysis. The principle of sufficient reason is not an instrument for determining necessary relations between independent substances. The sufficient ground of a valid predicate must in all cases be found in the concept of the subject to which it is referred. The difference between the two principles lies elsewhere, namely, in the character of the connection established between subject and predicate. In the one case the denial of the proposition involves a direct self-contradiction. In the other the opposite of the judgment is perfectly conceivable; our reason for asserting it is a moral (employing the term in the eighteenth-century sense), not a logical ground. The subject is so constituted, that in the choice of ends, in pursuit of the good, it must by its very nature so behave. The principle of sufficient reason, which represents in our finite knowledge the divine principle of the best, compels us to recognise the predicate as involved in the subject — as involved through a ground which inclines without necessitating. Often the analysis cannot be carried sufficiently far to enable us thus to transform a judgment empirically given into one which is adequately grounded. None the less, in recognising it as true, we postulate that the predicate is related to the subject in this way. There are not for Leibniz two methods of establishing truth, sense-perception to reveal contingent fact, and general reasoning to establish necessary truth. A proposition can be accepted as true only in so far as we can at least *postulate*, through absence of contradiction and through sufficient reason, its analytic character. It must express some form of identity. The proposition, Caesar crossed the Rubicon, is given us as historical fact. The more complete our knowledge of Caesar and of his time, the further we can carry the analysis; and that analysis if completely executed would displace the merely factual validity of the judgment by insight into its metaphysical truth. Thus experience, with its assertions of the here and now about particulars inexhaustibly concrete, sets to rational science an inexhaustible task. We can proceed in our analysis indefinitely, pushing out the frontiers of thought further and further into the empirical realm. Only by the Divine Mind can the task be completed, and all things

seen as ordered in complete obedience to the two principles of thought.

Leibniz, in propounding this view, develops a genuinely original conception of the relation holding between appearance and reality. Only monads, that is, spiritual beings, exist. Apart from the representative activity of the monads there are no such existences as space and time, as matter and motion. The mathematical and physical sciences, in their present forms, therefore, cannot be interpreted as revealing absolute existences. But, if ideally developed, they would emancipate themselves from mechanical and sensuous notions; and would consist of a body of truths, which, as thus perfected, would be discovered to constitute the very being of thought. Pure thought or reason consists in the apprehension of such truths. To discover and to prove them thought does not require to issue out beyond itself. It creates this conceptual world in the very act of apprehending it; and as this realm of truth thus expresses the necessary character of all thought, whether divine or human, it is universal and unchanging. Each mind apprehends the same eternal truth; but owing to imperfection each finite being apprehends it with some degree of obscurity and confusion, fragmentarily, in terms of sense, and so falls prey to the illusion that the self stands in mechanical relations to a spatial and temporal world of matter and motion.

Leibniz supports this doctrine by his theory of sense-experience as originating spontaneously from within the individual mind. Thereby he is only repeating that pure thought generates its whole content from within itself. Sense-experience, in its intrinsic nature, is nothing but pure thought. Such thought, owing to the inexhaustible wealth of its conceptual significance, so confuses the mind which thus generates it, that only by prolonged analysis can larger and larger portions of it be construed into the conceptual judgments which have all along constituted its sole content. And in the process, space, time, and motion lose all sensuous character, appearing in their true nature as orders of relation which can be adequately apprehended only in conceptual terms. They remain absolutely real as objects of thought, though as sensible existences they are reduced to the level of mere appearance. Such is the view of thought which is unfolded in Leibniz’s writings, in startling contrast to the naturalistic teaching of his Scotch antagonist.

As already indicated, Kant’s first-hand knowledge of Leibniz’s teaching was very limited. He was acquainted with it chiefly through the inadequate channel of Wolff’s somewhat commonplace exposition of its principles. But even from such a source he could derive what was most essential, namely, Leibniz’s view of thought as absolute in its powers and unlimited in its claims. How closely Wolff holds to the main tenet of Leibniz’s system appears from his definition of philosophy as “the science of possible things, so far as they are possible.” He thus retains, though without the deeper suggestiveness of Leibniz’s speculative insight, the view that thought precedes reality and legislates for it. By the possible is not meant the existentially or psychologically possible, but the conceptually necessary, that which, prior to all existence, has objective validity, sharing in the universal and necessary character of thought itself.

As Riehl has very justly pointed out, Wolff’s philosophy had, prior even to the period of Kant’s earliest writings, been displaced by empirical, psychological enquiries and by eclectic, popular philosophy. Owing to the prevailing lack of thoroughness in philosophical thinking, “Problemlosigkeit” characterised the whole period. The two exclusively alternative views of the function of thought stood alongside one another within each of the competing systems, quite unreconciled and in their mutual conflict absolutely destructive of all real consistency and thoroughness of thought. It was Kant who restored rationalism to its rightful place. He reinvigorated the flaccid tone of his day by adopting in his writings, both early and late, the strict method of rational science, and by insisting that the really crucial issues be boldly faced. In essentials Kant holds to Wolff’s definition of philosophy as “the science of possible things, so far as they are possible.” As I have just remarked, the possible is taken in an objective sense, and the definition consequently gives expression to the view of philosophy upon which Kant so frequently insists, as lying wholly in the sphere of pure *a priori* thought. Its function is to determine prior to specific experience what experience must be; and obviously that is only possible by means of an *a priori*, purely conceptual method. His *Critique*, as its title indicates, is a criticism of pure reason by pure reason. Nothing which

escapes definition through pure *a priori* thinking can come within its sphere. The problem of the “possibility of experience” is the problem of discovering the conditions which *necessarily* determine experience to be what it is. Kant, of course, radically transforms the whole problem, in method of treatment as well as in results, when in defining the subject-matter of enquiry he substitutes experience for things absolutely existent. This modification is primarily due to the influence of Hume. But the constant occurrence in Kant’s philosophy of the term “possibility” marks his continued belief in the Idealist view of thought. Though pure thought never by itself amounts to knowledge — therein Kant departs from the extreme rationalist position — only through it is any knowledge, empirical or *a priori*, possible at all. Philosophy, in order to exist, must be a system of *a priori* rational principles. Nothing empirical or hypothetical can find any place in it. Yet at the same time it is the system of the *a priori* conditions only of experience, not of ultimate reality. Such is the twofold relation of agreement and difference in which Kant stands to his rationalist predecessors.

SCIENCE AND RELIGION — KANT, LAMBERT, LAPLACE, SIR WILLIAM HERSCHEL by Walter Libby

Hutton had advanced the study of geology by concentrating attention on the observable phenomena of the earth's crust, and turning away from speculations about the origin of the world and the relation of this sphere to other units of the cosmos. In the same century, however, other scientists and philosophers were attracted by these very problems which seemed not to promise immediate or demonstrative solution, and through their studies they arrived at conclusions which profoundly affected the science, the ethics, and the religion of the civilized world.

Whether religion be defined as a complex feeling of elation and humility — a sacred fear — akin to the æsthetic sense of the sublime; or, as an intellectual recognition of some high powers which govern us below — of some author of all things, of some force social or cosmic which tends to righteousness; or, as the outcrop of the moral life touched with light and radiant with enthusiasm; or, as partaking of the nature of all these: it cannot be denied that the eighteenth century contributed to its clarification and formulation, especially through the efforts of the German philosopher, Immanuel Kant (1724-1804). Yet it is not difficult to show that the philosophy of Kant and of those associated with him was greatly influenced by the science of the time, and that, in fact, in his early life he was a scientist rather than a philosopher in the stricter sense. His *General Natural History and Theory of the Heavens*, written at the age of thirty-one, enables us to follow his transition from science to philosophy, and, more especially, to trace the influence of his theory of the origin of the heavenly bodies on his religious conceptions.

For part of this theory Kant was indebted to Thomas Wright of Durham (1711-1786). Wright was the son of a carpenter, became apprenticed to a watchmaker, went to sea, later became an engraver, a maker of mathematical instruments, rose to affluence, wrote a book on navigation, and was offered a professorship of navigation in the Imperial Academy of St. Petersburg. It was in 1750 that he published, in the form of nine letters, the work that stimulated the mind of Kant, *An Original Theory or New Hypothesis of the Universe*. The author thought that the revelation of the structure of the heavens naturally tended to propagate the principles of virtue and vindicate the laws of Providence. He regarded the universe as an infinity of worlds acted upon by an eternal Agent, and full of beings, tending through their various states to a final perfection. Who, conscious of this system, can avoid being filled with a kind of enthusiastic ambition to contribute his atom toward the due admiration of its great and Divine Author?

Wright discussed the nature of mathematical certainty and the various degrees of moral probability proper for conjecture (thus pointing to a distinction that ultimately became basal in the philosophy of Kant). When he claimed that the sun is a vast body of blazing matter, and that the most distant star is also a sun surrounded by a system of planets, he knew that he was reasoning by analogy and not enunciating what is immediately demonstrable. Yet this multitude of worlds opens out to us an immense field of probation and an endless scene of hope to ground our expectation of an ever future happiness upon, suitable to the native dignity of the awful Mind which made and comprehended it.

The most striking part of Wright's *Original Theory* relates to the construction of the Milky Way, which he thought analogous in form to the rings of Saturn. From the center the arrangement of the systems and the harmony of the movements could be discerned, but our solar system occupies a section of the belt, and what we see of the creation gives but a confused picture, unless by an effort of imagination we attain the right point of view. The various cloudy stars or light appearances are nothing but a dense accumulation of stars. What less than infinity can circumscribe them, less than eternity comprehend them, or less than Omnipotence produce or support them? He passes on to a discussion of time and space with regard to the

known objects of immensity and duration, and in the ninth letter says that, granting the creation to be circular or orbicular, we can suppose in the center of the whole an intelligent principle, the to-all-extending eye of Providence, or, if the creation is real, and not merely ideal, a sphere of some sort. Around this the suns keep their orbits harmoniously, all apparent irregularities arising from our eccentric view. Moreover, space is sufficient for many such systems.

Kant resembled his predecessor in his recognition of the bearing on moral and religious conceptions of the study of the heavens and also in his treatment of many astronomical details, sometimes merely adopting, more frequently developing or modifying, the teachings of Wright. He held that the stars constitute a system just as much as do the planets of our solar system, and that other solar systems and other Milky Ways may have been produced in the boundless fields of space. Indeed, he is inclined to identify with the latter systems the small luminous elliptical areas in the heavens reported by Maupertuis in 1742. Kant also accepted Wright's conjecture of a central sun or globe and even made selection of one of the stars to serve in that office, and taught that the stars consist like our sun of a fiery mass. One cannot contemplate the world-structure without recognizing the excellent orderliness of its arrangement, and perceiving the sure indications of the hand of God in the completeness of its relations. Reason, he says in the *Allgemeine Naturgeschichte*, refuses to believe it the work of chance. It must have been planned by supreme wisdom and carried into effect by Omnipotence.

Kant was especially stimulated by the analogy between the Milky Way and the rings of Saturn. He did not agree with Wright that they, or the cloudy areas, would prove to be stars or small satellites, but rather that both consisted of vapor particles. Giving full scope to his imagination, he asks if the earth as well as Saturn may not have been surrounded by a ring. Might not this ring explain the supercelestial waters that gave such cause for ingenuity to the medieval writers? Not only so, but, had such a vaporous ring broken and been precipitated to the earth, it would have caused a prolonged Deluge, and the subsequent rainbow in the heavens might very well have been interpreted as an allusion to the vanished ring, and as a promise. This, however, is not Kant's characteristic manner in supporting moral and religious truth.

To account for the origin of the solar system, the German philosopher assumes that at the beginning of all things the material of which the sun, planets, satellites, and comets consist, was uncompounded, in its primary elements, and filled the whole space in which the bodies formed out of it now revolve. This state of nature seemed to be the very simplest that could follow upon nothing. In a space filled in this way a state of rest could not last for more than a moment. The elements of a denser kind would, according to the law of gravitation, attract matter of less specific gravity. Repulsion, as well as attraction, plays a part among the particles of matter disseminated in space. Through it the direct fall of particles may be diverted into a circular movement about the center toward which they are gravitating.

Of course, in our system the center of attraction is the nucleus of the sun. The mass of this body increases rapidly, as also its power of attraction. Of the particles gravitating to it the heavier become heaped up in the center. In falling from different heights toward this common focus the particles cannot have such perfect equality of resistance that no lateral movements should be set up. A general circulatory motion is in fact established ultimately in one direction about the central mass, which receiving new particles from the encircling current rotates in harmony with it.

Mutual interference in the particles outside the mass of the sun prevents all accumulation except in one plane and that takes the form of a thin disk continuous with the sun's equator. In this circulating vaporous disk about the sun differences of density give rise to zones not unlike the rings of Saturn. These zones ultimately contract to form planets, and as the planets are thrown off from the central solar mass till an equilibrium is established between the centripetal and centrifugal forces, so the satellites in turn are formed from the planets. The comets are to be regarded as parts of the system, akin to the planets, but more remote from the control of the centripetal force of the sun. It is thus that Kant conceived the nebular hypothesis, accounting (through the formation of the heavenly bodies from a cloudy vapor similar to that

still observable through the telescope) for the revolution of the planets in one direction about the sun; the rotation of sun and planets; the revolution and rotation of satellites; the comparative densities of the heavenly bodies; the materials in the tails of comets; the rings of Saturn, and other celestial phenomena. Newton, finding no matter between the planets to maintain the community of their movements, asserted that the immediate hand of God had instituted the arrangement without the intervention of the forces of Nature. His disciple Kant now undertook to explain an additional number of phenomena on mechanical principles. Granted the existence of matter, he felt capable of tracing the cosmic evolution, but at the same time he maintained and strengthened his religious position, and did not assume (like Democritus and Epicurus) eternal motion without a Creator or the coming together of atoms by accident or haphazard.

It might be objected, he says, that Nature is sufficient unto itself; but universal laws of the action of matter serve the plan of the Supreme Wisdom. There is convincing proof of the existence of God in the very fact that Nature, even in chaos, cannot proceed otherwise than regularly and according to law. Even in the essential properties of the elements that constituted the chaos, there could be traced the mark of that perfection which they have derived from their origin, their essential character being a consequence of the eternal idea of the Divine Intelligence. Matter, which appears to be merely passive and wanting in form and arrangement, has in its simplest state a tendency to fashion itself by a natural development into a more perfect constitution. Matter must be considered as created by God in accordance with law and as ever obedient to law, not as an independent or hostile force needing occasional correction. To suppose the material world not under law would be to believe in a blind fate rather than in Providence. It is Nature's harmony and order revealed to our understanding that give us a clue to its creation by an understanding of the highest order.

In a work written eight years later Kant sought to furnish people of ordinary intelligence with a proof of the existence of God. It might seem irrelevant in such a production to give an exposition of physical phenomena, but, intent on his method of mounting to a knowledge of God by means of natural science, he here repeats in summarized form his theory of the origin of the heavenly bodies. Moreover, the influence of his astronomical studies persisted in his maturest philosophy, as can be seen in the well-known passage at the conclusion of his ethical work, the *Critique of the Practical Reason* (1788): "There are two things that fill my spirit with ever new and increasing awe and reverence — the more frequently and the more intently I contemplate them — the star-strewn sky above me and the moral law within." His religious and ethical conceptions were closely associated with — indeed, dependent upon — an orderly and infinite physical universe.

In the mathematician, astronomer, physicist, and philosopher, J. H. Lambert (1728-1777), Kant found a genius akin to his own, and through him hoped for a reformation of philosophy on the basis of the study of science. Lambert like his contemporary was a disciple of Newton, and in 1761 he published a book in the form of letters expressing views in reference to the Milky Way, fixed stars, central sun, very similar to those published by Kant in 1755. Lambert had heard of Wright's work, so similar to his own, a year after the latter was written.

Comets, now robbed of many of the terrors with which ancient superstition endowed them, might, he says, seem to threaten catastrophe, by colliding with the planets or by carrying off a satellite. But the same hand which has cast the celestial spheres in space, has traced their course in the heavens, and does not allow them to wander at random to disturb and destroy each other. Lambert imagines that all these bodies have exactly the volume, weight, position, direction, and speed necessary for the avoidance of collisions. If we confess a Supreme Ruler who brought order from chaos, and gave form to the universe; it follows that this universe is a perfect work, the impress, picture, reflex of its Creator's perfection. Nothing is left to blind chance. Means are fitted to ends. There is order throughout, and in this order the dust beneath our feet, the stars above our heads, atoms and worlds, are alike comprehended.

Laplace in his statement of the nebular hypothesis made no mention of Kant. He sets forth, in the

Exposition of the Solar System, the astronomical data that the theory is designed to explain: the movements of the planets in the same direction and almost in the same plane; the movements of the satellites in the same direction as those of the planets; the rotation of these different bodies and of the sun in the same direction as their projection, and in planes little different; the small eccentricity of the orbits of planets and satellites; the great eccentricity of the orbits of comets. How on the ground of these data are we to arrive at the cause of the earliest movements of the planetary system?

A fluid of immense extent must be assumed, embracing all these bodies. It must have circulated about the sun like an atmosphere and, in virtue of the excessive heat which was engendered, it may be assumed that this atmosphere originally extended beyond the orbits of all the planets, and was contracted by stages to its present form. In its primitive state the sun resembled the nebulæ, which are to be observed through the telescope, with fiery centers and cloudy periphery. One can imagine a more and more diffuse state of the nebulous matter.

Planets were formed, in the plane of the equator and at the successive limits of the nebulous atmosphere, by the condensation of the different zones which it abandoned as it cooled and contracted. The force of gravity and the centrifugal force sufficed to maintain in its orbit each successive planet. From the cooling and contracting masses that were to constitute the planets smaller zones and rings were formed. In the case of Saturn there was such regularity in the rings that the annular form was maintained; as a rule from the zones abandoned by the planet-mass satellites resulted. Differences of temperature and density of the parts of the original mass account for the eccentricity of orbits, and deviations from the plane of the equator.

In his *Celestial Mechanics* (1825) Laplace states that, according to Herschel's observations, Saturn's rotation is slightly quicker than that of its rings. This seemed a confirmation of the hypothesis of the *Exposition du Système du Monde*.

When Laplace presented the first edition of this earlier work to Napoleon, the First Consul said: "Newton has spoken of God in his book. I have already gone through yours, and I have not found that name in it a single time." To this Laplace is said to have replied: "First Citizen Consul, I have not had need of that hypothesis." The astronomer did not, however, profess atheism; like Kant he felt competent to explain on mechanical principles the development of the solar system from the point at which he undertook it. In his later years he desired that the misleading anecdote should be suppressed. So far was he from self-sufficiency and dogmatism that his last utterance proclaimed the limitations of even the greatest intellects: "What we know is little enough, what we don't know is immense" (*Ce que nous connaissons est peu de chose, ce que nous ignorons est immense*).

Sir William Herschel's observations, extended over many years, confirmed both the nebular hypothesis and the theory of the systematic arrangement of the stars. He made use of telescopes 20 and 40 feet in focal length, and of 18.7 and 48 inches aperture, and was thereby enabled, as Humboldt said, to sink a plummet amid the fixed stars, or, in his own phrase, to gauge the heavens. *The Construction of the Heavens* was always the ultimate object of his observations. In a contribution on this subject submitted to the Royal Society in 1787 he announced the discovery of 466 new nebulæ and clusters of stars. The sidereal heavens are not to be regarded as the concave surface of a sphere, from the center of which the observer might be supposed to look, but rather as resembling a rich extent of ground or chains of mountains in which the geologist discovers many strata consisting of various materials. The Milky Way is one stratum and in it our sun is placed, though perhaps not in the very center of its thickness.

By 1811 he had greatly increased his observations of the nebulæ and could arrange them in series differing in extent, condensation, brightness, general form, possession of nuclei, situation, and in resemblance to comets and to stars. They ranged from a faint trace of extensive diffuse nebulosity to a nebulous star with a mere vestige of cloudiness. Herschel was able to make the series so complete that the difference between the members was no more than could be found in a series of pictures of the human

figure taken from the birth of a child till he comes to be a man in his prime. The difference between the diffuse nebulous matter and the star is so striking that the idea of conversion from one to the other would hardly occur to any one without evidence of the intermediate steps. It is highly probable that each successive state is the result of the action of gravity.

In his last statement, 1818, he admitted that to his telescopes the Milky Way had proved fathomless, but on “either side of this assemblage of stars, presumably in ceaseless motion round their common center of gravity, Herschel discovered a canopy of discrete nebulous masses, such as those from the condensation of which he supposed the whole stellar universe to be formed.”

In the theory of the evolution of the heavenly bodies, as set forth by Kant, Laplace, and Herschel, it was assumed that the elements that composed the earth are also to be found elsewhere throughout the solar system and the universe. The validity of this assumption was finally established by spectrum analysis. But this vindication was in part anticipated, at the beginning of the nineteenth century, by the analysis of meteorites. In these were found large quantities of iron, considerable percentages of nickel, as well as cobalt, copper, silicon, phosphorus, carbon, magnesium, zinc, and manganese.

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THE PHILOSOPHY OF IMMANUEL KANT by A. D. Lindsay

CONTENTS

FOREWORD
CHAPTER I. THE IDEA OF CRITICISM
CHAPTER II. KANT'S STATEMENT OF THE PROBLEM. SYNTHETIC A PRIORI JUDGMENTS
CHAPTER III. KANT'S IDEALISM. TIME AND SPACE.
CHAPTER IV. THE CATEGORIES AND THE PRINCIPLES OF PURE UNDERSTANDING
CHAPTER V. THE ANTINOMIES AND CRITICISM OF THE PROOFS OF THE EXISTENCE OF GOD
CHAPTER VI. KANT'S MORAL THEORY
CHAPTER VII. THE "CRITIQUE OF JUDGMENT" — ÆSTHETICS AND TELEOLOGY
BIBLIOGRAPHY

FOREWORD

There is a story that Schopenhauer used to begin his lectures on Kant by saying: “Let no one *tell* you what is contained in the *Critique of Pure Reason*.” The writer of this little book hopes that no one will imagine that he has disregarded this warning. There are no short-cuts to the understanding of a great philosopher, and the only way to appreciate the greatness of a philosophic system is to study the philosopher’s own writings. All that the writer of a book like this can hope to do is to persuade others to undertake that study by interesting them in the problems with which it deals, and by offering a few suggestions which may help to an understanding of it. I have said nothing about the numerous other works which Kant wrote. For the three *Critiques* contain his system, and the understanding of that is all-important.

CHAPTER I. THE IDEA OF CRITICISM

"It is a difficult matter," says Heine, "to write the life history of Immanuel Kant, for he had neither life nor history. He lived a mechanically ordered, abstract, old bachelor kind of existence in a quiet, retired alley in Königsberg, an old town in the north-east corner of Germany." The times he lived in were stirring enough. He was born in 1724, and died in 1804. He lived through the Seven Years' War that first made Germany a nation, he followed with sympathy the United States War of Independence, he saw the French Revolution and the beginning of the career of Napoleon. Yet in all his long life he never moved out of the province in which he was born, and nothing was allowed to interrupt the steady course of his lecturing, studying, and writing. "Getting up," continues Heine, "drinking coffee, lecturing, eating, going for a walk, everything had its fixed time; and the neighbours knew that it must be exactly half-past four when Immanuel Kant, in his gray frock-coat, with his Spanish cane in his hand, stepped from his door and walked towards the little lime-tree avenue, which is called after him the Philosopher's Walk." "Strange contrast," reflects Heine, "between the man's outward life and his destructive, world-smashing thoughts." As the political history of the eighteenth century came to an end when the French Revolution spilled over the borders of France and drove Napoleon up and down Europe, breaking up the old political systems and inaugurating modern Europe, so its opposing currents of thought were gathered together in the mind of a weak-chested, half-invalid little man in Königsberg, and from their meeting a new era in philosophy began.

There are some philosophers to whom truth seems to come almost unsought, as an immediate authoritative vision. Kant was not one of these. His greatest work, the *Critique of Pure Reason*, was conceived when he was forty-eight, and published in 1781, when he was fifty-seven. It was the outcome of half a lifetime's patient study and thought. Heine says of him: "He was the perfect type of the small shopkeeper. Nature had meant him to weigh coffee and sugar, but fate willed that he should weigh other things and put a God on his scales, and his weighing was exact." The sneer is unjust, but there is something in the simile; for Kant's philosophy was a kind of taking stock, a survey of the great movement of thought from the time when the Renaissance and the Reformation made thought free, an attempt to estimate the achievements of the new sciences, to deal with their conflicting claims and ideals and say what it all came to. In Kant modern science, which began with Descartes and Galileo, first became conscious of itself.

This taking stock Kant called *Criticism*. His great books are all called Critiques — the *Critique of Pure Reason*, the *Critique of Practical Reason*, the *Critique of Judgment*. He called his philosophy the Critical Philosophy or Critical Idealism. Essential to an understanding of Kant is an understanding of what he meant by criticism, and why he opposes it to dogmatism and scepticism; for the necessity and possibility of such a criticism was his great philosophical discovery. We have called Kant's work a survey of the achievements of the thought of his times, but it was very much more than that, and has a much more universal significance than could belong to any history of the thought of one epoch. For these achievements of thought, though great, were conflicting and partial. They contrasted with failure and barrenness in other directions, and they seemed to be due to different methods. This success of thought in one direction and its failure in another, and this uncertainty about the true method of science, were problems which at once presented themselves to an impartial observer, and Kant held that they could be answered only by taking stock of actual attainments, and by criticism of the powers and range of human thought in general.

The problem that presented itself to him will be understood if we look for a moment at the history of thought in the seventeenth and eighteenth centuries. One thing that Kant noted in it was the steady and sure

progress of physics. “With the experiments of Galileo and Torricelli,” he says in the preface to the second edition of the first *Critique*, “a new light flashed on all students of nature.” The continued success of physics meant the successful application of mathematics to the concrete world, and along with it a remarkable development of mathematics itself. This sudden success inspired men to feel that they had discovered a way of explaining the universe; they contrasted the fertility of their new methods with the barrenness of scholastic speculation in morals and theology; they felt confident that all that was wanted to the attainment of certain knowledge in all spheres of human interest was the extension of these methods. If men would only set to work the right way, they were sure that all difficulties would be overcome; and, by reflection upon their own success, they hoped to explain what the right way was.

Unfortunately this was not easy, for the advance from pure mathematics to physics, from a study of the nature of pure mathematical conceptions to an inquiry into the laws of falling bodies, implied a change whose nature was not clear to the men who had themselves made the advance. A conflict arose between those who thought more of the fact that knowledge, to be certain, must be capable of mathematical expression, and those who thought more of the basis of experiment and observation on which the new sciences depended, who remembered that these sciences began when Galileo, instead of thinking in the abstract how bodies ought to fall, dropped bodies of different weights from the top of the leaning tower of Pisa and observed what actually happened. Descartes was the great representative of the first school. He began by insisting on the difference between mathematical truth which could be, as he said, clearly and distinctly conceived, and ordinary opinion about things which was full of guesswork and imagination. Scientific knowledge was possible, he thought, only by apprehending the real or primary qualities of things which were mathematical, in contradistinction to their secondary qualities — their colour, smell, &c. — which were less real. Thence he came to think that the real world was mathematical in nature, like a huge, intricate geometrical figure. The elements of mere fact, in our present knowledge, its dependence on observation and experiment, he thought of as temporary defects which the progress of science would remove. What we ordinarily call perception, indeed, in the sense of awareness of things in time and space, was described by Descartes’ successors as confused thinking. Our knowledge of the world would, it was hoped, become a vast mathematical system, all the detail and complexity of which would be rigorously deducible from a few central truths.

This general way of thinking was called Rationalism. Kant ordinarily calls it Dogmatism. It was attacked by other scientists for its view of the nature of space and time. No one who reflects at all can fail to distinguish a difference between the way in which we see the truth of a geometrical proposition — that, *e.g.*, the three angles of a triangle are equal to two right angles — and the way in which we judge that such and such a figure drawn on a board is a triangle, or make judgments about the way in which things are actually arranged in space or succeed in time. Judgments of the latter kind involve words like “here” and “there,” “now” and “then,” words which are all a kind of pointing. It seems impossible from considering the nature of a triangle to deduce why any existing thing should be called triangular, and all statements about the position of things in space and time seem to be derived not from a consideration of the general nature of space and time, but from observation. Now the science which had made perhaps the most striking progress in the time we are speaking of, physical astronomy, involved any number of statements about the position of bodies in space. The Rationalist school admitted this, but held that that was due to the fact that science was not sufficiently thought out. In time, they hoped, all statements about position in space would disappear. To think of things in spatial order was to think confusedly. Newton, on the other hand, held that space could not be explained away, that astronomy implied an absolute space in which things existed, that the spatial relations of things could not be explained by the nature of the things themselves, but only by a reference to absolute space in which they all were. This meant that observation or perception was something of which you could not hope and should not wish to get rid, and that an ideal of knowledge in which all applied mathematics should have been transmuted into pure mathematics was a

vain one. Astronomy implied both mere observation and apprehension of necessary relations. Here was a science which seemed to employ both methods together. Galileo, in fact could not have made his discovery without observation but men had observed bodies falling for ages without discovering the laws of motion. Further, the laws of motion, once discovered, made men in some degree independent of observation, made them able to say of actual concrete things not only what had happened, but what must happen.

Such difficulties as these arose from reflection on the aims and methods of the mathematical sciences, but there was much genuinely scientific inquiry in the seventeenth and eighteenth centuries, which showed no signs of taking mathematical form; chemistry and biology, for example, were still almost entirely empirical. Furthermore, thinkers were not concerned with science alone. These centuries saw a great revival of interest in speculation on human affairs, history, politics, morals and theology. England, which was the home of free discussion on questions of politics and morals, and where, more than in most other countries, there was free discussion on theology, became also the home of empiricism. The empirical movement, indeed, drew much of its impetus from a reaction against Hobbes, the only great English thinker who unhesitatingly applied the mechanical and deterministic assumptions of the new sciences to morals and politics, and arrived by this uncompromising method at results so obviously repellent that no man of any sense could accept them, and so consistently presented that they could not be refuted save by a refutation of the assumptions upon which they were founded. Such a refutation was, in fact, undertaken by Locke, the first great representative of the empirical school. He was interested alike in the more obviously empirical sciences of chemistry and biology, and in politics. He was not a very consistent or systematic thinker, but he had other gifts perhaps as valuable. He was a man of great common sense and breadth of view, and was able thereby to take a conspectus of the general situation in the various spheres of inquiry, to notice the obvious differences in our knowledge of mathematics, of chemical and biological fact, and of theology, and to see that these constituted a problem. We find in him the first statement of the necessity of philosophical criticism. It is contained in his account of the origin of the *Essay concerning Human Understanding*. “Were it fit to trouble thee with the history of this *Essay*, I should tell thee that five or six friends, meeting at my chamber, and discoursing on a subject very remote from this” (they were discussing the “principles of morality and revealed religion”), “found themselves quickly at a stand, by the difficulties that rose on every side. After we had awhile puzzled ourselves, without coming any nearer a resolution of those doubts which perplexed us, it came into my thoughts that we took a wrong course; and that, before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what *objects* our understandings were, or were not, fitted to deal with.”

We have here the same general starting point of inquiry as we shall afterwards find in Kant. There are certain, obstinate puzzles which we meet with in discussion which can only be solved by going back and inquiring into the nature of knowledge and the powers of our minds. Unfortunately, as Kant points out, Locke went the wrong way about his task. He describes it as “a plain historical inquiry.” He thought that he had only to look into his mind and see what was in it, as he might open a door and look into a room. The result is that he thinks of all knowledge as consisting simply in looking at what is present to the mind. We can know, therefore, whatever can be present to the mind, and the limitations of knowledge are discovered by asking what can be so present to the mind. The conclusions to which he comes as to different spheres of human inquiry are roughly these: We can have knowledge of mathematics because there we are concerned only with ideas present to the mind, and with noting their agreement and disagreement. We can have no knowledge of such questions as the immortality of the soul, or the nature of spirits, for they are beyond our observation. As regards existing things, we can have knowledge of them, in so far as they are present to our minds, and no further. The meaning of “present to the mind” was never clearly analysed by Locke; but he meant, for example, that we can observe that an object which is yellow, and which we call gold, is also heavy, and can be dissolved by Aqua Regia, but we cannot say why that is

so, and we ought not, on Locke's principles, to have any ground for supposing that these qualities will go on co-existing.

The element of truth in Locke's position is this. When we are examining concrete things like pieces of gold or any chemical substance, we find in them a number of varying qualities whose connection we cannot understand. We do not know why a metal of a certain specific gravity should also be yellow; we can only note the fact. Hence in chemistry our method must be quite different from the method of mathematics. In mathematics we start from the definition, and we can understand the connection of the properties of a geometrical figure, and see that they all follow necessarily from the definition. But in sciences like chemistry a definition does not take us any further; we can only find out the properties of a substance by observation and experiment. Locke explains this difference by saying that in the former case we are only concerned with agreement among our own ideas, in the second place we are concerned somehow with things outside us. This explanation will not stand. It is not true that mathematics is simply analysis of an arbitrary definition, as Locke seems to suggest. It involves construction, or, as Kant calls it, synthesis. It is a process of discovering new truths. Secondly, our statements about concrete objects are not statements of qualities we see co-existing at the moment. They are statements about all gold or all men; in other words, they are universal, and Locke found it impossible to explain the universality of such propositions — what we mean, *e.g.* when we talk about the nature of gold or of man, not of this gold or this man that I see before me. Lastly, this distinction of mathematics and the empirical sciences by a distinction of spheres does not allow, as we saw, for a science like astronomy, which builds on mathematics and yet applies to the concrete world.

These difficulties were seen more clearly by Hume, at once the greatest and the most thorough-going of empiricists. He cut the knot in regard to mathematics by asserting that geometry, just because it has clearly an application to the existing world, had no more certainty than any other empirical inquiry, while arithmetic and algebra, he agreed, were certain, but confined their application to the sphere of our own ideas. Both positions are almost obviously inconsistent with the facts. In considering the nature of our judgments about concrete existences he raised a more profound problem. All such judgments, as he said, imply the principle of causation, or of what is called, in modern times, the principle of the uniformity of nature. That principle we take with us in our investigation of the existing world. Yet, as Hume saw, we do not observe causes; we only observe succession and change. We seem, therefore, to put into the world we see a necessity and uniformity which the observed facts do not warrant. How is this to be explained?

Hume's answer is ingenious. The principle of causation cannot be rationally justified, and the necessary connection we predicate of changes in the outside world is not in the things; it is only a feeling in ourselves, and is the result of custom. After seeing the same succession several times, we come somehow to feel differently about it, and that feeling of difference we express by saying that we have before us an instance not of simple succession, but of cause and effect.

This is not the place to discuss the difficulties of Hume's position; it is enough to notice how entirely passive it makes the mind, and how alien such an explanation is from the spirit of inquiry and discovery. If cause is simply the effect of custom on the mind, then the facts either produce that effect or they do not. In neither case is there anything to find out. But the scientist, in investigating causes, however strongly he may hold that he has to observe the facts, knows also that he has a problem to solve, that he has to discover the right way to go about it, must adopt some principle in dealing with the facts. Pure passivity will help him little.

Hume's account of causation, then, is really a denial of even empirical science, and yet it helped to make clear an important truth; for, although we do not get the *principle* of causation from experience, we have to go to experience to discover causal laws. We do not discover causation by analysing a cause and seeing that it is such that, from its nature, it must produce a certain effect. All knowledge of causation goes back to observed succession, though all cases of observed and even repeated succession are not cases of

causation. Hume, therefore, was right in saying that where there could be no observed succession there could be no knowledge of causation.

Both the rationalistic and the empirical explanations of science had failed, the one because it could find no room for observation of facts, the other because it could find no room for principles governing that observation; and we shall see that Kant started with a consciousness of this double failure. He saw that Hume's criticism of causation raised problems for which the rationalist had no answer, and yet that the position reached by Hume was incompatible with the existence of science.

The same failure of both rationalism and empiricism had become evident in another sphere — that of morals and religion. The relation of philosophy to science is always twofold. Philosophy is partly concerned with analysing and reflecting on the methods of the different sciences, partly with seeking to adjust the rival and conflicting claims of the two great departments of man's life — science and religion.

It might seem, at first sight, as though in morals and religion rationalism were the only possible method to be approved by philosophy, for, inasmuch as morals are concerned with what ought to be, not with what is, they cannot depend on observation, but must be deduced from some principle above experience; nor are objects of religion, God and the soul, objects of observation. No man can "by searching find out God."

It was natural, therefore, that both on the Continent and in England morality and religion began by being rationalistic. Descartes believed that his mathematical method could be applied with success to demonstrate the truths of religion, while Locke includes morality along with mathematics among the a priori and certain sciences. But the history of eighteenth century controversy showed that, in spite of rationalist methods, neither morality nor religion could attain that certainty and general agreement which marked the mathematical sciences. Spinoza, applying the same method as Descartes, but with more consistency, arrived at a conception of God which most of his contemporaries regarded as "horrid atheism," and the general result of rational theology is well described by one of Kant's correspondents when he says that the more proofs of the existence of God he learnt, the more his doubts increased. In England the attempts made to found morality upon rationalist principles produced systems too barren to withstand the attack of empiricism fortified by the growing interest in history and anthropology. The Deist movement, an attempt to free religion from the incrustations of faith and deduce it from pure reason, showed that a religion founded on pure reason contained nothing worth believing. In Hume we have the final discrediting of reason in these spheres. He shows ingeniously that "the good Berkeley's" argument for the existence of God could be turned round to disprove the existence of the soul, and he concluded that religion was a sphere with which reason had no concern. In the sphere of morals the distinction between what ought to be and what is, the distinction on which rationalistic morals are based, had been discredited by a reduction of all conduct to Utilitarianism, a search for pleasure and a flight from pain mediated by sympathy. The consequences are described by Kant in his preface to the *Critique of Pure Reason*: "At present, after everything has been tried, so they say, and tried in vain, there reign in philosophy weariness and complete indifferentism, the mother of chaos and night in all sciences," though he hopefully continues, "but at the same time the source, or at least the prelude, of their near reform and of a new light, after an ill-applied study has rendered them dark, confused, and useless."

The earlier of the modern thinkers — Descartes among the rationalists, and Bacon among the empiricists — are full of hope. They have confidence in the human spirit. But increased reflection seemed only to bring distrust with it. The history of rationalism in theology showed that, in such matters, reason could prove absolutely opposing positions. Most men were ready to accept Hume's dictum that any one who follows his reason must be a fool and take refuge in an indifferentism which accepts whatever happens to be there.

The remedy for this state of affairs, Kant finds, is the critical method; for disbelief in reason is the reaction from overconfidence in it. Men had thought that reason could prove everything. Because these

hopes had been frustrated, they now thought that it could prove nothing. Philosophy, he was convinced, would oscillate between overweening confidence and unwarranted distrust in itself until it had criticised human reason and discovered what it could do and what it could not. This is the task he set before himself. As the failure of eighteenth century philosophy, which had led to distrust of all philosophy, had been twofold — failure to give an intelligible explanation of the processes of scientific thought, and failure to find any standard by which to mediate between the conflicting claims of science and religion — the task of the critical philosophy is twofold. It attempts to explain and to justify the methods and assumptions of the sciences, and to find some solution of the conflict between theories of the world which seem to be based upon these methods and the assumptions and claims of morality and religion.

CHAPTER II. KANT'S STATEMENT OF THE PROBLEM. SYNTHETIC A PRIORI JUDGMENTS

In the preface to the second edition of the *Critique of Pure Reason* Kant finds the necessity of criticism in the contrast between certain rational sciences and metaphysics. Mathematics and physics, he observes, are obviously certain sciences. They are not empirical, they make steady progress, the results they have reached are secure and unanimously accepted, and have a certainty which no mere empirical investigation could attain. Metaphysics, on the other hand, though as ancient an inquiry, seems incapable of any settled results. Its history is a record, not of steady progress, but of bewildering marches and countermarches. The confident conclusions of one philosopher are as confidently denied by another, and the endless indecisive conflict produces in the minds of most men the conviction that in philosophy one doctrine is as good as another, and therefore none are worth very much. In the sphere where reason might be expected to be most at home, reason is impotent; yet the achievements of reason in those other spheres of the a priori sciences should preserve us from any general scepticism of the powers of reason. The task of criticism will be to examine the part played by reason in science, and to ask how far its failure in metaphysics is due to mistakes in method, and how far to the different nature of the objects of the a priori sciences and of metaphysics. Kant points out that it was some time before either mathematics or physics followed the secure path of a science. The contrast between the haphazard and empirical observations of the Babylonians or Egyptians and the science of the Greeks was due to the discovery of a new method. The discovery by Galileo and Torricelli of modern physics came about by a similar revolution in method. The *Critique*, therefore, is to be a treatise on method. It will examine the method of reason in the sciences, and ask what conclusions can be drawn as to the proper method of metaphysics.

In the *Prolegomena*, a work in which he summarises the results of the first *Critique*, Kant describes the *Critique* as an answer to three questions: How is mathematics possible? How is pure science of nature or physics possible? and, How is metaphysics possible? Something of the nature of his answer to the third, and for him the most important, question, may be gathered from the fact that he explains that the third question should not be put in the form, How is metaphysics as a science possible? That question can only be answered by saying that it is not possible. But it is still allowable and necessary to ask, How is metaphysics possible as a natural disposition of the mind? For the main result of his inquiries into the place of reason in the sciences is to show that reason is successful in the sciences only because of the presence of certain conditions which are wanting in metaphysics. At first sight we might think it natural that the objects of metaphysics which Kant enumerates as God, Freedom, and Immortality should be understood by reason, and find it more difficult to explain how reason should apply to the world of ordinary experience. The knowledge of everyday things is thought of as empirical, a matter of observation; while we are inclined to think that, if there is rational knowledge, it is knowledge of something else, of the mere agreement or disagreement of ideas (as Hume thought), or of the essences of things, known independently and apart from perception, as Plato thought. Kant argues that the combination of a priori reasoning and empirical observation, which earlier thinkers had found so puzzling in the exact sciences, exhibits the only possible use of reason, that reason, divorced from and with no reference to the world of experience, is barren, and that consequently metaphysics, if that be taken to mean a rational knowledge of objects which are outside of our experience, does not exist. We are left with metaphysics as a natural disposition; for Kant holds that the questions which metaphysics seeks to answer arise from the nature of reason and its relation to experience, though their answer is to be sought not in knowledge but in

action.

This last point must be elucidated later. In the meantime we must see how this inquiry into the nature of reason crystalises itself into a seemingly abstract and trivial question: How are synthetic a priori judgments possible? It is baffling at first to find an inquiry of the scope we have indicated suddenly take such a narrow form, but a little consideration will show the importance of the question. Knowledge may be regarded as either analysis or synthesis, as a puzzling out or unravelling of what we somehow know already, or as a putting together of what had previously been known or observed separately. The rationalist school, whom we described in the last chapter, were inclined to regard all knowledge as analytical. They thought of progress in knowledge as an advance from obscure to clear apprehension, and as a thinking out or making clear of something which had always been known somehow. Mathematics, the typical form of knowledge for the rationalists, had been thought of as the analysis of what was implied or given in the definitions. The conception of analytic a priori knowledge was thus familiar and simple. On the other hand, the empiricists had thought of knowledge as primarily synthesis — or, as they called it, association — a connecting together of ideas in their nature separate. Knowledge of a thing was thought of as the observing together of several ideas. Judgments about objects were regarded as judgments about the co-existence of separate ideas, ideas which were not thought of as being bound by any logical necessity. We do not understand why a substance with the specific gravity of gold should be yellow; we only observe the co-existence of certain qualities. The judgment, then, gold is yellow, is synthetic; it is an assertion of the co-existence of separate qualities. It is also empirical; it does not express a reasoned insight into the necessary connection of gold and yellow. It seems rather a record of observation. Synthetic knowledge, then, was thought of as in its nature empirical and a posteriori. Hume, who thought of all knowledge of the world in experience as synthetic, denied to such knowledge any necessity or certainty.

Hume, however, had noticed that the principle of causation, the judgment that every event has a cause, is both a priori and synthetic. It is not, he held, derived from experience; rather it is a principle which guides our investigation of experience. It is not got from analysis of the notion of causation, nor is it simply concerned with the agreement or disagreement of our ideas. It asserts the necessary connection of two perfectly separate existing things. Hume himself, as we saw, tried to explain away these uncomfortable facts. He was too wedded to his belief that all knowledge was derived from passively received impressions to face them rightly. Kant, coming to the problem with different prepossessions, with the belief that most knowledge was analytic, was impressed with Hume's proof that the principle of causation could not be derived from analysis. The very basis of all science of nature, then, contradicted the belief that knowledge was analytical. Kant was also, with Hume, convinced that the principle of causation was not derived from experience, for he saw that experience assumed it. At the same time, he was not prepared, like Hume, to explain it away. Further, he saw that the problem raised by the principle of causation was a wide one. For other judgments, he held, are both synthetic and a priori, among them mathematical judgments. As we shall see afterwards, Kant proved the impossibility of arriving at knowledge of God or the soul by mere analysis of concepts. The judgments of metaphysics, about God or the soul, are also synthetic. But the validity of the judgments of metaphysics is under dispute. If we examine the synthetic a priori judgments of mathematics and of science whose validity is certain, we may then discover whether such judgments in metaphysics can or can not have similar certainty. We may thus see that the problem of the possibility of synthetic a priori judgments is a restatement in logical terms of the problem of the relation between the a priori sciences and metaphysics.

Something more must be said of the importance of synthetic a priori judgments in Kant's account of knowledge. Their existence, we have seen, exposes the shortcomings of both rationalism, which allowed only for analytic a priori judgments, and empiricism, which allowed only of synthetic a posteriori judgments. Both these theories tended to regard knowledge as an analysis or description of what was

present to the mind, and differed really only in their view of what was present. For, though the empiricist thought of empirical knowledge as synthesis, the synthesis was not ascribed to the mind, but to associating ideas; the mind only observed, and knowledge was merely the apprehension of objects by the senses. We see what is before our eyes, and notice the differences and similarities in what is before us. The rationalist conceived of thought as simply apprehending the nature of the real, freed from the illusions of sense perception. The mathematician has before his thought the nature of a triangle, and sees intellectually what that nature implies. We may try to mediate between the two by saying that while all knowing is observing, some is observing of objects of thought and some of objects of sense, the one being called understanding, the other perception. In most scientific judgments, however, we are not simply observing objects either of thought or of sense. Scientific judgments are more than descriptions of what is present to the mind or to the senses; they are essentially anticipations. They go beyond what is immediately given. This is shown by the fact that it is the characteristic of a scientific proposition that it can be verified. If we understand it rightly, we see that it implies that, under such-and-such conditions, such-and-such things will be experienced. Hence the importance of experiment to science. A scientific proposition is, of course, grounded on observation of perceived fact and understanding of universal connection, but it is an assertion of something beyond that.

If, then, all scientific judgments are synthetic, and if both rationalism and empiricism failed to account for the manner in which such judgments go beyond what is immediately given to the mind, ought we not to say that the real problem for Kant is to show not merely how synthetic a priori judgments are possible, but how any synthetic judgments are possible? This seems at first sight plausible, but the suggestion must be rejected; for, when Kant asks how a judgment is possible, he is not asking how we come to make it, but how we know that it is valid. Now, if we consider any empirical judgment about the facts of nature, we must recognise that Locke and Hume were right in denying certainty to such judgments. In all general statements about concrete facts we to a certain extent go beyond our evidence. Empirical scientific statements are not theoretically certain. They may, of course, be certain enough for all practical purposes. They are reasonable expectations of what will happen, but reasonable expectation is a very different thing from the certainty of mathematical insight.

Now Kant maintained that, while such empirical judgments are not certain, they all imply the certainty of a number of general principles on which they depend. These general principles are the synthetic a priori judgments with which he is especially concerned. When we apply the principles of trigonometry to an engineering problem, we know that our measurements are only approximate, and that the result also will only be approximate; but the possibility of arriving at such approximate results depends on the absolute truth of the trigonometrical principles, and on the assumption that they express not simply the agreement or disagreement of ideas, but hold of the real. When we apply the rules of arithmetic to counting objects, there may be a certain arbitrariness in deciding on our unit. There is no such arbitrariness in the rule. All scientific judgments of causation are only approximately certain, but they all imply the certainty of the principle of causation, and are based on the assumption that such a principle is of universal application. This and the other principles assumed in our empirical judgments are, then, the synthetic judgments with which Kant is concerned. Now, it is of the nature of our empirical knowledge that it is fragmentary and not uniform, that we are concerned with an indefinite number of things whose connections we do not wholly understand, and which we cannot therefore anticipate. Yet we assume that all these objects will obey the rules of arithmetic and geometry, and will all be subject in their changes to the principle of causation. On such assumptions all the sciences of applied mathematics depend. How are they justifiable? That is Kant’s question.

Kant, when he considers mathematics, is concerned with the assumptions of applied mathematics, of those sciences which, though mathematical, make statements about existing objects, and in which the old distinction between understanding and perception which was based on the difference in the objects of

these two faculties breaks down. The sciences which Kant is investigating imply that principles which are clearly not derived from mere observation are yet the basis on which we order and arrange what we observe. Now, if we held that the objects of mathematics were independent entities quite separate from the things we perceive, it would be impossible to explain how we might assume that the things we perceive would be subject to the rules of mathematics. If, on the other hand, we held that in mathematics we were simply concerned with the various objects of the senses, it would be impossible to explain how mathematics can have a generality and necessity which no statements can have which rest on observation of the various things we see. The existence of applied mathematics implies firstly that understanding and perception are distinct, and that neither of them can be reduced to the other, for that would mean that we should have to give up either the element of observation and experiment or the element of necessity and a priority, and secondly, that understanding and perception are combined, and must be combined for any advance in science.

Now, Kant finds his answer to the problem he has raised by concentrating his attention on the fact that, while understanding and perception are distinct, they are both present in all knowledge. His argument is that we are necessarily in a difficulty if we think of understanding and perception as having each its separate objects, and then try to explain their combination. If we begin with their combination, we may see that the reference of principles of thought to objects of sense is not an accident, but that these principles of thought or of understanding, as Kant calls them, are only concerned with objects of sense, and have no other meaning. If we object, But how can principles of thought be universal if they are concerned with the many and varying objects of sense? Kant's answer is that they are not concerned directly with these objects, but with the conditions under which these objects can be understood. They are therefore not statements about objects, but statements of the conditions of possible experience. If we find out that all perceiving and thinking imply certain conditions, then we can affirm the validity of principles based upon these conditions, so long as we do not try to apply the principles beyond our perceiving.

We may put the point in another way by asking by what right the mind can prescribe to or anticipate experience. Kant's answer is just in so far as we can determine the conditions under which alone objects can be known. If that can be done, we can say, These principles will hold of objects in so far as they are known. In the preface to the second edition of the *Critique of Pure Reason* Kant reverts to the discoveries of Galileo and Torricelli, and points out that their success was due to their asking of nature the right question, and the right question was that which reason could understand. "When Galileo let balls of a particular weight, which he had determined himself, roll down an inclined plane, or Torricelli made the air carry a weight, which he had previously determined to be equal to that of a definite volume of water, a new light flashed on all students of nature. They comprehended that reason has insight into that only which she herself produces on her own plan, and that she must move forward with the principles of her judgments, according to fixed law, and compel nature to answer her questions, but not let herself be led by nature, as it were in leading-strings. Otherwise accidental observations, made on no previously fixed plan, will never converge towards a necessary law, which is the only thing that reason seeks or requires. Reason, holding in one hand its principles, according to which alone concordant phenomena can be admitted as laws of nature, and in the other the experiment which it has devised according to those principles, must approach nature in order to be taught by it, but not in the character of a pupil who agrees to everything the master likes, but as an appointed judge, who compels the witnesses to answer the questions which he himself proposes."

Kant, here, is concerned with reason in its application to experience, and he makes it clear that there is much in all such inquiries which cannot be anticipated a priori. "Reason must approach nature in order to be taught by it." The answer to the questions and experiments cannot be known beforehand. The empirical element in science cannot be explained away. Reason dictates not the answer but the question, and so far the form of the answer. Reason, then, it is suggested, is concerned with the principles or conditions,

according to which we can understand things. It is not a method of observing or analysing objects; rather it states the methods and principles according to which objects must be observed if they are to be understood. The principles are not statements about the nature of objects, but principles of the possibility of experience. This new attitude to reason Kant describes as the Copernican change in philosophy. It constitutes Kant's idealism. Its nature and importance we must examine in the next chapter.

CHAPTER III. KANT'S IDEALISM. TIME AND SPACE.

The great discovery which Kant considered he had made as to the nature of reason was that reason was not a method of observing objects as they really exist, but was concerned directly only with our ways of understanding objects. This discovery is the essence of Kant's idealism, and its main purport is expressed in the distinction Kant so often makes between things in themselves and phenomena. This distinction is used as the key to the solution of all his difficulties. But the doctrine it implies is very easy to misunderstand, partly because idealism is generally used in a very different sense from that in which Kant uses it, partly because Kant's statement of the distinction between things in themselves and phenomena depended on a view of knowledge which he was very much concerned to refute, but with which we are not now familiar. If we are to understand Kant's philosophy, we must know what he means by idealism, and wherein his idealism differs from that of his predecessors.

The word idealism is, naturally, contrasted with realism. It suggests an assertion that something is not real, but only an idea. If we know it to be combined with a distinction between things in themselves, and phenomena, or appearances, it seems to suggest that the objects of knowledge are somehow illusions, or only appearances in the mind, as contrasted with real things. Something like this had been held by Kant's predecessors. For the fundamental principle of the idealism on which most of Kant's predecessors had been agreed, and which is sometimes called Cartesian, and sometimes subjective idealism, is that the mind somehow knows itself and its own actions and states, with more directness and certainty than it knows external objects. The doctrine is commonly based upon a confused view of sense perception.

Sense perception is obviously possible only through processes in the sensory organs, and objects were thought of as producing impressions through the sensory organs in the brain, and the mind as then becoming aware of them in the brain. Hence, when Locke says that the mind only knows its own ideas, he tends to mean (though the facts are sometimes too much for him and he is nobly inconsistent) that the mind only knows objects inside the brain. The main objection to this doctrine, apart from the fact that it is based on a confusion, is that it makes it quite inexplicable how the notion of an outside world ever arises. For if we know, and must eternally know, only ideas inside our head, why should we ever imagine that there an outside world exists. Yet if nothing *outside* us were observed — if we knew of no process which went on between outside objects and the brain, the doctrine would have no basis on which to rest. There cannot be any meaning in saying something is "only an idea," if we do not know what is real in the sense of its having an existence independent of our minds.

Locke supposed that, although we knew only ideas, we could somehow refer from our ideas to an outside world. For he thought that truth was concerned with the agreement of our ideas with reality. This form of the doctrine, the commonest, is sometimes called Representationism. For it thinks of the mind as concerned with representations, or pictures, or images which it may compare with the real objects. Its futility is obvious enough. We can only compare a picture with the thing it represents, if we can know both. If we can only know ideas, we can never know that they are only ideas, and can never compare them with anything else.

This difficulty was seen by Berkeley, the most consistent of subjective idealists, and led him to deny the existence of outside objects, and hold that existence or reality meant being perceived and nothing more. But if we take Berkeley's position, it becomes very difficult to say what we mean by judgments being true. If things only exist as we think of them, or perceive them, or rather if they are only our thinking of or perceiving them, the question of the truth or falsity of our statements about them cannot arise.

This idealism Kant is careful to refute, and he points out that there is no evidence for its fundamental proposition that we know our mind more directly than we know objects. We are only conscious of

ourselves in knowing something not ourselves. We do not invent the notion of externality or outsideness in space from an experience in which it originally has no part. Externality is implied in our most simple experience. We begin with consciousness of outside things, and only become conscious of our own mental states or processes later. But it is important to observe that, the truth or falsity of subjective idealism has no bearing whatsoever on the question with which Kant was concerned. If I ask how I can lay down rules about what I have not yet experienced, I am not in the least helped by being told that I only experience what is in my mind. For the question will equally arise, How do I know what is going to be in my mind? The question idealism ordinarily discusses, as to whether the objects of our awareness are in our mind or outside, are in their nature mental and dependent on the mind or not, is entirely and absolutely irrelevant to Kant's purposes.

But it is a fact, and one that has got to be explained that in judgment we go beyond what is present to our minds, and that, in so anticipating what we shall experience, we assume that certain principles hold of all that has been or may be present. With that difficulty idealism, as ordinarily understood, has nothing to do. Representationism tried to give some account of this going beyond what is present to our minds by suggesting that truth is a reference from ideas to reality; but, as we saw, if we know only ideas, such a reference is impossible. The doctrines opposed to representationism, that only ideas exist, or that we directly know real objects, allow the existence of nothing contrasted with what we are apprehending to which a reference in judgment can be made. No one who is satisfied with any of these positions can have seen Kant's problem.

If Kant then, is not a subjective idealist what does he mean by saying, as he constantly does, that we only know phenomena, and why should that limitation of knowledge help him in any of his difficulties? He means, in the first place, that all knowledge depends upon perception. The first paragraph of the first part of the *Critique of Pure Reason* makes that clear. "Whatever the process and the means may be by which knowledge reaches its objects, there is one that reaches them directly and forms the ultimate material of all thought, viz. perception. This is possible only when the object is given, and the object can be given only (to human beings, at least) through a certain affection of the mind."

Now, although we perceive an objective reality, sense perception obviously gives a very imperfect knowledge of objects. We see only some sides and aspects of things, and not others. What we see depends on changes in our position. Further, we know that what we see is only a small part of the nature of anything. We think of reality as an interconnected system, but we only perceive a very small part of it, and what we perceive depends upon the particular time and the particular part of space in which we live. In our experience we are never really content simply with what we perceive; we perceive much too little for that. We are always inferring from what we see to something beyond it. What is that something beyond, which, as we have seen, is implied in all judgment? We might hold that it was the things as they really are as distinguished from things as they appear, or phenomena, and that, when we turned from perception to thought, we turned from illusion to reality. Kant denied this. He held that, if you examine a scientific judgment about anything you perceive, such as that yellow thing is gold, you will find that, if you know what the judgment means, you will be able to say: Then, under such-and-such conditions — if you weigh it, for example — you will have such-and-such a perception. The appeal is not from what you perceive to what you think, but from what you perceive now to what you will perceive under such-and-such conditions. Such a reference indeed, implies thought and what is ordinarily called a concept; but our knowledge of concepts used in science always means that, if we know what is meant *e.g.* by calling anything gold, we know how it will behave under such-and-such conditions. The concept, in Kant's words, is a function of unity in our representations. The task of thought, then, is not to turn the mind away from what we perceive, but to help us to transcend some of the limitations of our perceptions, or, to speak more accurately, to set somewhat further back the limits of our perception; for thought never entirely transcends these limits. Our knowledge is always conditioned by the fact that we are finite minds living in

a particular place and at a particular time; but thought can extend the range of our perception in space and in time.

The limitations of our perception have, for Kant, a double aspect, which determines his division of the first part of the *Critique* into two parts — the *Æsthetic* and the *Analytic*. In the first place, our direct knowledge of space at any one time is always knowledge only of a part of space; our direct knowledge of time, whether in present consciousness or in memory of our own experience, is knowledge of only a part of time; and the things in the space we directly perceive, or in the time we experience, are what they are by their relation to space outside the space we see, and time beyond the time we experience, and that limited space and time we treat, therefore, as parts of one all-embracing space and one all-embracing time, and in the conception of an indefinitely extended space and time we can think of the space in which all things exist, and the time in which all things occur, of which we only see and experience a small part. The science of astronomy obviously talks of space and time far beyond anything we could ever perceive, but we go beyond such direct perception in such simple expressions as "forty miles from here" or "three days hence." And, when Kant says that space and time are only phenomenal, he does not mean that they are mental, but that we only know them through perception, and that we get at absolute space and time not by going from what we perceive to what we think, but by thinking of what we perceive indefinitely extended. All definite statements about space must come back in the end to "so far from *here*," all about time to "so long from *now*," and the fact that all our knowledge of space and time is got by adding to or extending in thought the space and time we directly perceive does, according to Kant, solve some obstinate puzzles about the nature of space and time.

In the second place, if we consider our knowledge of objects, we realise that, as we said, at any one moment we only perceive them in part or from one position. What we directly perceive of them is fragmentary and discontinuous, one aspect seen now, and another aspect seen at another time. But we do not think of the things as existing in that discontinuous way; we think of them as having a nature of their own. That does not contradict, but is something very much more than, what we perceive, and our knowledge of any object is got by piecing together the aspects we directly perceive; but that piecing together, or synthesis, is not haphazard. It is governed by rules — rules partly derived from the nature of the particular thing we are concerned with, and partly more general rules, which come from the relation of this work of piecing together to the framework of space and time by help of which it is done.

Kant's conception of knowledge, then, is something like this. Each of us is in direct contact with reality, but we perceive directly only a small part of it, and, as our consciousness moves on in time, and as we change our position in space, we are directly conscious of different small portions of reality. A part of the whole is illumined by direct perception, but the whole stretches beyond that indefinitely in space and time. In the part we directly perceive there is a temporal order and a spatial order. Things are given to us arranged in space and ordered in time, and these arrangements or orders in the space and time that is directly given to us in perception have certain rules, and we think of these principles of arrangement as extending indefinitely beyond the space and time given to us in perception. When we make judgments about reality beyond our perception, we think of things as so arranged in the space and time beyond our perception as we should see them arranged were the range of our perception sufficiently wide. Further, it is most important to remember that we do not remain in one place and at one time and make guesses of what may happen in the darkness beyond. Though our perception at any one moment is limited, we can connect what we see at one time with what we see at another. We can, by means of language and writing, use the perception of others to fill out our experience, until gradually our scientific judgments, our knowledge of what we should perceive under all sorts of possible experience, seems to bulk much more largely than could our individual perceptions. But we are still, Kant would say, getting at our knowledge of what is beyond by piecing together what we and other people have perceived, and the whole is always much more than that.

What, then, is meant by the contention that we can know things in themselves which Kant is earnest to refute? It might mean that we do in perception attain to a complete knowledge, but that would be obviously untrue. As Kant understood the claim, it meant rather something like this: In thought we are obviously not limited by our perception. We are always assuming certain principles, such as the laws of space or the principle of causation, to hold of all reality, both what we do and what we do not directly perceive. May we not say, then, that these principles hold of all reality, and argue from that fact to what the nature of the whole must be? If everything that we know is caused, *e.g.*, may we not apply the principle of causation to all reality and say that it must have a cause?

When we come to consider the *Dialectic*, the second main division of the first *Critique*, we shall notice Kant's detailed analysis of these arguments, and how he points out that you can in this way get contradictory results. In the meantime it must be observed that in these arguments we start from principles applied to what we perceive and expressing connections between the different things we perceive, and then apply them beyond everything we do or could perceive. That means that we imagine that we can take these principles out of relation not only to this or that detail of perception, but out of relation to any perception at all, and thus apprehend reality by thought independently of perception.

Kant's answer is that thought cannot directly apprehend the nature of the whole, and these universal principles, such as the principle of causation, are only principles by which we connect one perception with another to amend the discontinuous and fragmentary nature of our perception; they are rules for the synthesis of what we perceive. By so synthesising our perceptions we come to a less imperfect knowledge of the whole, but apart from perceptions the principles have no meaning at all.

Kant's idealism, *i.e.* his insistence that we know only phenomena, not things in themselves, is relevant to his problem, because it implies the denial of the view that thought has objects apprehended independently of perception, and because it insists that we can only know directly what we perceive, or things as they appear to us, that in our process from perception to knowledge we start with what is present to our perception and end with what is or with what might be present to our perception, and that this process is possible by reason of our continued consciousness in time. The process, Kant holds, is governed by certain principles. These depend upon the part played by space and time in all our perception, and the manner in which we employ space and time in piecing together our discontinuous perceptions.

Now, obviously it is quite possible to hold this position without having thought out what is implied in being present to the mind in perception. This is what Kant did. He describes perception in different and inconsistent ways. The reason for this inconsistency is that Kant is not concerned with the nature of perception, but with the relation of what is immediately perceived to what is not but may be immediately perceived, and he therefore never worked out any consistent account of perception. He sometimes talks of perception reaching objects directly, and refutes the view that we perceive only what is in our mind. (This, indeed, is implied in his distinction of space and time as forms of *external* and *internal* sense respectively.) But usually he takes the ordinary idealist view that we do not perceive things, but affections produced in us by things. Owing to this inconsistency Kant constantly seems to be stating very much more than he has any right to. This is especially true in all that he says about knowledge being confined to phenomena and not extending to things in themselves. When he talks of our knowing only phenomena, he sometimes seems to mean that we know objects, things in themselves, only in part, in so far as they appear to us. That would make the distinction between the phenomenon and the thing in itself a distinction between the same thing imperfectly and perfectly understood. He sometimes, and this is his more usual view, seems to mean that we are aware of appearances, entities separate and distinguishable from the objects which produce them in our minds. But if we work out in any of Kant's arguments the point of his appeal to the fact that knowledge is only of phenomena, we shall find that in every case the difference between a subjective idealist and a realist view of perception, of what "being present to the mind" means,

is irrelevant, and that his argument holds on either theory.

We must now turn to Kant's account of space and time which is given in the *Æsthetic*, the first part of the *Critique*. He begins by showing the impossibility of the two views of the nature of space and time which then held the field, the views of Newton and Leibniz. Newton had thought of space and time as realities, things in themselves existing along with other things. But obviously we cannot think of space as a separate thing existing by itself; for space without things would have no determination or possibility of determination, and would be to us just nothing, whereas, as it is, it is something to us. The same holds of time. The Newtonian doctrine, Kant says, "forces us to assume two eternal, infinite, and self-subsisting non-realities, which are there, without any reality in them, only that they may comprehend all reality." Just because things are in space and time, space and time are not themselves things. But if this makes us say that space and time are only relations between or qualities of things, we find ourselves in difficulties as obvious. We do not come to apprehend space and time by comparing things and seeing that they have a common quality of being "spatial" or "temporal," as we come to apprehend redness, *e.g.*, by seeing red things. The perception of space and time is implied in each and every perception of things. We cannot, therefore, derive them from our study of things; we must begin with them. Further, Kant notices, as against Leibniz, that space and time are not ordinary concepts because they have no instances. Different men are instances of man, but different spaces or times are only parts or determinations of the one space and the one time. As against the view, then, that would make space and time only relations, derived from our comparison of things which are not temporal or spatial, Kant insists that space and time are a priori. We cannot see things without seeing them outside one another — *i.e.* in space — or experience succession or change without experiencing it in time. Space and time, then, have a certain independence of things in space and time. The qualitative differences of things in space or events in time do not affect the nature of space and time, and we can and do study and discuss spatial and temporal relations quite independently of such differences.

Space and time, then, can be abstracted from things in space and time. Yet, on the other hand, we cannot think that space and time exist independently of things. They do not exist in abstraction; for, though the specific differences of things in space and time are irrelevant to the nature of space and time, if there were no things, or if there were no differences, there could be no space and time as we know them. "The empirical perception," says Kant, "is not compounded of phenomena and space, of the sensation and the empty perception." Space and time, therefore, Kant says, are not things in themselves.

What, then, are they? Kant's answer is that they are forms of our perception. Space is the form of external perception, and time is the form of internal perception, and Kant holds that by this answer we can understand both how our knowledge of space and time may be a priori, how spatial and temporal distinctions may be abstracted from the differences of things, and how we may avoid the difficulties consequent on regarding time and space as independent things.

What, then, does Kant mean by *form*? He seems to mean two things, which he does not clearly distinguish. The first meaning is best described in his own words: "In the phenomenon I call what corresponds to the sensation the matter of the phenomenon, and that which causes that the manifold of the phenomenon is perceived as arranged in specific relations I call the form of the phenomenon." We are here face to face with the ultimate difference of form and matter, or order and that which is ordered. When Kant calls time and space the form of our perception he is simply calling attention to the fact that in all that we perceive we find this distinction. It is something found, given, not made by us. By the word "form" Kant does not mean anything specially subjective as contrasted with matter or content, for he carefully distinguishes between space and time, and such qualities as colour, which get their nature in part, he thinks, from the specific nature of the sense organ. Compared with such qualities space and time are objective. The phrase "forms of our perception," then, does not really explain anything about space and time; it only emphasises the fact that the distinction between space and time and objects in them is

found in what we perceive, and that there is no meaning in discussing either side of the distinction as though it were quite independent of what we perceive.

But form has also another meaning which justifies Kant in calling space and time *only* forms of our perception, and hence subjective. For, while these forms are *found* in what we perceive, the distinctive part which they play in our knowledge is due to the fact that we use space and time as a framework by which to connect our scattered experiences. We come to think of the space and time we perceive as parts of an absolute space and an absolute time. We perceive parts of space and time, but absolute space and absolute time we do not perceive. They are the form we perceive imagined indefinitely extended. We order the particular parts of space and time which we do perceive in reference to absolute space and time. Yet absolute space and time are only known through the finite parts of space and time which we actually experience. Hence absolute space and time are not perceived realities or perceived orders, but ways in which we organise and arrange what we perceive. Now, the qualities of space and time which are hard to think of as the qualities of a thing that exists, *i.e*. their infinite divisibility and infinite extension, are qualities of absolute space and time. When we say that space is infinitely divisible, we do not mean that any existing thing is made up of an infinite number of parts. The divisibility of space and the divisibility of matter are quite different. An inch as a spatial determination is infinitely divisible, but the divisibility of the actual stuff which any inch may measure is a matter of empirical investigation, and ought to admit of a definite answer. That means that, while we use determinations of space which we consider infinitely divisible and infinitely extensible to measure things in space, we do not consider that these determinations, fractions, or multiples of inches or centimetres, have anything to do with the constitution of the thing they measure. It was not put together in fractions of inches. Thus we must distinguish between space as the form of what we perceive, the next-each-otherness of things, and the use we make of that form to construct by means of measurement order in all different perception. The first is obviously the form only of what we perceive, and gives rise to no transcendental questions. But the second, infinite space, though it seems to transcend our perception, has still only meaning in reference to perception, is only a way of ordering our perceptions. The same holds good of time.

We can see now what Kant means by saying that time and space are empirically real and transcendentally ideal. Kant does not maintain that space and time are illusions. They are a constant element of what is given us in perception. It is only when we try and go beyond our perceptions, and take space and time as things existing independently of what we perceive, thus trying to transcend the limits of possible perception, that we fall into illusion. Space and time have meaning only as elements in what we perceive, or in connecting what we perceive now with what we may perceive.

CHAPTER IV. THE CATEGORIES AND THE PRINCIPLES OF PURE UNDERSTANDING

Kant makes the distinction between perception and understanding depend upon the distinction between the receptivity and the spontaneity of the mind. In the *Æsthetic* he has been concerned with time and space as elements in what seems to be given to the mind. Before we begin to ask the questions of science, before we analyse, describe, or classify, before we have to think, we perceive. Time and space are not got at by thinking or generalisation. For before we can say anything about any part of our experience, it is *given* us in a certain spatial and temporal order. If we open our eyes at any moment, we are, without any conscious effort of thought on our part, confronted with an elaborate content. It seems simple to distinguish this receptive attitude of the mind in perception from its activity in thinking.

The distinction is not really so simple as it appears. For we all know that what we perceive depends, at least to some extent, on the mind's activity. We are familiar with the reflection that men see what they want to see or what they are looking for. This is clearly shown in the case of hearing by the difference in what we hear when we are listening to a language we understand and when we are listening to an unfamiliar language, or in the common experience when, after failing to hear what someone has said, we think what it must have been, and then seem to recall the sound, not as we heard it, but as we should have heard it if we had heard it rightly. Anyone who reflects on the process of fast reading will realise that we do not perceive or notice all the letters on a page; we fill in from our imagination, as we discover when we read words that are not on the page. It is a very hard thing, giving up all interpretation and inference, to describe faithfully just what is there to see.

Passive perception, then, does not exist, and our thought affects our perception. Yet, at the same time, the distinction between thought and perception, although not simple, is real. For although our previous thought affects our perception and we see things already classified, see books, and tables, and chairs, not merely coloured surfaces, yet we can distinguish between simple immediate perception and the process of thought which begins when we ask, What is that? *i.e.* when we begin to make judgments.

The characteristic of thought, according to Kant, is synthesis, or putting together, and all synthesis is the work of the mind. When we begin to describe and classify the contents of our perception, we pick out separate qualities from the continuous whole we perceive, and group them together. This grouping is, of course, determined by the likenesses and differences which we perceive everywhere, but we do not, in judging, confine ourselves to noticing likeness and difference. For any content of our perception has some point of resemblance, and some of difference with any other. We are concerned with likenesses that go with or are the signs of other likenesses. On the basis of perceived likeness we erect the notion of things and qualities of a certain kind. In doing this we go beyond what we see, and unite and arrange the contents of our perception through concepts. That is what we are doing when we say that is a so-and-so. For example, if I say that rock is like a dog, I am simply expressing a likeness I perceive. I do not imply that the rock is therefore alive or will bark; I am not going beyond how the rock looks; but if I say that object is a dog, I assert that all that is implied in being a dog will hold of that object, *i.e.* that it will have a certain appearance and behaviour, which is known. I can anticipate, therefore, how it will behave, look, and sound under certain circumstances. All these phenomena, the appearance, the barking, and running, though I may perceive them at different times and places, are grouped together in the judgment, "That is a dog." This is what Kant means by saying, "Concepts depend on functions. By function I mean the unity of the act of arranging different representations under one common representation." Concepts, therefore, always refer to perception, and it is by means of concepts that we are enabled to introduce such order into what we perceive, that we can anticipate from what we perceive what we shall perceive. "Perceptions

without concepts are blind.” Without concepts what we perceive would not lead us in any way beyond what is immediately given. “Thoughts without contents are empty.” Concepts are nothing, and have no meaning apart from the contents of perception which they unify.

Most of these concepts are what is called empirical. We get at them by observing likenesses and differences in what we perceive, and observing which are significant and important, and which are what we call accidental. Science, in its discovery of laws, is only carrying further this process which is implied in all simple judgments. By observing likenesses and differences, their uniformities and variations, and discovering those which are a key to the rest, we improve our concepts, and thereby have more knowledge of what we call natural laws, and can more and more anticipate experience. With these empirical concepts and their development Kant is not concerned. But there are certain concepts of which Hume had observed that they are not obtained in the ordinary way from an examination of the contents of experience. The two with which he chiefly concerned himself were substance and cause. These concepts seems to play an especially important part in the ordering and arranging of the concepts of experience. For the work of science, in moving from a simple observation of likenesses and differences to a knowledge of empirical laws, depends upon certain assumptions or principles, like the principle of causation or the principle of the conservation of energy. These principles imply concepts not derived, like the others, from generalisation from experience; they are the synthetic a priori judgments which, as we have seen, constituted a special problem for Kant.

Kant is first concerned to ask where these a priori concepts come from, and how many of them there are. This inquiry he calls the metaphysical deduction of the categories. Having answered that question, he then goes on to ask by what right we assume these principles in our dealing with experience. This, the most important and difficult section of the *Critique*, he calls the transcendental deduction of the categories.

Most concepts, as we saw, are empirical. We take certain likenesses and differences we observe as the mark of a real unity in the things. The different natures of different things we do not fully know, but we distinguish them by the different uniformities we observe, and in order to explain our experience we assume the unity underlying these perceived likenesses. Iron, dog, fire, are names for the natures of things which we see manifested in our experience. The concept, then, is got from what we perceive, though it stands for something more than we perceive. How, then, can there be any concepts which are not got from the empirical differences of things we perceive? Let us take such a concept as substance, and see whether we can discover where it comes from. Locke had been puzzled by discovering that he could not, in any object, find anything which was its substantiality. Calling anything a substance is not like saying that it is hard, or green, or heavy; we are not concerned with specific differences in things, but we are not therefore saying what is meaningless. There is something, namely substance, which we can distinguish from the hardness, or colour, or weight that we perceive. That something we do not perceive; we assume it whenever we talk of a thing being hard, and green, and heavy. A thing’s substantiality is just the unity of its perceivable qualities. But such a unity is implied in the concept of any object. Substance, then, is a name for one of the general principles implied in our assuming that what we perceive are real objects.

Kant generalises the result of this inquiry into particular concepts of this kind. He holds that a priori concepts or categories (*i.e.* the concepts which we do not get from empirical differences of things) stand for principles implied in thinking of things as objects or in judging. If we want, therefore, to find out the number of the categories, we must ask how many different kinds of unity are implied in judgment, or what are the conditions of judging any object. Kant does not here help, but rather misleads us in this inquiry. For he unfortunately thought that the different kinds of judgment could be discovered without further ado by taking the list given in formal logic. He therefore first makes a list of categories, based on the logical forms of judgment, and then tries to show the connection between these categories and the principles which were, as he had discovered, assumed in the mathematical sciences.

The actual movement of his thought is, I think, different. He asks if there are any general conditions implied in all judgment. His answer is that all judgments, all statements, that is, which claim to be true, imply determination of time and space. From that determination certain principles can be deduced. If time and space are implied in all judging, then these principles will equally be implied, and will hold of all things which can be objects for us.

It will be easier to understand Kant's arguments if we invert the order of the *Critique* and begin with examining the nature of the principles of the understanding or of one of them.

The categories which are of importance in Kant's argument are quantity, quality, substance, causation, and reciprocity, and necessity, possibility, and actuality. The last three are less important than the others, and we shall not deal with them.

To the first five of these categories correspond the following principles:

(1) Quantity. "All phenomena are, with reference to their perception, extensive quantities."

(2) Quality. "In all phenomena the real, which is the object of a sensation, has intensive quantity, that is, a degree."

The last three are classed under a general heading of *Analogies of Experience*, whose principle is: "Experience is possible only through the representation of a necessary connection of perceptions." They are

(3) *The principle of the permanence of substance*. "In all changes of phenomena the substance is permanent, and its quantum is neither increased nor diminished in nature."

(4) *Principle of the succession of time, according to the Law of Causality*. "All changes take place according to the law of connection between cause and effect."

(5) *Principle of co-existence, according to the law of reciprocity or community*. "All substances, so far as they can be perceived as co-existent in space, are always affecting each other reciprocally."

These principles, Kant points out, are assumed in the sciences of applied mathematics. The application of geometry to the world we experience assumes that all phenomena are extensive quantities; physics assumes that quantitative expression can be given to the qualities of objects other than their size, their weight, *e.g.*, and all scientific determination of change assumes the three principles which Kant calls analogies of experience: the permanence or conservation of amount in changes, the necessary connection of things in time, and the reciprocal interdependence of things which exist at the same time. These principles are not proved by science; their validity is assumed in all scientific investigation. On what, then, does it rest?

We shall follow Kant's argument more easily if we take his account of one of these principles — the principle of causation. For what is said of that will hold, with necessary changes, of the others, and, as we have noticed, it was Hume's criticism of causation which first led Kant to formulate the critical problem. Hume had pointed out that we had never such insight into causal connection as to be able, from mere inspection of a cause, to foretell the effect without any reference to experience. He declared, on the contrary, that there was no difference between observed succession and causation so far as concerned the objects observed. In each case we see first one thing and then another. The difference, then, between mere succession and causal connection can only be in us, in the way we come to feel about certain successions we observe. In technical language, the necessity of causation is subjective.

How does Kant answer this position? He begins, as is usual with him, by taking the problem a little further back. Causation is a connection we predicate between what we see at one time, and what we see at another. Now if we take into account only the fact that we see one thing at one time and another thing at another, there is no difference between what we see when we successively see two things which we judge to co-exist, and when we see two things one of which we judge to have succeeded the other in time. Hume, therefore, proved too much. His argument would show that we have no grounds for distinguishing between apprehension of succession and succession in apprehending, but such a distinction is the basis of

our apprehension and understanding of change or movement. If, then, we examine how we distinguish between apprehension of succession and succession in apprehending, we may see on what the principle of causation is based.

An instance will help to make this point clear. Suppose that I am sitting in a room, and look first at the door and then turn round and look at the window. There are two successive acts of apprehending; the content of the first is the door, of the second, the window, but the succession, I say, is in my apprehending. The door and the window have co-existed all the time. Suppose, again, that I look out of the window and see a cab in front of the house opposite, come back into the room, and then look out again and see the cab in front of a house further down. Here, again, are two successive acts of apprehending, the content of the first houses with cab in front of one house, of the second houses with cab in front of another. This time I say the houses have gone on co-existing, but the cab has moved. The difference in what I see this time is due not to me, but to the cab. The succession is in the thing apprehended. If we just think of the contents apprehended, we have first A, then B, and say A and B co-exist in the first instance, and have CD and CE, and say D and E have been successive in the other. Why in the second case do we not say when we look out of the window the second time: Here is another row of houses, which, though they look exactly the same as the ones I saw last time, have got the cab in a different place? That is the land of thing one does say in a dream. Why would it be inadmissible in waking life?

Let us first ask how we ever come to make the distinction between change in the content of our perception, which is due to change in us, and change in the things we perceive. Look out of a window into a busy street. As we look certain things remain the same, the houses opposite, the lamp-posts, and so on, but other things change. The permanence of part of the contents guarantees us that the change we perceive is not due to us: if it were, these would change also. Therefore it must be in certain of the things. Change is perceived against a background that is permanent and does not change. But any such particular perception is, of course, very limited. We do not see all the world at once, and we only come to know a larger extent of reality by means of memory, which enables us to put together what we see at one time with what we see at another. We have got to try and understand how it is that we make this distinction, which is clear to us in small isolated bits of experience, hold of all experience. Now if reality did not change, and we were conscious of our own movements, we could go from one point to another of reality and back again, and could be aware that the changes in our perception were all due, not to change in reality, but to us — were our history. We should know that the different things we saw were co-existing all the time, and we should, in describing them, try to describe them, as in a map, as we should perceive them if we saw them all at once. The succession would be subjective, the co-existence objective. If we perceived nothing but change, we should be incapable of distinguishing between our changes and the change outside us, for all succession in our experiencing would be experience of what was successive, and there could be no distinction between psychology and science. Our experience of reality is not like either of these suppositions, but like both of them combined. Some succession of our experiencing is experience of the co-existing, some experience of succession.

Reality stretches out beyond us in space, some of it changing and some of it permanent; we cannot tell simply from the difference in what we perceive whether the difference comes from change in us or change in the thing. We can tell that only on the assumption that we are having fragmentary views of a whole that is continuous. The only continuity we know is the continuity of our own experience made possible by memory, and we try to interpret that experience in the light of the larger continuity of the world which our experience breaks up. As we go from one place to another, notice now this thing, now that, we can test interpretations made on this assumption. Wrong interpretations are those which make our experience inconsistent. If we thought that what happened at one time had no relation with what happened at another, that anything might happen any time, our experience and our own life would be the merest jumble. Our experience attains consistency only as we learn more and more to disentangle the differences in

experience which come from our changes, from the changes and the variety which are part of the whole connected system of reality, of which we see now one fragment, then another. The distinction between succession in our apprehending and apprehension of succession, which is the basis of all experience of change, implies the recognition of change as not arbitrary but part of a connected system of reality. As Kant puts it in his formulation of the principle of the analogies of experience, “Experience is only possible by means of the representation of a necessary connection of perceptions.”

But if our perception of reality is fragmentary, how can we think of reality as other than fragmentary, how can we fill up the gaps? Only by thinking of the whole as a connected system in space and time. For it is the nature of space and time that they can be thought of independently of the specific nature of the things in space and time, and that the space and time we perceive in any one experience must be thought of as parts of an all-embracing space and an all-embracing time. We cannot follow the whole history of a change from A to B, we can only say that, if our experience is to have any consistency, we must think that the fact that we first saw A and then saw B implies in this case that the change from A to B is part of the continuous system of change in time, that it is determined in time. But to think of an event as determined in time is not to think of it as determined by time, for time in itself could not produce one thing more than another. It is to think of it as determined by the nature of what precedes it in time. We therefore conclude that like causes have like effects; for, if anything could cause anything, we should never know that change in what we observed was due to change in us — in the position of our bodies, *e.g.* — and the experience of objective change would be impossible.

The principle does not tell us of itself what causes what. That can only be discovered by empirical investigation. That is necessary because we do not, as we seem to have assumed above, simply see one thing becoming another. We see parts of all kinds of changes. Hence succession may be objective but not causal. Science has, by observation and experiment, to disentangle and isolate different changes, but it could not do this without assuming the principle of causality.

Causation, then, and the other assumptions of the physical sciences, are shown by Kant to be “grounds of the possibility of experience.” We cannot deny them without denying elementary distinctions in our experience, without which life would be a chaos, and which are assumed and justified every moment. While Kant thus demonstrates the validity of such principles, he is also insistent on the limitations of their application. They are principles which give consistency to experience, but must not be applied save in reference to what we experience. They apply, in his words, “only to phenomena.” The purport of this limitation can, again, be most easily seen by examining the principle of causality. By means of that principle we connect one event with another, but the reality is not two different but connected events, but a continuous process. The continuous process escapes us, because our perception of it is fragmentary and discontinuous. Inasmuch as a judgment of causal connection asserts that the events we separately notice are connected, it is true, but it is false if taken to imply that reality consists of a series of discontinuous events or stages which are yet connected. Such an assumption would mean, in Kant’s words, that causation is applied not to phenomena (things as they appear to us), but to things in themselves (things considered apart from the manner in which they appear to us). If we realise its falsehood, we can, he thinks, evade the contradictions which he examines in the *Dialectic*.

CHAPTER V. THE ANTINOMIES AND CRITICISM OF THE PROOFS OF THE EXISTENCE OF GOD

So far we have been considering the positive side of Kant's argument, his attempt to confirm the validity of the principles of science. We must now notice the negative side, his attempt to limit the application of these principles, and his denial of the possibility of knowledge in certain spheres.

We saw that Kant in his *Prolegomena* summed up the argument of the three chief divisions of the *Critique* as an answer to the questions: How is mathematics possible? How is pure science of nature possible? and, How is metaphysics possible? He qualified the last question by adding "as a natural disposition of the mind." The argument of the *Dialectic* is that metaphysics, in the sense of inquiry into objects which transcend the bounds of experience, is not possible as a science, but that metaphysical questions arise naturally from the nature of human reason. They cannot be answered. All we can do is to see why we cannot answer them.

Kant thought of knowledge as a process of extending the bounds of perception, of piecing together the fragmentary glimpses we get of the world, stretching them out in spatial and temporal determinations that go beyond what we have actually experienced, connecting and linking up the events which we perceive discontinuously. As science extends, the range of our knowledge widens, but the process of extension never reaches its completion. There are always more facts to be discovered and explained. Science, therefore, can never rest content with its achievements, but must always demand that the investigation of conditions should be pushed further back and on. From this sense of the incompleteness of all actual knowledge, and of all there is that might be but is not known, arises what Kant calls an ideal of reason, a demand that, in all investigation into the conditioned, we should go on till we come to the totality of conditions. This ideal he holds to be serviceable and necessary. It has, however, a natural tendency to pass from an ideal to an idea, and in so doing it gives rise to the contradictions with which the *Dialectic* is concerned. If all our investigation is governed by the thought that it must go on until it reaches completion, we naturally speculate on the fulfilment of that ideal, and try to form an idea of that totality of conditions, of how we should think the world if we knew it in its completeness. Herein we hypostatize the ideal or make it an idea, and we fall into contradiction; for we cannot really know the whole without knowing all its parts. If we give up the slow and never-completed process of knowing one part after another, and try to jump to the idea of the whole, we reach quite contrary results, as we apply to the conception of the whole one or other of two assumptions implied in our investigation of the parts.

Kant sharply distinguishes between the principles of the pure understanding and the ideas of reason. The former are implied in all our knowledge, and the fact that experience is not chaotic confirms them at every moment. The second are ideals which guide knowledge, but are never realised. He calls them ideas of reason, because it is the special task of reason to lay down rules for the proper and complete working of the understanding. This task, he thinks, is exemplified in the logical nature of the syllogism which brings into unity the judgments of the understanding. As he used the forms of judgment as a guiding thread to discover a complete list of categories of the understanding, so he uses the forms of syllogism to discover a complete list of the ideas of reason. In both cases Kant's reference to logical forms is far-fetched. Actually the list in the *Dialectic* seems to be influenced by a number of considerations not always consistent.

There are three main divisions of the *Dialectic*. (The first Kant calls the paralogisms of rational psychology.) All knowing and experience imply the unity of the self which knows. In actual experience

that unity is qualified by the nature of what it unites, but we may try to think of it apart from and independent of this. This leads to an attempt to know the self by asking what must be its nature if it has the unity implied in knowing, and to argue that the soul is a substance and simple, not affected by the changes in the matter which it knows and therefore immortal.

The second division arises from the fact that in knowledge we are concerned with series — a series of addings together and a series of divisions, as of parts of space and time; a series of things arising one from the other, as in causation; and a series of things in dependence one upon the other. The *ideas* of reason come from the thought of these series completed, and produce what Kant calls antinomies. For if we start with the thought that what we are trying to apprehend must be a whole, we get one series of results; if with the thought that we can only apprehend the whole by going from condition to condition indefinitely, we get another. Kant distinguishes four antinomies, each with thesis and antithesis. The thesis of the first is, "The world has a beginning in time, and is limited also in regard to space"; the antithesis, "The world has no beginning and no limits in space, but is infinite, in respect both to time and space." The thesis of the second is, "Every compound substance in the world consists of simple parts, and nothing exists anywhere but the simple or what is composed of it"; the antithesis is the contrary of this. The thesis of the third is, "Causality, according to the laws of nature, is not the only causality from which all the phenomena of the world can be deduced. In order to account for these phenomena it is necessary also to admit another causality, that of freedom"; the antithesis, "There is no freedom, but everything in the world takes place entirely according to the laws of nature." The thesis of the fourth is, "There exists an absolutely necessary Being belonging to the world, either as a part or as a cause of it"; the antithesis is a denial of this.

The problems of the third division of the *Dialectic* arises from an attempt to think of a whole which shall include both the known world and the mind that knows. This attempt, which Kant calls the ideal of pure reason, leads to proofs of the existence of God.

As the *Dialectic* proceeds, it becomes clear that Kant has another list to hand. He enumerates, as the three great objects of metaphysical inquiry, God, Freedom, and immortality, and in his discussion of the ideas of reason he treats them principally as attempts to give definite and dogmatic answers to the problems suggested by these three topics.

Immortality is the subject of what Kant calls the paralogisms of rational psychology. He argues that all attempts to prove the immortality of the soul by a priori arguments involve an argument of this kind: they begin by noting that death is always dissolution of some kind, that, therefore, what is not made up of parts and cannot be dissolved, cannot die. Then they urge that the soul is not made up of parts, and therefore cannot die. The fallacy in this argument is that it treats the unity of the self as though it were an object of knowledge. We can show that knowledge is only possible if the self has a unity other than that of a spatial whole, but we cannot therefore argue that it must be exactly like a spatial whole, in the sense that death in it can only be brought about by dissolution, but unlike a spatial whole in that in it there is nothing to be dissolved. The real nature of the unity of the self, Kant argues, cannot be known. All we can do is to reject a priori arguments either for or against its immortality.

Freedom is treated in the third antinomy of pure reason, and to that Kant devotes most attention, but others of the antinomies are concerned with the difficulties arising from the application of spatial and temporal determinations to reality as a whole, and to the category of necessity. Kant makes a distinction between the first two and the second two antinomies. It is the first two that express the inadequacy of temporal or spatial determination to reality as a whole. All such determination implies measurement, and measurement is always a relation of part to part. The antitheses of both antinomies express the inadequacy of any number to the expression of the nature of the whole, the thesis the inadequacy of regarding reality as an aggregate or addition of any kind. Each is strong in what it denies, and Kant's solution is that both thesis and antithesis are false, because you cannot apply spatial or temporal determination to the world as

a whole.

In contrast the solution of the other antinomies is that both thesis and antithesis are true, and that is possible because they are concerned with different things. The third antinomy arises from the difficulty of applying the category of causation to the world as a whole. The assumption underlying the thesis is not, as is sometimes asserted, merely that the notion of infinity in itself implies a contradiction, but that a determinate result must have a determinate cause. If we think of what actually exists now as having been caused by what has preceded it, we must think of that which has had a determinate result being itself determinate. It is the familiar argument for a first cause. In causation we seem to be relating one event to another event, and are really only putting the question of origination further back. Yet, if we say that therefore we must suppose an absolute origination of change, a beginning of the series, we have to answer the question, How is it possible to think of the originating number of the series? For to think that something can arise from nothing is to contradict the principle of causation.

Kant's solution to this difficulty is important, for it had great influence upon his ethical theory. The category of causation applies only to phenomena. If we think of things as phenomena we must recognise that they are subject to the principle of causation; if we think of them as things in themselves, the category of causation does not apply to them, and their action may be free. The same action may therefore on its phenomenal side be determined, and on its nominal side, as the action of a thing in itself, be free. This may seem to be solving one contradiction by propounding another, till we remember that in causation we do not explain the relation of cause to effect. The relation we discover is between one instance of cause and effect and another. Like causes have like effects. The principle applies, then, in so far as things are like one another. It applies to changes which are aggregates or complexes of simpler changes which are like other changes. If and in so far as there are things which are more than aggregates of their elements, and are therefore unique, there are things to whose changes no laws of cause and effect are adequate. The point may be illustrated by the way we think about character. If we think of a man's character as his characteristics, his being this or that *kind* of person, we must think of his action as so far determined, but that does not prevent us from thinking of his individuality as something more than any sum or combination of characteristics, as something essentially alive, which escapes all attempts to bind it by rules. It is the difference in Kant's words between man regarded "from the point of view of anthropology," and man regarded as a responsible moral being. We shall see in the next chapter that this distinction is the basis of Kant's moral theory. Here it must be noted that he does not claim that his solution of the third antinomy proves the fact of freedom. That, he held, no merely intellectual argument could prove. It only defends the possibility of freedom.

The third division of the *Dialectic* is an examination of the proofs of the existence of God. When we study Kant's account of them, we find we are concerned not, as elsewhere in the *Dialectic*, with a conflict springing from the nature of reason itself, but with the relation of thought and conduct. Kant distinguishes three proofs of the existence of God — the ontological, the cosmological, and the physico-theological — but he maintains that the last two really rest upon and imply the first. The first, the ontological proof, is the argument that the very conception of a perfect being implies existence. It is the only proof of moral importance, inasmuch as it attempts to argue a priori that a being of perfect morality must exist. Kant's answer to it is that, to argue that we could not conceive a perfect being unless we conceived that being's existence, is to suppose that to conceive of a thing, and to conceive of the same thing existing, is to conceive of different things. Existence, he says, adds nothing to the concept of an object. Kant's objection to the ontological proof has been criticised. But the proof either assumes that God is a being independent of and separate from the rest of reality, and then, as Kant says, we may conceive God as existing, but our conception not being necessitated, carries no necessity with it. (If I conceive a hundred dollars to be in my pocket, he says, I conceive them to be there; but that does not mean the dollars are there.) Or if we say that reality must be thought of as existing, the answer is, Yes, but must reality necessarily be thought of as

morally perfect? It is this last assumption which alone makes the ontological proof worth proving; for arguments about the existence or non-existence of God are mere quarrels about words, except in so far as they are concerned with moral issues. But moral issues cannot be solved by a consideration of purely intellectual assumptions. The nature of the other two proofs of God's existence makes this clear. The second, the cosmological, is the argument that if anything exists, something must necessarily exist. Kant's answer is that this is sound so far as it goes, but it does not prove that what necessarily exists is a morally perfect being. The third, the physico-theological argument, is the familiar argument from design. Kant treats this argument with much greater respect than the other two, but insists that we must see how far it will carry us. If we are going to infer the nature of God from the nature of the world as we see it, we must do so honestly. But though we see design in the world, we do not see perfection, and on the basis of this argument we cannot ignore the imperfection and want of harmony which is as patent as the harmony and design.

Kant's analysis of these proofs seems negative. Its real purport is to insist that religion cannot be dissociated from moral experience, that the knowledge of God, which is the concern of religion, is not got by intellectual speculation, but in the moral life. When he said that he had limited reason to make room for faith, he did not mean that men could not prove the existence of God, but might believe in it if they pleased. He meant that God is implied and known above all in moral action. His criticism of these classical proofs is thus the beginning of that revivified philosophy of religion whose chief representatives have been Schleiermacher and Ritschl.

CHAPTER VI. KANT'S MORAL THEORY

Kant's moral theory is an integral part of his philosophical system. If the *Critique of Pure Reason* argues the impotence of reason in the sphere of speculation, the *Critique of Practical Reason* affirms its sovereignty in the sphere of practice. The second *Critique* is thus the complement of the first. Kant's treatment of moral problems being largely the consequence of the conclusions of the first *Critique*, his moral theory is thus mainly metaphysical. The title of one of his works on moral theory, *Fundamental Principles of the Metaphysic of Morals*, bears this out. There were, no doubt, other influences which had their effect on his conception of morality. He tells us himself that he was inspired by the teaching of Rousseau on the dignity and worth of man. He was undoubtedly repelled into a reaction against the sentimental school of Shaftesbury, which in its German adherents insisted on the agreeable and gentlemanly nature of virtue with an almost sickly sentiment. This reaction accounts for the extreme emphasis laid by Kant on the divorce between duty and any kind of inclination. But his doctrine as a whole can only be understood in the light of the conclusions of the first *Critique*.

Kant's conception of freedom or autonomy of the will is the key to his moral theory. "On the hypothesis of freedom of the will," he says, "morality together with its principle follows from it by mere analysis of the conception." We saw in the last chapter that Kant regarded human action, when looked at from an anthropological point of view, as phenomenal, and therefore subject to the law of cause and effect. If we think of man as a creature of inclination, with likes and dislikes, we seem, in considering men's differences from one another in this respect, to be dealing with matters of fact over which men have no control. We are born and grow up with different natures, with the result that one man likes one thing, another another; one man's temptations do not tempt another, what one man finds easy another finds difficult. We seem here to be in a world where causation rules. If men act differently, it is because their external environment, acting upon their different natures, calls out different responses. So far, then, says Kant, as men act according to inclination, do things because they like doing them, or avoid them because they dislike them, their actions are what he calls heteronomous, governed by laws over which they have no control. We assume, whenever we are trying to explain human actions, that they are the result of the interaction of character and environment, and are not to be praised or blamed but understood. *Tout comprendre est tout pardonner*.

But when we consider our moral judgments we seem to be in a different world, for there are some actions which we think we or others ought to have done or ought not to have done, and this obligation has nothing to do with our likes and dislikes. If we look back upon a past action of our own, we may see why we did it, understand how the temptation to it appealed with peculiar strength to something in our nature, yet nevertheless we may say that we ought not to have done it, and with that judgment goes the conviction that we need not have done it. The conception of "what ought to be" is on a different plane from the conception of "what is," and assumes a different kind of causality. It assumes that, when we are done with our analysis of character, of a man's likes and dislikes and the effect of circumstances upon them, we can still assume that it is in his power to do what he ought and to abstain from doing what he ought not. We praise the first and blame the second, whether in ourselves or others, just because we assume, over and above inclination and disinclination, a possibility of acting or not acting as duty demands.

Thus Kant analyses the assumption of moral judgment. But it is still no more than an assumption, and he has to ask how it can be reconciled with the seemingly contradictory principle of causation. The analysis of the third antinomy in the first *Critique*, as we saw, prepared the way by maintaining that the same action might be phenomenally determined, and free as the action of a thing in itself, were there another form of causality — free causality or self-determination. For the existence of such another form of

causality the first *Critique* offered no evidence. Kant's concern is to show that morality assumes it; for the claim of duty is that a man should not act as a creature of inclination, of likes and dislikes. Duty claims to cut across all such empirical considerations. The motive to do what duty demands must come from elsewhere. It may then be found to be a claim that man should act not as a part of the physical world, but as a moral being. For man, as well as an observer and understander of other men, is also a moral agent. As such he stands in quite different relations to other men. He treats them and himself as moral agents, responsible for their actions. As a member of the world of moral relations he acknowledges a system of rights and duties, he holds himself responsible to other men as they are responsible to him, and all this has nothing to do with what a man wants or does not want to do, with how easy or how difficult he may find it to perform what duty demands. In this he is assuming in himself and other men a power of determining the will in accordance with the moral law. That, just because it takes no account of likes and dislikes, cannot be derived from these or from considerations of circumstances or environment. It must be deducible from the nature of man as a moral being. In obeying the moral law, then, man will be obeying a law that comes from himself. His will will be self-legislative. This power of acting in accordance with a law that comes from the nature of man as a rational, responsible being, and not as a member of the world of causes and effects, is moral freedom; it is the assumption of all moral judgment and action. It cannot, Kant holds, be *explained*. For all explanation is the work of the understanding, and that can explain only phenomena. It is enough that the first *Critique* has shown that phenomenal causality is not inconsistent with the possibility of another causality. In the moral sphere we act and judge as if we were free. The moral law and duty make claims upon us on the same assumption. Moral freedom, then, is the ground of the possibility of moral experience.

Kant's account of duty is determined by the sharp separation which he makes of man as moral agent and man regarded "from the point of view of anthropology." The commands of duty must be derived solely from the nature of man as a moral agent. If they were the consequence of man's empirical nature or his surroundings, they would have no claim to override his promptings of inclination or pleasure. He describes these commands as categorical, and the principle of morality as a categorical imperative. The meaning of this phrase lies in its opposition to hypothetical. Many commands and principles are, Kant says, hypothetical. They assume that men desire certain ends, happiness or health or success, and the actions they advise are advised as means to such ends. The law of morality is quite different from such prudential maxims. It does not say, "If you want to be happy or to save your soul, then act thus and thus." Its commands are absolute, for they appeal to man simply as a rational being. They must therefore be derived solely from a consideration of man's rationality. It is difficult at first sight to see how any commands can be deduced from a consideration so abstract. How, we might say, can man's rationality be known and recognised except in the content of what he does and thinks?

Kant seeks to derive his imperative from the contrast between acting as a moral agent and following inclination. Man regards himself as a moral agent, morally responsible for his conduct, and he regards others as morally responsible, whatever his or their particular nature or character may be. That means that he must act as he thinks any one else would be bound to act, and from this Kant deduces his formulation of the categorical imperative: "*Act only according to that maxim which you can at the same time will to be a universal law*." Another formula indicates more clearly the relation of duty to a society of moral agents responsible to one another: "*Act so that you treat humanity, in your person and in the person of every one else, always as an end as well as a means, never merely as a means*." It is only by following such imperatives that we can rise above the promptings of circumstance, for only thus is the will self-legislative. In obeying such an imperative our will is self-determined, for it is following a principle that is derived from man's nature as independent and transcendent of the world of phenomena. Hence in moral action we are in contact with the reality of things more truly than in any understanding of phenomena. The moral law has a dignity which no natural inclinations or likings can have, and the good-will, the will

which follows such a law, has a similar worth and dignity. “There is nothing in the world — nay, even beyond the world — nothing conceivable, which can be regarded as good without qualification, saving alone a good will.”

Such in outline is Kant’s account of morality. A discussion of some of the difficulties which a consideration of it suggests may help to make its purport more clear. Kant holds that the principles of right action can be deduced directly from the imperative he has formulated, and need take therefore no account of historical circumstance. Now, it is easy to show that, when we do an action which we know to be wrong, we are making an exception in our own favour. We cannot universalise the maxim of our own conduct. When we do what we know to be wrong, we recognise what is right. We say, “This is how any one ought to act in these circumstances, but I am not going to do it.” We must learn to look upon ourselves as we should look upon and judge any other moral agent. If, when taxed with wrongdoing, we reply, “I wanted to do it,” or “That is the kind of person I am,” or “That is the way I am made,” we are abandoning the moral position, and the answer is, “Whether you wanted it or not, you ought not to have done it,” or, “Well, you ought to become different.” But this does not help us when, looking at actions from a moral standpoint, it is difficult to say what ought to be done. Kant tries to show that wrong action, if universalised, is always contradictory. He takes the instance of telling a lie. If that were universal no one would believe any one else, and there would be no point in telling a lie. Lying is essentially parasitical. But this does not help us in the familiar problem in casuistry, whether it is allowable to tell a lie to save life. For here we have a conflict between two maxims, both of which can be universalised. We cannot regard such a situation as simply involving a question of telling the truth or of saving life. We must consider the circumstances of the case. This is even more evident if we apply Kant’s rule to the question of whether celibacy is ever justified. If celibacy were universal, there would soon be nobody to be celibate, but it does not therefore follow that some people under certain circumstances ought not to be celibate. The question cannot be answered without reference to circumstances. The moral of this is that the categorical imperative does not enable us to act without individual moral judgment in individual cases. Further, in one of the instances which Kant gives he admits that there are certain ways of action which might be universalised, but which he nevertheless holds to be wrong. He instances the duty of being industrious. A society could quite well be imagined in which every one was lazy, but he says, “It cannot be willed.” The ultimate appeal here is to what the moral reason wills. That means that we must admit that the moral reason or moral judgment has a content not derivable simply from the conception of the moral law; that there are certain kinds of life, certain kinds of action, which we judge to be good, and others which we judge to be bad. But, if this is so, we must give up the sharp separation Kant makes between the moral law and nature, and allow that things in nature can have a moral value. It may still be true that they only have moral value through their relation to a good will, and have no moral significance apart from such a relation.

The difficulties created by Kant’s sharp separation of the moral and the phenomenal worlds are equally apparent in his discussion of motives. He conceives the individual as phenomenal, to be determined solely by pleasure and pain. The power of the moral law is manifest, therefore, when its commands run counter to inclination, and the motive of respect for the moral law conquers inclination. It is true to say that a man’s likes and dislikes in themselves are not to the point when we are asking what he ought to do, but Kant sometimes speaks as though there could be no moral value in an action which did not go against inclination. This is perilously near that morbid theory of conscience which assumes that the fact that an action would be very disagreeable to the agent is itself proof that the proposal to perform it is the voice of conscience. Here again we have to say that the fact that inclinations viewed merely as inclinations have no moral value, does not show that, relatively to the good will, one may not be better than another. There is nothing to be proud of in the fact that we dislike doing our duty.

This sharp separation between the world of morality and science was somewhat tempered in Kant’s

third *Critique*, which we shall examine in the next chapter.

CHAPTER VII. THE “CRITIQUE OF JUDGMENT” — ÆSTHETICS AND TELEOLOGY

The *Critique of Judgment* is at once the most interesting and the most difficult of Kant’s three *Critiques*. It seems to cover a much wider ground than either of the two earlier *Critiques*. It concerns itself with the relation of empirical investigation to the a priori principles of understanding discussed in the first *Critique*, with an attempt to bridge the gulf between the world of freedom and the world of nature as described in the second *Critique*, with a discussion of the principles of æsthetics and of the conflict between the rival claims of the principles of mechanism and teleology, a conflict which, since the discoveries of Darwin and the increasing interest taken in biology, is becoming every day more important. On all these points Kant has much of importance to say. Modern theories of æsthetic are mainly based on an acceptance of the distinctions which he first laid down clearly. Much modern philosophy of a type which is little in sympathy with the doctrines of the first *Critique* — Pragmatism, for example — is an elaboration of his account of the regulative principles which guide empirical investigation, while speculation on the rival methods of biology has hardly advanced beyond the solution suggested by Kant. Yet the very suggestiveness of this book makes it hard to understand. It is difficult to see the connection which Kant supposed to exist between these very various problems. The form of the book, like the form of the first *Critique*, is marked by subdivisions suggested by formal logic, which seem to have little or no connection with the subjects discussed under them, so that the whole is a curious combination of formal system and discursive content. Kant himself regarded this *Critique* as the triumphant vindication of his whole system, in that it brought together and reconciled subjects which he had previously distinguished too sharply. Many later writers have thought rather that in it the inconsistencies which they believe to exist in Kant’s thought come to a head.

We have not space here to vindicate the *Critique of Judgment* as “the crowning phase of the critical philosophy,” as a recent writer has called it, or to examine singly Kant’s treatment of the various subjects of interest with which it is concerned. It is important, however, to follow the connection which Kant supposed to exist between these different subjects. If we can understand that, we shall gain considerable insight into Kant’s system as a whole.

Kant names the book the *Critique of Judgment*, or, more exactly, the *Critique of the Faculty of Judgment*. Judgment is distinguished from understanding, whose principles are more peculiarly the subject of the first *Critique*. The understanding, according to Kant, is the faculty of rules. Judgment is shown in the application of rules to individual instances. It is the element of individuality and spontaneity in all thinking, for which no rules can be discovered. Judgment cannot be taught, different men possess it in different degrees; it is akin to genius. When, then, Kant turns to examine the faculty of judgment, he is asking whether the mind, in dealing with individuals in all their variety and difference, and in attempting to understand them, is guided by any general rules or principles. The import of this question becomes clear in his relation of it to the familiar question of causation. The principle of causation, as we have seen, is, according to Kant, an a priori principle of the understanding, and is assumed in all experience; but it does not of itself enable us to determine in any particular case what causes what. That is the task of empirical investigation, and needs, as we know, the imagination and insight of the individual investigator; in Kantian language, it is the work of the faculty of judgment. Besides the a priori principle of causation, therefore, we have an indefinite number of empirical causal laws. Kant asks whether the scientist in investigating such laws, and more particularly in considering their relation to one another, is guided by any principles. He finds that the scientist assumes that this indefinite variety is capable of being reduced to some kind of unity, assumes that there is continuity in nature, that knowledge will not remain an

aggregate of disconnected rules. Chemistry, for example, has discovered that the overwhelming variety of natural changes can be reduced to the action and interaction of a small number of elements. The chemist proposes to go on and see whether the different elements may not themselves be seen to be forms of one substance.

These assumptions are, according to Kant, quite different from the principles of the understanding. For the latter are grounds of the possibility of experience. We cannot deny them without making experience unmeaning. This cannot be said of the former. It obviously cannot be essential to experience that the multiplicity of the laws of nature should be reducible to unity, for such unity has never been discovered. Experience has been quite possible without it. This distinction between two kinds of principles Kant expresses by calling those with which we are now concerned regulative. The purpose they serve is the regulation and improvement of knowledge. They do not, like the principles of the understanding, prescribe to nature. We assume in them that nature is, in Kant's words, purposive to the understanding — that is, we first think out what order of nature would be intelligible, and then look to see whether we cannot discover in nature such an order. This assumption does not prove that there is any such order, but in science we act as if it were there to be found out.

This suggestion of Kant's has been elaborated in many modern writers on philosophy, who have pointed out how much scientific method is governed by the notion of the most easily intelligible theory, and they have argued that science assumes, for the convenience of method, principles which it never completely proves. These principles are called sometimes methodological assumptions, sometimes postulates. The difference between such modern writers and Kant is that the former think that all a priori principles are of this nature, and that the principle of causation, for example, is itself only a postulate.

The faculty of judgment, then, according to Kant, assumes for regulative purposes that nature is purposive to our understanding. What does this last phrase mean? We are often concerned to know the relation of things to our purposes. It has been pointed out that very many of our empirical concepts represent rather our practical interest in things than our desire to understand them as they are. Kant's phrase implies that, apart from any such relation to particular purposes, there is a more general purpose of mere intelligibility, which some objects obviously serve more than others.

Here we pass to the consideration of art, for in our judgments of beauty Kant holds that we similarly disregard the relation of the beautiful object to any particular purpose, and seem to be concerned with general purposiveness. The judgment of beauty is, for Kant, the supreme act of the faculty of judgment. It is reflection on an individual for its own sake, without attempting to fit it to our desires or see it as an instance of our concepts or rules. Kant therefore proceeds to examine our judgments of beauty, which show how reflection on individual objects may display general rules, and then proceeds, in the last part of the *Critique*, to discuss the part played by the concept of purposiveness in our understanding of nature.

It would seem at first sight that Kant is not interested in art for its own sake, but for the light which it throws upon the nature of our intellectual faculties. Nevertheless he is careful to insist on the distinction between artistic and scientific judgments. The judgment of beauty, he insists, is free, is not determined by a concept. We are not concerned, in such judgments, with asking what an object is. In so far as, in our appreciation of beauty, we bring in such considerations we are wrong. He therefore rules out any theory that beauty is concerned with faithful representation. Beauty consists in the form of an object, and in nothing else. The judgment of beauty, besides being free, is also disinterested. The relation of the beautiful object to our purposes is irrelevant to its beauty. The judgment of beauty cannot, therefore, be determined by rules of any kind. It is always individual and immediate, and the immediate feeling of beauty counts for more than any rules or canons of taste. Kant therefore vindicates art as independent of either science or morality. Yet, once we realise its independence, the nature of art throws light upon both science and morality; for the judgment of beauty, although free and not determined by concepts, claims universal validity. We might put Kant's point in another way by saying that art is significant, and yet is not

significant of anything *in particular*. Its meaning cannot be reduced to scientific statement nor abstracted from its form, and yet art has meaning. Kant finds the explanation of the fact that the judgment of beauty is free, and yet claims universal validity, in the suggestion that a beautiful object is one the contemplation of which arouses and enlivens the two faculties of the intelligence, the imagination and the understanding, in their proper proportion or harmony. All knowledge needs imagination, the power of seeing resemblances and differences in objects, and understanding which by concepts gives unity and rules to the imagination. In science the imagination is subordinate to the understanding, for the aim of science is definiteness and precision. In art the imagination is free, and yet art is not the mere seeing of resemblances and differences; it also has its unity. It aims at the best proportion of variety and unity. This is independent of the varying natures of individual persons, and therefore the judgment of beauty can claim to be universally valid.

Beautiful objects, then, are "purposive to the understanding," inasmuch as their form stimulates in the most harmonious degree the two faculties of intelligence, and in art we find proof that there is a principle of general intelligibility, which may guide the work of the scientist. The purpose of the scientist is quite different from that of the artist, but if he is to reduce his facts to order and intelligibility he must be guided by a principle which is seen in its pure form in the artist.

In the second place, an understanding of the nature of art has significance for moral theory, because the judgment of beauty is disinterested, and shows that pleasure may be independent of desire. In æsthetic pleasure we are not merely determined by our inclinations, for art is of all human activities free and creative. We enjoy art not because it serves any of our individual desires and purposes, it is enjoyed by something in us that is universal. Art, then, contradicts the position which Kant assumes in the second *Critique*, that we cannot follow pleasure without being slaves of our phenomenal nature. It is a disinterested enjoyment, and is witness to the possibility of disinterested pleasure in the good. Further, Kant held that in one kind of æsthetic enjoyment, appreciation of the sublime, the contrast between our weakness and the vast extent and overwhelming powers of nature, calls forth in us a conviction accompanied by pleasure of the yet greater might of the moral law within us. Art therefore may become the symbol of morality, and the third *Critique* does much to soften the rigour of the teaching of the second.

In the last part of the *Critique of Judgment* Kant applies his doctrine of regulative principles to the understanding of nature. The faculty of judgment, as we saw, is concerned with the attempt to give unity to the detail of the natural world. In this work it has two regulative principles, mechanism and teleology. Reality cannot be formed according to both these principles; for mechanism assumes that reality can be regarded as a pattern or complex of recurring or interchangeable parts whose changes are necessitated, teleology that the world cannot be explained without supposing purpose to be an operating agency in change. Mechanism seeks to explain things as the necessary result of their original condition, teleology in the light of their highest development. The two principles have therefore been held to be inconsistent. The scientist, jealous for the validity of his discovery of mechanism, combats the very notion of purposive agency. The theologian thinks that to admit mechanism anywhere is to give up his whole position.

Kant's solution of this antinomy is that both mechanism and teleology are only regulative principles. They tell us nothing of the ultimate nature of reality, except that we can explain much of it by regarding it as if it were a machine, and much by regarding it as if it were the field of purposive agency. Reality must be consistent with both these facts, but more we cannot say. The moral is that we should continue to treat them as regulative principles, and push each principle of explanation as far as it will go.

Kant is here, as usual, the enemy alike of scientific and of theological dogmatism. He will not allow any limit to be set to the work of scientific investigation, and yet will not allow a principle of scientific method to be converted from an explanation of perceived facts into a theory of the universe.

Besides mediating between the conflicting claims of mechanism and teleology, Kant also modifies the notion of teleology. When we think of reality as purposive, we do not necessarily think of it as having a definite purpose, as being subordinate, for example, to the well-being of man. The principle of

purposiveness arises properly, he holds, from the contemplation of living things, from the perception of the difference between an organism and a machine. An organism is purposive in the sense in which a work of art is. In applying the principle we are trying to understand reality as though the relation of all the different things in it were like the relation of the parts of an organism or a picture. But this principle, like the principle of mechanism, does not carry us further than the facts we have examined, for an organism or a work of art can only be understood by study of the individual relations of all its parts. We can never know the universe as an organism, for we can never know all its parts. We can understand and put together more and more of them, but we never come to the end.

The third *Critique*, then, enforces the lesson of the first, that knowledge is the work of individual finite minds, trying to understand elements in a whole that transcends the limits of their experience, pushing back the spatial and temporal limits which confine each individual, but never removing them altogether. The critical philosophy teaches the impossibility of absolute knowledge, but it does so not by suggesting general scepticism of all knowledge, but by enforcing the validity of scientific knowledge within its own limits.

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IMMANUEL KANT by Elbert Hubbard

From ‘Little Journeys to the Homes of Great Philosophers’

The canons of scientific evidence justify us neither in accepting nor rejecting the ideas upon which morality and religion repose. Both parties to the dispute beat the air; they worry their own shadow; for they pass from Nature into the domain of speculation, where their dogmatic grips find nothing to lay hold upon. The shadows which they hew to pieces grow together in a moment like the heroes in Valhalla, to rejoice again in bloodless battles. Metaphysics can no longer claim to be the cornerstone of religion and morality. But if she can not be the Atlas that bears the moral world she can furnish a magic defense. Around the ideas of religion she throws her bulwark of invisibility; and the sword of the skeptic and the battering-ram of the materialist fall harmless on vacuity.

We find that most men fit easily into types. You describe to me one Durham cow and you picture all Durham cows. So it is with men: they belong to breeds, which we politely call denominations, sects or parties. Tell me the man’s sect, and I know his dress, his habit of life, his thought. His dress is the uniform of his party, and his thought is that which is ordered and prescribed. Dull indeed is the intellect which can not correctly prophesy the opinions to which this man will arrive on any subject.

Durham cows are not exactly alike, I well know, but a trifle more length of leg, a variation in color, or an off-angle of the horn, and that cow is forever barred from exhibition as a Durham. She is fit only for beef, and the first butcher that makes a bid takes her, hide and horns.

Members of sects do not think exactly alike, but there are well-defined limits of thought and action, beyond which they dare not stray lest the butcher bag them. In joining a sect they have given bonds to uniformity, and have signed their willingness to think and act like all other members of the sect.

Herbert Spencer deals with this “jiner” propensity in man, and describes it as a manifestation of the herding instinct in animals. It is a combination for mutual protection — a social contract, each one waiving a part of his personality in order to secure a supposed benefit. A herd of cattle can stand against a pack of wolves, but a cow alone is doomed.

Few men indeed can stand against the pack. Wise are the many who seek safety in numbers! Think of those who have stood out alone and expressed their individuality, and you count on your fingers God’s patriots dead and turned to dust.

The paradox of things is shown in that the entrenched many, having found safety in aggregation, pay their debt of homage to the bold few who lived their lives and paid the penalty by death.

Across the disk of existence, each decade, there glide five hundred million souls, and disappear forever in the dim and dusk of the eternity that lies behind. Out of the bare handful that are remembered, we cherish only the memories of those who stood alone and expressed their honest, inmost thought. And this thought is, always and forever, the thought of liberty. Exile, ostracism, death, have been their fate, and on the smoke of martyr-fires their souls mounted to immortality.

Future generations often confuse these men with Deity, the Maker of the Worlds. And thus do we arrive at truth by indirection, for in very fact these were the Sons of God, vitalized by Divinity, part and parcel of the Power that guides the planets on their way and holds the worlds in space. Upon their tombs we carve a single word: *Savior*.

Kant was sixty years old before he was known to any extent beyond his native town; but so fast then did his fame travel that at his death it was recognized that the greatest thinker of the world had passed away.

Kant founded no school; but Fichte, Schelling, Hegel, Herde and Schopenhauer were all his children — and all but Schopenhauer showed their humanity by denouncing him, for men are prone to revile that which has benefited them most. Kant marks an epoch and all thinkers who came after him are his debtors. His philosophy has passed into the current coin of knowledge.

Kant's lifelong researches revolve around four propositions:

1. Who am I?
2. What am I?
3. What can I do?
4. What can I know?

The answer to Number Four is that I can not know anything. That is to say, the wise man is the man who knows that he does not know. And this disposes of Number One and Number Two, leaving only Number Three for our consideration. It took, however, a good many years and a vast amount of study and writing for Kant to thus simplify. For years he toiled with algebraic formulas and syllogistic theorems before he concluded that the best wisdom of life lies in simplification, not complexity.

"What can I do?" resolves itself into, "What must I do?" And the answer is: You must do four things in order to retain your place as a normal being upon this earth: eat, work, associate with your kind, rest. Just four things we must do, and outside of this everything is incidental, accidental, irrelevant and inconsequential. Then how to eat, work, associate and rest wisely and best constitutes life. Every man should be free to work out these four equations for himself, his freedom ending where another man's rights begin. To these four questions we should bring our highest reason, our ripest experience and our best endeavor. As for himself we know that Kant made a schedule of life which evolved a sickly boy into a reasonably strong man who banished pain, sorrow and regret from his existence and lived a long life of deep, quiet satisfaction, sane to the end, watching every symptom of approaching dissolution with keen interest, and at the last passing into quiet sleep, his spirit gliding peacefully away, perhaps to answer those two great questions which he said were unanswerable here: "Who am I?" "What am I?"

Immanuel Kant was born in Seventeen Hundred Twenty-four at the City of Konigsberg, in the northeastern corner of Prussia. There he received his education; there he was a teacher for nearly half a century; and there, in his eightieth year, he died. He was never out of East Prussia and never journeyed sixty miles from his birthplace during his whole life. Professor Josiah Royce of Harvard, himself in the sage business, and perhaps the best example that America has produced of the pure type of philosopher, says, "Kant is the only modern thinker who in point of originality is worthy to be ranked with Plato and Aristotle." Like Emerson, Kant regarded traveling as a fool's paradise; only Emerson had to travel much before he found it out, while Kant gained the truth by staying at home. Once a lady took him for a carriage ride, and on learning from the footman that they were seven miles from home he was so displeased that he refused to utter a single orphic on the way back; and further, the story is that he never after entered a vehicle, and living for thirty years was never again so far from the lodging he called home.

In his lectures on physical geography Kant would often describe mountains, rivers, waterfalls, volcanoes, with great animation and accuracy, yet he had never seen any of these. Once a friend offered to take him to Switzerland, so he could actually see the mountains; but he warmly declined, declaring that the man who was not satisfied until he could touch, taste and see was small, mean and quibbling as was Thomas, the doubting disciple. Moreover, he had samples of the strata of the Alps, and this was enough, which reminds us of the man who had a house for sale and offered to send a prospective purchaser a sample brick.

Mind was the great miracle to Kant — the ability to know all about a thing by seeing it with your

inward eye. “The Imagination hath a stage within the brain upon which all scenes are played,” and the play to Kant was greater than the reality. Or, to use his own words: “Time and Space have no existence apart from Mind. There is no such thing as Sound unless there be an ear to receive the vibrations. Things and places, matter and substance come under the same law, and exist only as mind creates them.”

The parents of Kant were very lowly people. His father was a day laborer — a leather-cutter who never achieved even to the honors and emoluments of a saddler. There were seven children in the family, and never a servant crossed the threshold. One daughter survived Immanuel, and in her eighty-fourth year she expressed regrets that her brother had proved so recreant to the teachings of his parents as practically to alienate him from all his relatives. One brother became a Lutheran minister and lived out an honored career; the others vanish and fade away into the mist of forgetfulness.

So far as we know, all the children were strong and well except this one. At birth he weighed but five pounds, and his weakness was pitiable. He was the kind of child the Spartans used to make way with quickly, for the good of the State. He had a big, bulging head, thin legs, a weak chest, and one shoulder was so much higher than the other that it amounted almost to a deformity.

As the years went by, the parents saw he was not big enough to work, but hope was not dead — they would make a preacher of him! To this end he was sent to the “Fredericianium,” a graded school of no mean quality. The master of this school was a worthy clergyman by the name of Schultz, who was attracted to the Kant boy, it seems, on account of his insignificant size. It was the affection of the shepherd for the friendless ewe lamb. A little later the teacher began to love the boy for his big head and the thoughts he worked out of it. Brawn is bought with a price — young men who bank on it get it as legal tender. Those who have no brawn have to rely on brain or go without honors. Immanuel Kant began to ask his school-teacher questions that made the good man laugh.

At sixteen Kant entered Albertina University. And there he was to remain his entire life — student, tutor, teacher, professor.

He must have been an efficient youth, for before he was eighteen he realized that the best way to learn is to teach. The idea of becoming a clergyman was at first strong upon him; and Pastor Schultz occasionally sent the youth out to preach, or lead religious services in rural districts. This embryo preacher had a habit of placing a box behind the pulpit and standing on it while preaching. Then we find him reasoning the matter out in this way: “I stand on a box to preach so as to impress the people by my height or to conceal my insignificant size. This is pretense and a desire to carry out the idea that the preacher is bigger every way than common people. I talk with God in pretended prayer, and this looks as if I were on easy and familiar terms with Deity. Is it like those folks who claim to be on friendly terms with princes: If I do not know anything about God, why should I pretend I do?”

This desire to be absolutely honest with himself gradually grew until he informed the Pastor that he had better secure young men for preachers who could impress people without standing on a box. As for himself, he would impress people by the size of his head, if he impressed them at all. Let it here be noted that Kant then weighed exactly one hundred pounds, and was less than five feet high. His head measured twenty-four inches around, and fifteen and one-half inches over “firmness” from the opening of the ears. To put it another way, he wore a seven-and-a-half hat.

It is a great thing for a man to pride himself on what he is and make the best of it. The pride of craftsman betokens a valuable man. We exaggerate our worth, and this is Nature’s plan to get the thing done.

Kant’s pride of intellect, in degree, came from his insignificant form, and thus do all things work together for good. But this bony little form was often full of pain, and he had headaches, which led a wit to say, “If a head like yours aches, it must be worse than to be a giraffe and have a sore throat.”

Young Kant began to realize that to have a big head, and get the right use from it, one must have vital

power enough to feed it.

The brain is the engine — the lungs and digestive apparatus the boiler. Thought is combustion.

Young Kant, the uncouth, became possessed of an idea that made him the butt of many gibes and jeers. He thought that if he could breathe enough, he would be able to think clearly, and headaches would be gone. Life, he said, was a matter of breathing, and all men died from one cause — a shortness of breath. In order to think clearly, you must breathe.

We believe things first and prove them later; our belief is usually right, when derived from experience, but the reasons we give are often wrong. For instance, Kant cured his physical ills by going out of doors, and breathing deeply and slowly with closed mouth. Gradually his health began to improve. But the young man, not knowing at that time much about physiology, wrote a paper proving that the benefit came from the fresh air that circulated through his brain. And of course in one sense he was right. He related the incident of this thesis many years after in a lecture, to show the result of right action and wrong reasoning.

The doctors had advised Kant he must quit study, but when he took up his breathing fad, he renounced the doctors, and later denounced them. If he were going to die, he would die without the benefit of either the clergy or the physicians.

He denied that he was sick, and at night would roll himself in his blankets and repeat half-aloud, "How comfortable I am, how comfortable I am," until he fell asleep.

Near his house ran a narrow street, just a half-mile long. He walked this street up and back, with closed mouth, breathing deeply, waving a rattan cane to ward away talkative neighbors, and to keep up the circulation in his arms. Once and back — in a month he had increased this to twice and back. In a year he had come to the conclusion that to walk the length of that street eight times was the right and proper thing — that is to say, four miles in all. In other words, he had found out how much exercise he required — not too much or too little. At exactly half-past three he came out of his lodging, wearing his cocked hat and long, snuff-colored coat, and walked. The neighbors used to set their clocks by him. He walked and breathed with closed mouth, and no one dare accost him or walk with him. The hour was sacred and must not be broken in upon: it was his holy time — his time of breathing.

The little street is there now — one of the sights of Konigsberg, and the cab-drivers point it out as the Philosopher's Walk. And Kant walked that little street eight times every afternoon from the day he was twenty to within a year of his death, when eighty years old.

This walking and breathing habit physiologists now recognize as eminently scientific, and there is no sensible physician but will endorse Kant's wisdom in renouncing doctors and adopting a regimen of his own. The thing you believe in will probably benefit you — faith is hygienic.

The persistency of the little man's character is shown in the breathing habit — he believed in himself, relied on himself, and that which experience commended, he did.

This firmness in following his own ideas saved his life. When we think of one born in obscurity, living in poverty, handicapped by pain, weakness and deformity; never traveling; and then by sheer persistency and force of will rising to the first place among thinking men of his time, one is almost willing to accept Kant's dictum, "Mind is supreme, and the Universe is but the reflected thought of God."

Kant was great enough to doubt appearances and distrust popular conclusions. He knew that fallacies of reasoning follow fast upon actions — reason follows by slow freight. It is quite necessary that we should believe in a Supreme Power, but quite irrelevant that we should prove it.

Truth for the most part is unpopular, and the proof of this statement lies in the fact that it is so seldom told. Preachers tell people what they wish to hear, and indeed this must be so as long as the congregation that hears the preaching pays for it. People will not pay for anything they do not like. Hence, preaching leads naturally to sophistication and hypocrisy, and the promise of endless bliss for ourselves and a hell for our enemies comes about as a matter of course. What men will listen to and pay for is the real science

of theology. That is to say, the science of theology is the science of manipulating men. Success in theology consists in finding a fallacy that is palatable and then banking on it. Again and again Kant points out that a clergyman's advice is usually worthless, because pure truth is out of his province — unaccustomed, undesirable, inexpedient.

And Kant thought this was true also of doctors — doctors care more about pleasing their patients than telling them truth. "In fact," he said, "no doctor with a family to support can afford to tell his patients that his symptoms are no token of a disease — rather uncomfortable feelings are proof of health, for dead men don't have them." Most of the aches, pains and so-called irregularities are remedial moves on the part of Nature to keep the man well. Kant says that doctors treat symptoms, not diseases, and often the treatment causes the disease; so no man can tell what proportion of diseases is caused by medicine and what by other forms of applied ignorance.

As for lawyers, our little philosopher considered them, for the most part, sharks and wreckers. A lawyer looks over an estate, not with the idea of keeping it intact, but of dissolving it, and getting a part of it for himself. Not that men prefer to do what is wrong, but self-interest can always produce sufficient reasons to satisfy the conscience. Lawyers, being attaches of courts of justice, regard themselves as protectors of the people, when really they are the plunderers of the people, and their business is quite as much to defeat justice as to administer it. The evasion of law is as truly a lawyer's work as compliance with law. Then our philosopher explains that if law and justice were synonymous, this state of affairs would be most deplorable; but as it is, no particular harm is worked, save in the moral degradation of the lawyers. The connivance of lawyers tames the rank injustices of law; hence, to a degree, we live in a land where there is neither law nor justice — save such justice as can be appropriated by the man who is diplomat enough to do without lawyers and wise enough to have no property. Justice, however, to Kant is a very uncertain quantity, and he is rather inclined to regard the idea that men are able to administer justice as on a par with the assumption of the priest that he is dealing with God.

Kant once said, "When a woman demands justice, she means revenge."

A pupil here interposed, and asked the master if this was not equally true of men, and the answer was, "I accept the amendment — it certainly is true of all men I ever saw in courtrooms."

"Does death end all?"

"No," said Kant; "there is the litigation over the estate."

Kant's constant reiteration that he had no use for doctors, lawyers and preachers, we can well imagine did not add to his popularity. As for his reasoning concerning lawyers, we can all, probably, recall a few jug-shaped attorneys who fill the Kant requirements — takers of contingent fees and stirrers-up of strife: men who watch for vessels on the rocks and lure with false lights the mariner to his doom. But matters since Kant's day have changed considerably for the better. There is a demand now for a lawyer who is a businessman and who will keep people out of trouble instead of getting them in. And we also have a few physicians who are big enough to tell a man there is nothing the matter with him, if they think so, and then charge him accordingly — in inverse ratio to the amount of medicine administered.

And while we no longer refer to the clergyman as our spiritual adviser, except, perhaps, in way of pleasantry, he surely is useful as a social promoter.

The parents of Kant were Lutherans — punctilious and pious. They were descended from Scotch soldiers who had come over there two hundred years before and settled down after the war, just as the Hessians settled down and went to farming in Pennsylvania, their descendants occasionally becoming Daughters of the Revolution, because their grandsires fought with Washington.

This Scotch strain gave a sturdy bias to the Kants — these Lutherans were really rebels, and as every one knows, there are only two ways of dealing with a religious Scotchman — agree with him or kill him.

Most people said that Kant was supremely stubborn — he himself called it "firmness in the right."

Once, when a couple of calumniators were thinking up all the bad things they could say about him, one of them exclaimed, “He isn’t five feet high!”

“Liar!” came the shrill voice of the Philosopher, who had accidentally overheard them, “Liar! I am exactly five feet!” And he drew himself up, and struck his staff proudly and defiantly on the ground.

Which reminds one of the story told of Professor Josiah Royce, who once rang up six fares on the register when he wished to stop a Boston street-car. When the conductor protested, the philosopher called him “up-start,” “curmudgeon” and “nincompoop,” and showed the fallacy of his claim that thirty cents had been lost, since nobody had found it. Moreover, he offered to prove his proposition by algebraic equation, if one of the gentlemen present had chalk and blackboard on his person.

Once Kant was looking at the flowers in a beautiful garden. But instead of looking through the iron pickets, he stooped over and was squinting through the key-hole of the lock. A student coming along asked him why he didn’t look through the pickets and thus get a perfect view.

“Go on, you fool,” was the stern reply; “I am studying the law of optics — the unobstructed vision reveals too much — the vivid view is only gotten through a small aperture.”

All of which was believed to be a sudden inspiration in way of reply that came to the great professor when caught doing an absent-minded thing. That Kant was not above a little pious prevarication is shown by a story he himself tells. He was never inside of a church once during the last fifty years of his life. But when he became Chancellor of the University, one of his duties was to lead a procession to the Cathedral, where certain formal religious services were held. Kant tried to have the exercises in a hall, but failing in this, he did his duty, and marched like a pigmy drum-major at the head of the cavalcade.

“Now he will have to go in,” the scoffers said.

But he didn’t. Arriving at the church-door, he excused himself, pleading an urgent necessity, walked around to the back of the church, sacrificed, like Diogenes, to all the gods at once, and made off for home, quietly chuckling to himself at the thought of how he had circumvented the enemy.

Every actor has just so many make-ups and no more. Usually the characters he assumes are variations of a single one. Steele Mackaye used to say, “There are only five distinct dramatic situations.” The artist, too, has his properties. And the recognition of this truth caused Massillon to say, “The great preacher has but one sermon, yet out of this he makes many — by giving portions of it backwards, or beginning in the middle and working both ways, or presenting patchwork pieces, tinted and colored by his mood.” All public speakers have canned goods they fall back upon when the fresh fruit of thought grows scarce.

The literary man also has his puppets, pet phrases, and situations to his liking. Victor Hugo always catches the attention by a blind girl, a hunchback, a hunted convict or some mutilated and maimed unfortunate.

In his lectures, Kant used to please the boys by such phrases as this, “I dearly love the muse, although I must admit that I have never been the recipient of any of her favors.” This took so well that later he was encouraged to say, “The Old Metaphysics is positively unattractive, but the New Metaphysics is to me most lovely, although I can not boast that I have ever been honored by any of her favors.”

A large audience caused Kant to lose his poise — he became self-conscious — but in his own little lecture-room, with a dozen, or fifty at the most (because this was the capacity of the room), he was charming. He would fix his eye on a single boy, and often upon a single button on this boy’s coat, and forgetting the immediate theme in hand, would ramble into an amusing and most instructive monolog of criticism concerning politics, pedagogy or current events. In his writing he was exact, heavy and complex, but in these heart-to-heart talks, Herder, who attended Kant’s lectures for five years, says, “The man had a deal of nimble wit, and here Kant was at his best.”

So we have two different men — the man who wrote the “Critique” and the man who gave the lectures and clarified his thought by explaining things to others. It was in the lectures that he threw off this: “Men are creatures that can not do without their kind, yet are sure to quarrel when together.” This took fairly

well, and later he said, “Men can not do without men, yet they hate each other when together.” And in a year after, comes this: “A man is miserable without a wife, and is seldom happy after he gets one.” No doubt this caused a shout of applause from the students, college boys being always on the lookout for just such things; and coming from a very confirmed old bachelor it was peculiarly fetching.

To say that Kant was devoid of wit, as many writers do, is not to know the man. About a year after the “Critique of Pure Reason” appeared, he wrote this: “I am obliged to the learned public for the silence with which it has honored my book, as this silence means a suspension of judgment and a wise determination not to voice a premature opinion.” He knew perfectly well that the “learned public” had not read his book, and moreover, could not, intelligently, and the silence betokened simply a stupid lack of interest. Moreover, he knew there was no such thing as a learned public. Kant’s remark reveals a keen wit, and it also reveals something more — the pique of the unappreciated author who declares he doesn’t care what the public thinks of him, and thereby reveals the fact that he does.

Here are a couple of remarks that could only have been made in the reign of Frederick the Great, and under the spell of a college lecture: “The statement that man is the noblest work of God was never made by anybody but man, and must therefore be taken ‘cum grano salis.’” “We are told that God said He made man in His own image, but the remark was probably ironical.”

Schopenhauer says: “The chief jewel in the crown of Frederick the Great is Immanuel Kant. Such a man as Kant could not have held a salaried position under any other monarch on the globe at that time and have expressed the things that Kant did. A little earlier or a little later, and there would have been no such person as Immanuel Kant. Rulers are seldom big men, but if they are big enough to recognize and encourage big men, they deserve the gratitude of mankind!”

THE LAST DAYS OF IMMANUEL KANT by Thomas De Quincey

I take it for granted that every person of education will acknowledge some interest in the personal history of Immanuel Kant. A great man, though in an unpopular path, must always be an object of liberal curiosity. To suppose a reader thoroughly indifferent to Kant, is to suppose him thoroughly unintellectual; and, therefore, though in reality he should happen *not* to regard him with interest, it is one of the fictions of courtesy to presume that he does. On this principle I make no apology to the reader for detaining him upon a short sketch of Kant's life and domestic habits, drawn from the authentic records of his friends and pupils. It is true, that, without any illiberality on the part of the public in this country, the *works* of Kant are not regarded with the same interest which has gathered about his *name*; and this may be attributed to three causes — first, to the language in which they are written; secondly, to the supposed obscurity of the philosophy which they teach, whether intrinsic or due to Kant's particular mode of expounding it; thirdly, to the unpopularity of all speculative philosophy, no matter how treated, in a country where the structure and tendency of society impress upon the whole activities of the nation a direction exclusively practical. But, whatever may be the immediate fortunes of his writings, no man of enlightened curiosity will regard the author himself without something of a profounder interest. Measured by one test of power, viz., by the number of books written directly for or against himself, to say nothing of those which he has indirectly modified, there is no philosophic writer whatsoever, if we except Aristotle, who can pretend to approach Kant in the extent of the influence which he has exercised over the minds of men. Such being his claims upon our notice, I repeat that it is no more than a reasonable act of respect to the reader — to presume in him so much interest about Kant as will justify a sketch of his life.

Immanuel Kant, [Footnote: By the paternal side, the family of Kant was of Scotch derivation; and hence it is that the name was written by Kant the father — *Cant*, that being a Scotch name, and still to be found in Scotland. But Immanuel, though he always cherished his Scotch descent, substituted a *K* for a *C*, in order to adapt it better to the analogies of the German language.] the second of six children, was born at Königsberg, in Prussia, a city at that time containing about fifty thousand inhabitants, on the 22d of April, 1724. His parents were people of humble rank, and not rich even for their own station, but able (with some assistance from a near relative, and a trifle in addition from a gentleman, who esteemed them for their piety and domestic virtues,) to give their son Immanuel a liberal education. He was sent when a child to a charity school; and, in the year 1732, removed to the Royal (or Frederician) Academy. Here he studied the Greek and Latin classics, and formed an intimacy with one of his schoolfellows, David Ruhnken, (afterwards so well known to scholars under his Latin name of Ruhn-kenius,) which lasted until the death of the latter. In 1737, Kant lost his mother, a woman of excellent character, and of accomplishments and knowledge beyond her rank, who contributed to the future eminence of her illustrious son by the direction which she gave to his youthful thoughts, and by the elevated morals to which she trained him. Kant never spoke of her to the end of his life without the utmost tenderness, and acknowledgment of his great obligations to her maternal care. In 1740, at Michælmas, he entered the University of Königsberg. In 1746, when about twenty-two years old, he printed his first work, upon a question partly mathematical and partly philosophic, viz., the valuation of living forces. The question had been first moved by Leibnitz, in opposition to the Cartesians, and was here finally settled, after having occupied most of the great mathematicians of Europe for more than half a century. It was dedicated to the King of Prussia, but never reached him — having, in fact, never been published. [Footnote: To this circumstance we must attribute its being so little known amongst the philosophers and mathematicians of foreign countries, and also the fact that D'Alembert, whose philosophy was miserably below his mathematics, many years afterwards still continued to represent the dispute as a verbal one.] From this

time until 1770, he supported himself as a private tutor in different families, or by giving private lectures in Königsberg, especially to military men on the art of fortification. In 1770, he was appointed to the Chair of Mathematics, which he exchanged soon after for that of Logic and Metaphysics. On this occasion, he delivered an inaugural disputation — [*De Mundi Sensibilis atque Intelligibilis Forma et Principiis*] — which is remarkable for containing the first germs of the Transcendental Philosophy. In 1781, he published his great work, the *Critik der Reinen Vernunft*, or *Investigation of the Pure Reason*. On February 12, 1804, he died.

These are the great epochs of Kant's life. But his was a life remarkable not so much for its incidents, as for the purity and philosophic dignity of its daily tenor; and of this the best impression will be obtained from Wasianski's account of his last years, checked and supported by the collateral testimonies of Jachmann, Rink, Borowski, and other biographers. We see him here struggling with the misery of decaying faculties, and with the pain, depression, and agitation of two different complaints, one affecting his stomach, and the other his head; over all which the benignity and nobility of his mind are seen victoriously eminent to the last. The principal defect of this and all other memoirs of Kant is, that they report too little of his conversation and opinions. And perhaps the reader will be disposed to complain, that some of the notices are too minute and circumstantial, so as to be at one time undignified, and at another unfeeling. As to the first objection, it may be answered, that biographical gossip of this sort, and ungentlemanly scrutiny into a man's private life, though not what a man of honor would choose to write, may be read without blame; and, where a great man is the subject, sometimes with advantage. With respect to the other objection, I know not how to excuse Mr. Wasianski for kneeling at the bed-side of his dying friend, to record, with the accuracy of a short-hand reporter, the last flutter of his pulse and the struggles of expiring nature, except by supposing that the idea of Kant, as a person belonging to all ages, in his mind transcended and extinguished the ordinary restraints of human sensibility, and that, under this impression, he gave *that* to his sense of a public duty which, it may be hoped, he would willingly have declined on the impulse of his private affections.

The following paper on The Last Days of Kant, is gathered from the German of Wasianski, Jachmann, Borowski, and others.

My knowledge of Professor Kant began long before the period to which this little memorial of him chiefly refers. In the year 1773, or 1774, I cannot exactly remember which, I attended his lectures. Afterwards, I acted as his amanuensis; and in that office was naturally brought into a closer connection with him than any other of his pupils; so that, without any request on my part, he granted me a general privilege of free admission to his class-room. In 1780 I took orders, and withdrew myself from all connection with the university. I still continued, however, to reside in Königsberg; but wholly forgotten, or wholly unnoticed at least, by Kant. Ten years afterwards, (that is to say, in 1790,) I met him by accident at a party given on occasion of the marriage of one of the professors. At table, Kant distributed his conversation and attentions pretty generally; but after the entertainment, when the company broke up into parties, he came and seated himself very obligingly by my side. I was at that time a florist — an amateur, I mean, from the passion I had for flowers; upon learning which, he talked of my favorite pursuit, and with very extensive information. In the course of our conversation, I was surprised to find that he was perfectly acquainted with all the circumstances of my situation. He reminded me of our previous connection; expressed his satisfaction at finding that I was happy; and was so good as to desire that, if my engagements allowed me, I would now and then come and dine with him. Soon after this, he rose to take his leave; and, as our road lay the same way, he proposed to me that I should accompany him home. I did so, and received an invitation for the next week, with a general invitation for every week after, and permission to name my own day. At first I was unable to explain the distinction with which Kant had treated me; and I conjectured that some obliging friend had spoken of me in his hearing, somewhat more advantageously than I could pretend to deserve; but more intimate experience has convinced me that he

was in the habit of making continual inquiries after the welfare of his former pupils, and was heartily rejoiced to hear of their prosperity. So that it appeared I was wrong in thinking he had forgotten me.

This revival of my intimacy with Professor Kant, coincided pretty nearly, in point of time, with a complete change in his domestic arrangements. Up to this period it had been his custom to eat at a *table d'hôte*. But he now began to keep house himself, and every day invited two friends to dine with him, and upon any little festival from five to eight; for he was a punctual observer of Lord Chesterfield's rule — that his dinner party, himself included, should not fall below the number of the Graces — nor exceed that of the Muses. In the whole economy of his household arrangements, and especially of his dinner parties, there was something peculiar and amusingly opposed to the usual conventional restraints of society; not, however, that there was any neglect of decorum, such as sometimes occurs in houses where there are no ladies to impress a better tone upon the manners. The invariable routine was this: The moment that dinner was ready, Lampe, the professor's old footman, stepped into the study with a certain measured air, and announced it. This summons was obeyed at the pace of double quick time — Kant talking all the way to the eating-room about the state of the weather [Footnote: His reason for which was, that he considered the weather one of the principal forces which act upon the health; and his own frame was exquisitely sensible to all atmospheric influences.] — a subject which he usually pursued during the earlier part of the dinner. Graver themes, such as the political events of the day, were never introduced before dinner, or at all in his study. The moment that Kant had taken his seat, and unfolded his napkin, he opened the business of dinner with a particular formula— '*Now, then, gentlemen!*' and the tone and air with which he uttered these words, proclaimed, in a way which nobody could mistake, relaxation from the toils of the morning, and determinate abandonment of himself to social enjoyment. The table was hospitably spread; three dishes, wine, &c., with a small second course, composed the dinner. Every person helped himself; and all delays of ceremony were so disagreeable to Kant, that he seldom failed to express his displeasure with anything of that sort, though not angrily. He was displeased also if people ate little; and treated it as affectation. The first man to help himself was in his eyes the politest guest; for so much the sooner came his own turn. For this hatred of delay, Kant had a special excuse, having always worked hard from an early hour in the morning, and eaten nothing until dinner. Hence it was, that in the latter period of his life, though less perhaps from actual hunger than from some uneasy sensation of habit or periodical irritation of stomach, he could hardly wait with patience for the arrival of the last person invited.

There was no friend of Kant's but considered the day on which he was to dine with him as a day of pleasure. Without giving himself the air of an instructor, Kant really was so in the very highest degree. The whole entertainment was seasoned with the overflow of his enlightened mind, poured out naturally and unaffectedly upon every topic, as the chances of conversation suggested it; and the time flew rapidly away, from one o'clock to four, five, or even later, profitably and delightfully. Kant tolerated no *calms*, which was the name he gave to the momentary pauses in conversation, or periods when its animation languished. Some means or other he always devised for restoring its tone of interest, in which he was much assisted by the tact with which he drew from every guest his peculiar tastes, or the particular direction of his pursuits; and on these, be they what they might, he was never unprepared to speak with knowledge, and the interest of an original observer. The local affairs of Königsberg must have been interesting indeed, before they could be allowed to occupy the attention at *his* table. And, what may seem still more singular, it was rarely or never that he directed the conversation to any branch of the philosophy founded by himself. Indeed he was perfectly free from the fault which besets so many *savans* and *literati*, of intolerance towards those whose pursuits had disqualified them for any particular sympathy with his own. His style of conversation was popular in the highest degree, and unscholastic; so much so, that any stranger who should have studied his works, and been unacquainted with his person, would have found it difficult to believe, that in this delightful companion he saw the profound author of the Transcendental Philosophy.

The subjects of conversation at Kant's table were drawn chiefly from natural philosophy, chemistry, meteorology, natural history, and above all, from politics. The news of the day, as reported in the public journals, was discussed with a peculiar vigilance of examination. With regard to any narrative that wanted dates of time and place, however otherwise plausible, he was uniformly an inexorable sceptic, and held it unworthy of repetition. So keen was his penetration into the interior of political events, and the secret policy under which they moved, that he talked rather with the authority of a diplomatic person who had access to cabinet intelligence, than as a simple spectator of the great scenes which were unfolding in Europe. At the time of the French Revolution, he threw out many conjectures, and what were then accounted paradoxical anticipations, especially in regard to military operations, which were as punctually fulfilled as his own memorable conjecture in regard to the hiatus in the planetary system between Mars and Jupiter,[Footnote: To which the author should have added — and in regard to the hiatus between the planetary and cometary systems, which was pointed out by Kant several years before his conjecture was established by the good telescope of Dr. Herschel. Vesta and Juno, further confirmations of Kant's conjecture, were discovered in June 1804, when Wasianski wrote.] the entire confirmation of which he lived to witness on the discovery of Ceres by Piazzi, in Palermo, and of Pallas, by Dr. Olbers, at Bremen. These two discoveries, by the way, impressed him much; and they furnished a topic on which he always talked with pleasure; though, according to his usual modesty, he never said a word of his own sagacity in having upon *à priori* grounds shown the probability of such discoveries many years before.

It was not only in the character of a companion that Kant shone, but also as a most courteous and liberal host, who had no greater pleasure than in seeing his guests happy and jovial, and rising with exhilarated spirits from the mixed pleasures — intellectual and liberally sensual — of his Platonic banquets. Chiefly, perhaps, with a view to the sustaining of this tone of genial hilarity, he showed himself somewhat of an artist in the composition of his dinner parties. Two rules there were which he obviously observed, and I may say invariably: the first was, that the company should be miscellaneous; this for the sake of securing sufficient variety to the conversation: and accordingly his parties presented as much variety as the world of Königsberg afforded, being drawn from all the modes of life, men in office, professors, physicians, clergymen, and enlightened merchants. His second rule was, to have a due balance of *young* men, frequently of *very* young men, selected from the students of the university, in order to impress a movement of gaiety and juvenile playfulness on the conversation; an additional motive for which, as I have reason to believe, was, that in this way he withdrew his mind from the sadness which sometimes overshadowed it, for the early deaths of some young friends whom he loved.

And this leads me to mention a singular feature in Kant's way of expressing his sympathy with his friends in sickness. So long as the danger was imminent, he testified a restless anxiety, made perpetual inquiries, waited with patience for the crisis, and sometimes could not pursue his customary labors from agitation of mind. But no sooner was the patient's death announced, than he recovered his composure, and assumed an air of stern tranquillity — almost of indifference. The reason was, that he viewed life in general, and therefore, that particular affection of life which we call sickness, as a state of oscillation and perpetual change, between which and the fluctuating sympathies of hope and fear, there was a natural proportion that justified them to the reason; whereas death, as a permanent state that admitted of no *more* or *less*, that terminated all anxiety, and for ever extinguished the agitation of suspense, he would not allow to be fitted to any state of feeling, but one of the same enduring and unchanging character. However, all this philosophic heroism gave way on one occasion; for many persons will remember the tumultuous grief which he manifested upon the death of Mr. Ehrenboth, a young man of very fine understanding and extensive attainments, for whom he had the greatest affection. And naturally it happened, in so long a life as his, in spite of his provident rule for selecting his social companions as much as possible amongst the young, that he had to mourn for many a heavy loss that could never be supplied to him.

To return, however, to the course of his day, immediately after the termination of his dinner party, Kant

walked out for exercise; but on this occasion he never took any companion, partly, perhaps, because he thought it right, after so much convivial and colloquial relaxation, to pursue his meditations,[Footnote: Mr. Wasianski is wrong. To pursue his meditations under these circumstances, might perhaps be an inclination of Kant's to which he yielded, but not one which he would justify or erect into a maxim. He disapproved of eating alone, or *solipsismus convictorii*, as he calls it, on the principle, that a man would be apt, if not called off by the business and pleasure of a social party, to think too much or too closely, an exercise which he considered very injurious to the stomach during the first process of digestion. On the same principle he disapproved of walking or riding alone; the double exercise of thinking and bodily agitation, carried on at the same time, being likely, as he conceived, to press too hard upon the stomach.] and partly (as I happen to know) for a very peculiar reason, viz., that he wished to breathe exclusively through his nostrils, which he could not do if he were obliged continually to open his mouth in conversation. His reason for this was, that the atmospheric air, being thus carried round by a longer circuit, and reaching the lungs, therefore, in a state of less rawness, and at a temperature somewhat higher, would be less apt to irritate them. By a steady perseverance in this practice, which he constantly recommended to his friends, he flattered himself with a long immunity from coughs, colds, hoarseness, and every mode of defluxion; and the fact really was, that these troublesome affections attacked him very rarely. Indeed I myself, by only occasionally adopting his rule, have found my chest not so liable as formerly to such attacks.

At six o'clock he sat down to his library table, which was a plain ordinary piece of furniture, and read till dusk. During this period of dubious light, so friendly to thought, he rested in tranquil meditation on what he had been reading, provided the book were worth it; if not, he sketched his lecture for the next day, or some part of any book he might then be composing. During this state of repose he took his station winter and summer by the stove, looking through the window at the old tower of Lobenicht; not that he could be said properly to see it, but the tower rested upon his eye, — obscurely, or but half revealed to his consciousness. No words seemed forcible enough to express his sense of the gratification which he derived from this old tower, when seen under these circumstances of twilight and quiet reverie. The sequel, indeed, showed how important it was to his comfort; for at length some poplars in a neighboring garden shot up to such a height as to obscure the tower, upon which Kant became very uneasy and restless, and at length found himself positively unable to pursue his evening meditations. Fortunately, the proprietor of the garden was a very considerate and obliging person, who had, besides, a high regard for Kant; and, accordingly, upon a representation of the case being made to him, he gave orders that the poplars should be cropped. This was done, the old tower of Lobenicht was again unveiled, and Kant recovered his equanimity, and pursued his twilight meditations as before.

After the candles were brought, Kant prosecuted his studies till nearly ten o'clock. A quarter of an hour before retiring for the night, he withdrew his mind as much as possible from every class of thoughts which demanded any exertion or energy of attention, on the principle, that by stimulating and exciting him too much, such thoughts would be apt to cause wakefulness; and the slightest interference with his customary hour of falling asleep, was in the highest degree unpleasant to him. Happily, this was with him a very rare occurrence. He undressed himself without his servant's assistance, but in such an order, and with such a Roman regard to decorum and the *to prepon*, that he was always ready at a moment's warning to make his appearance without embarrassment to himself or to others. This done, he lay down on a mattress, and wrapped himself up in a quilt, which in summer was always of cotton, — in autumn, of wool; at the setting-in of winter he used both — and against very severe cold, he protected himself by one of eider-down, of which the part which covered his shoulders was not stuffed with feathers, but padded, or rather wadded closely with layers of wool. Long practice had taught him a very dexterous mode of *nesting* himself, as it were, in the bed-clothes. First of all, he sat down on the bedside; then with an agile motion he vaulted obliquely into his lair; next he drew one corner of the bedclothes under his left shoulder, and

passing it below his back, brought it round so as to rest under his right shoulder; fourthly, by a particular *tour d'adresse*, he treated the other corner in the same way, and finally contrived to roll it round his whole person. Thus swathed like a mummy, or (as I used to tell him) self-involved like the silk-worm in its cocoon, he awaited the approach of sleep, which generally came on immediately. For Kant's health was exquisite; not mere negative health, or the absence of pain, but a state of positive pleasurable sensation, and a genial sense of the entire possession of all his activities. Accordingly, when packed up for the night in the way I have described, he would often ejaculate to himself (as he used to tell us at dinner)— 'Is it possible to conceive a human being with more perfect health than myself?' In fact, such was the innocence of his life, and such the happy condition of his situation, that no uneasy passion ever arose to excite him — nor care to harass — nor pain to awake him. Even in the severest winter his sleeping-room was without a fire; only in his latter years he yielded so far to the entreaties of his friends as to allow of a very small one. All nursing or self-indulgence found no quarter with Kant. In fact, five minutes, in the coldest weather, sufficed to supersede the first chill of the bed, by the diffusion of a general glow over his person. If he had any occasion to leave his room in the night-time, (for it was always kept dark day and night, summer and winter,) he guided himself by a rope, which was duly attached to his bed-post every night, and carried into the adjoining apartment.

Kant never perspired, [Footnote: This appears less extraordinary, considering the description of Kant's person, given originally by Reichardt, about eight years after his death. 'Kant,' says this writer, 'was drier than dust both in body and mind. His person was small; and possibly a more meagre, arid, parched anatomy of a man, has not appeared upon this earth. The upper part of his face was grand; forehead lofty and serene, nose elegantly turned, eyes brilliant and penetrating; but below it expressed powerfully the coarsest sensuality, which in him displayed itself by immoderate addiction to eating and drinking.' This last feature of his temperament is here expressed much too harshly.] night or day. Yet it was astonishing how much heat he supported habitually in his study, and in fact was not easy if it wanted but one degree of this heat. Seventy-five degrees of Fahrenheit was the invariable temperature of this room in which he chiefly lived; and if it fell below that point, no matter at what season of the year, he had it raised artificially to the usual standard. In the heats of summer he went thinly dressed, and invariably in silk stockings; yet, as even this dress could not always secure him against perspiring when engaged in active exercise, he had a singular remedy in reserve. Retiring to some shady place, he stood still and motionless — with the air and attitude of a person listening, or in suspense — until his usual *aridity* was restored. Even in the most sultry summer night, if the slightest trace of perspiration had sullied his night-dress, he spoke of it with emphasis, as of an accident that perfectly shocked him.

On this occasion, whilst illustrating Kant's notions of the animal economy, it may be as well to add one other particular, which is, that for fear of obstructing the circulation of the blood, he never would wear garters; yet, as he found it difficult to keep up his stockings without them, he had invented for himself a most elaborate substitute, which I shall describe. In a little pocket, somewhat smaller than a watch-pocket, but occupying pretty nearly the same situation as a watch-pocket on each thigh, there was placed a small box, something like a watch-case, but smaller; into this box was introduced a watch-spring in a wheel, round about which wheel was wound an elastic cord, for regulating the force of which there was a separate contrivance. To the two ends of this cord were attached hooks, which hooks were carried through a small aperture in the pockets, and so passing down the inner and the outer side of the thigh, caught hold of two loops which were fixed on the off side and the near side of each stocking. As might be expected, so complex an apparatus was liable, like the Ptolemaic system of the heavens, to occasional derangements; however, by good luck, I was able to apply an easy remedy to these disorders which sometimes threatened to disturb the comfort, and even the serenity, of the great man.

Precisely at five minutes before five o'clock, winter or summer, Lampe, Kant's servant, who had formerly served in the army, marched into his master's room with the air of a sentinel on duty, and cried

aloud in a military tone,— ‘Mr. Professor, the time is come.’ This summons Kant invariably obeyed without one moment’s delay, as a soldier does the word of command — never, under any circumstances, allowing himself a respite, not even under the rare accident of having passed a sleepless night. As the clock struck five, Kant was seated at the breakfast-table, where he drank what he called *one* cup of tea; and no doubt he thought it such; but the fact was, that in part from his habit of reverie, and in part also for the purpose of refreshing its warmth, he filled up his cup so often, that in general he is supposed to have drunk two, three, or some unknown number. Immediately after he smoked a pipe of tobacco, (the only one which he allowed himself through the entire day,) but so rapidly, that a pile of glowing embers remained unsmoked. During this operation he thought over his arrangements for the day, as he had done the evening before during the twilight. About seven he usually went to his lecture-room, and from that he returned to his writing-table. Precisely at three quarters before one he rose from his chair, and called aloud to the cook,— ‘It has struck three quarters.’ The meaning of which summons was this: — Immediately after taking soup, it was his constant practice to swallow what he called a dram, which consisted either of Hungarian wine, of Rhenish, of a cordial, or (in default of these) of Bishop. A flask of this was brought up by the cook on the proclamation of the three quarters. Kant hurried with it to the eating-room, poured out his *quantum*, left it standing in readiness, covered, however, with paper, to prevent its becoming vapid, and then went back to his study, and awaited the arrival of his guests, whom to the latest period of his life he never received but in full dress.

Thus we come round again to dinner, and the reader has now an accurate picture of the course of Kant’s day; the rigid monotony of which was not burthensome to him; and probably contributed, with the uniformity of his diet, and other habits of the same regularity, to lengthen his life. On this consideration, indeed, he had come to regard his health and his old age as in a great measure the product of his own exertions. He spoke of himself often under the figure of a gymnastic artist, who had continued for nearly fourscore years to support his balance upon the slack-rope of life, without once swerving to the right or to the left. In spite of every illness to which his constitutional tendencies had exposed him, he still kept his position in life triumphantly. However, he would sometimes observe sportively, that it was really absurd, and a sort of insult to the next generation for a man to live so long, because he thus interfered with the prospects of younger people.

This anxious attention to his health accounts for the great interest which he attached to all new discoveries in medicine, or to new ways of theorizing on the old ones. As a work of great pretension in both classes, he set the highest value upon the theory of the Scotch physician Brown, or (as it is usually called, from the Latin name of its author,) the Brunonian Theory. No sooner had Weikard adopted [Footnote: This theory was afterwards greatly modified in Germany; and, judging from the random glances which I throw on these subjects, I believe that in this recast it still keeps its ground in that country.] and made it known in Germany, than Kant became familiar with it. He considered it not only as a great step taken for medicine, but even for the general interests of man, and fancied that in this he saw something analogous to the course which human nature has held in still more important inquiries, viz.: first of all, a continual ascent towards the more and more elaborately complex, and then a treading back, on its own steps, towards the simple and elementary. Dr. Beddoes’s Essays, also, for producing by art and curing pulmonary consumption, and the method of Reich for curing fevers, made a powerful impression upon him; which, however, declined as those novelties (especially the last) began to sink in credit. As to Dr. Jenner’s discovery of vaccination, he was less favorably disposed to it; he apprehended dangerous consequences from the absorption of a brutal miasma into the human blood, or at least into the lymph; and at any rate he thought, that, as a guarantee against the variolous infection, it required a much longer probation. Groundless as all these views were, it was exceedingly entertaining to hear the fertility of argument and analogy which he brought forward to support them. One of the subjects which occupied him at the latter end of his life, was the theory and phenomena of galvanism, which, however, he never

satisfactorily mastered. Augustin's book upon this subject was about the last that he read, and his copy still retains on the margin his, pencil-marks of doubts, queries and suggestions.

The infirmities of age now began to steal upon Kant, and betrayed themselves in more shapes than one. Connected with Kant's prodigious memory for all things that had any intellectual bearings, he had from youth labored under an unusual weakness of this faculty in relation to the common affairs of daily life. Some remarkable instances of this are on record, from the period of his childish days; and now, when his second childhood was commencing, this infirmity increased upon him very sensibly. One of the first signs was, that he began to repeat the same stories more than once on the same day. Indeed, the decay of his memory was too palpable to escape his own notice; and, to provide against it, and secure himself from all apprehension of inflicting tedium upon his guests, he began to write a syllabus, or list of themes, for each day's conversation, on cards, or the covers of letters, or any chance scrap of paper. But these memoranda accumulated so fast upon him, and were so easily lost, or not forthcoming at the proper moment, that I prevailed on him to substitute a blank-paper book, which I had directed to be made, and which still remains, with some affecting memorials of his own conscious weakness. As often happens, however, in such cases, he had a perfect memory for the remote events of his life, and could repeat with great readiness, and without once stumbling, very long passages from German or Latin poems, especially from the AEneid, whilst the very words that had been uttered but a moment before dropped away from his remembrance. The past came forward with the distinctness and liveliness of an immediate existence, whilst the present faded away into the obscurity of infinite distance.

Another sign of his mental decay was the weakness with which he now began to theorize. He accounted for everything by electricity. A singular mortality at this time prevailed amongst the cats of Vienna, Basle, Copenhagen, and other places. Cats being so eminently an electric animal, of course he attributed this epizootic to electricity. During the same period, he persuaded himself that a peculiar configuration of clouds prevailed; this he took as a collateral proof of his electrical hypothesis. His own headaches, too, which in all probability were a mere remote effect of old age, and a direct one of an inability [Footnote: Mr. Wasianski is quite in the wrong here. If the hindrances which nature presented to the act of thinking were now on the increase, on the other hand, the disposition to think, by his own acknowledgment, was on the wane. The power and the habit altering in proportion, there is no case made out of that disturbed equilibrium to which apparently he would attribute the headaches. But the fact is, that, if he had been as well acquainted with Kant's writings as with Kant personally, he would have known, that some affection of the head of a spasmodic kind was complained of by Kant at a time when nobody could suspect him of being in a decaying state.] to think as easily and as severely as formerly, he explained upon the same principle. And this was a notion of which his friends were not anxious to disabuse him, because, as something of the same character of weather (and therefore probably the same general tendency of the electric power) is found to prevail for whole cycles of years, entrance upon another cycle held out to him some prospect of relief. A delusion which secured the comforts of hope was the next best thing to an actual remedy; and a man who, in such circumstances, is cured of his delusion, '*cui demptus per vim mentis gratissimus error*,' might reasonably have exclaimed, '*Pol, me occidistis, amici.*'

Possibly the reader may suppose, that, in this particular instance of charging his own decays upon the state of the atmosphere, Kant was actuated by the weakness of vanity, or some unwillingness to face the real fact that his powers were decaying. But this was not the case. He was perfectly aware of his own condition, and, as early as 1799, he said, in my presence, to a party of his friends— 'Gentlemen, I am old, and weak, and childish, and you must treat me as a child.' Or perhaps it may be thought that he shrank from the contemplation of death, which, as apoplexy seemed to be threatened by the pains in his head, might have happened any day. But neither was this the case. He now lived in a continual state of resignation, and prepared to meet any dispensation of Providence. 'Gentlemen,' said he one day to his guests, 'I do not fear to die. I assure you, as in the presence of God, that if I were this night to be made

suddenly aware that I was on the point of being summoned, I would raise my hands to heaven, fold them, and say, Blessed be God! If indeed it were possible that a whisper such as this could reach my ear — Fourscore years thou hast lived, in which time thou hast inflicted much evil upon thy fellow-men, the case would be otherwise.' Whosoever has heard Kant speak of his own death, will bear witness to the tone of earnest sincerity which, on such occasions, marked his manner and utterance.

A third sign of his decaying faculties was, that he now lost all accurate measure of time. One minute, nay, without exaggeration, a much less space of time, stretched out in his apprehension of things to a wearisome duration. Of this I can give one rather amusing instance, which was of constant recurrence. At the beginning of the last year of his life, he fell into a custom of taking immediately after dinner a cup of coffee, especially on those days when it happened that I was of his party. And such was the importance he attached to this little pleasure, that he would even make a memorandum beforehand, in the blank-paper book I had given him, that on the next day I was to dine with him, and consequently that there was to be coffee. Sometimes it would happen, that the interest of conversation carried him past the time at which he felt the craving for it; and this I was not sorry to observe, as I feared that coffee, which he had never been accustomed to, [Footnote: How this happened to be the case in Germany, Mr. Wasianski has not explained. Perhaps the English merchants at Königsberg, being amongst Kant's oldest and most intimate friends, had early familiarized him to the practice of drinking tea, and to other English tastes. However, Jachmann tells us, (,) that Kant was extravagantly fond of coffee, but forced himself to abstain from it under a notion that it was very unwholesome.] might disturb his rest at night. But, if this did not happen, then commenced a scene of some interest. Coffee must be brought 'upon the spot,' (a word he had constantly in his mouth during his latter days,) 'in a moment.' And the expressions of his impatience, though from old habit still gentle, were so lively, and had so much of infantine naïveté about them, that none of us could forbear smiling. Knowing what would happen, I had taken care that all the preparations should be made beforehand; the coffee was ground; the water was boiling; and the very moment the word was given, his servant shot in like an arrow, and plunged the coffee into the water. All that remained, therefore, was to give it time to boil up. But this trifling delay seemed unendurable to Kant. All consolations were thrown away upon him: vary the formula as we might, he was never at a loss for a reply. If it was said— 'Dear Professor, the coffee will be brought up in a moment.'— '*Will* be!' he would say, 'but there's the rub, that it only *will* be:

Man never *is*, but always *to be* blest.'

If another cried out— 'The coffee is coming immediately.'— 'Yes,' he would retort, 'and so is the next hour: and, by the way, it's about that length of time that I have waited for it.' Then he would collect himself with a stoical air, and say— 'Well, one can die after all: it is but dying; and in the next world, thank God! there is no drinking of coffee, and consequently no — waiting for it.' Sometimes he would rise from his chair, open the door, and cry out with a feeble querulousness— 'Coffee! coffee!' And when at length he heard the servant's step upon the stairs, he would turn round to us, and, as joyfully as ever sailor from the mast-head, he would call out— 'Land, land! my dear friends, I see land.'

This general decline in Kant's powers, active and passive, gradually brought about a revolution in his habits of life. Heretofore, as I have already mentioned, he went to bed at ten, and rose a little before five. The latter practice he still observed, but not the other. In 1802 he retired as early as nine, and afterwards still earlier. He found himself so much refreshed by this addition to his rest, that at first he was disposed to utter a *Euraeka*, as over some great discovery in the art of restoring exhausted nature: but afterwards, on pushing it still farther, he did not find the success answer his expectations. His walks he now limited to a few turns in the King's gardens, which were at no great distance from his own house. In order to walk more firmly, he adopted a peculiar method of stepping; he carried his foot to the ground, not forward, and obliquely, but perpendicularly, and with a kind of stamp, so as to secure a larger basis, by setting down the entire sole at once. Notwithstanding this precaution, upon one occasion he fell in the street. He was

quite unable to raise himself; and two young ladies, who saw the accident, ran to his assistance. With his usual graciousness of manner he thanked them fervently for their assistance, and presented one of them with a rose which he happened to have in his hand. This lady was not personally known to Kant; but she was greatly delighted with his little present, and still keeps the rose as a frail memorial of her transitory interview with the great philosopher.

This accident, as I have reason to think, was the cause of his henceforth renouncing exercise altogether. All labors, even that of reading, were now performed slowly, and with manifest effort; and those which cost him any bodily exertion became very exhausting to him. His feet refused to do their office more and more; he fell continually, both when moving across the room, and even when standing still: yet he seldom suffered from these falls; and he constantly laughed at them, maintaining that it was impossible he could hurt himself, from the extreme lightness of his person, which was indeed by this time the merest skeleton. Very often, especially in the morning, he dropped asleep in his chair from pure weariness: on these occasions he fell forward upon the floor, and lay there unable to raise himself up, until accident brought one of his servants or his friends into the room. Afterwards these falls were prevented, by substituting a chair with circular supports, that met and clasped in front.

These unseasonable dozings exposed him to another danger. He fell repeatedly, whilst reading, with his head into the candles; a cotton night-cap which he wore was instantly in a blaze, and flaming about his head. Whenever this happened, Kant behaved with great presence of mind. Disregarding the pain, he seized the blazing cap, drew it from his head, laid it quietly on the floor, and trod out the flames with his feet. Yet, as this last act brought his dressing-gown into a dangerous neighborhood to the flames, I changed the form of his cap, persuaded him to arrange the candles differently, and had a decanter of water placed constantly by his side; and in this way I applied a remedy to a danger, which would else probably have been fatal to him.

From the sallies of impatience, which I have described in the case of the coffee, there was reason to fear that, with the increasing infirmities of Kant, would grow up a general waywardness and obstinacy of temper. For my own sake, therefore, and not less for his, I now laid down one rule for my future conduct in his house; which was, that I would, on no occasion, allow my reverence for him to interfere with the firmest expression of my opinion on subjects relating to his own health; and in cases of great importance, that I would make no compromise with his particular humors, but insist, not only on my view of the case, but also on the practical adoption of my views; or, if this were refused me, that I would take my departure at once, and not be made responsible for the comfort of a person whom I had no power to influence. And this behavior on my part it was that won Kant's confidence; for there was nothing which disgusted him so much as any approach to fawning or sycophancy. As his imbecility increased, he became daily more liable to mental delusions; and, in particular, he fell into many fantastic notions about the conduct of his servants, and, in consequence, into a peevish mode of treating them. Upon these occasions I generally observed a deep silence. But sometimes he would ask me for my opinion; and when this happened, I did not scruple to say, 'Ingenuously, then, Mr. Professor, I think that you are in the wrong.'— 'You think so?' he would reply calmly, at the same time asking for my reasons, which he would listen to with great patience, and openness to conviction. Indeed, it was evident that the firmest opposition, so long as it rested upon assignable grounds and principles, won upon his regard; whilst his own nobleness of character still moved him to habitual contempt for timorous and partial acquiescence in his opinions, even when his infirmities made him most anxious for such acquiescence.

Earlier in life Kant had been little used to contradiction. His superb understanding, his brilliancy in conversation, founded in part upon his ready and sometimes rather caustic wit, and in part upon his prodigious command of knowledge — the air of noble self-confidence which the consciousness of these advantages impressed upon his manners — and the general knowledge of the severe innocence of his life — all combined to give him a station of superiority to others, which generally secured him from open

contradiction. And if it sometimes happened that he met a noisy and intemperate opposition, supported by any pretences to wit, he usually withdrew himself from that sort of unprofitable altercation with dignity, by contriving to give such a turn to the conversation as won the general favor of the company to himself, and impressed, silence, or modesty at least, upon the boldest disputant. From a person so little familiar with opposition, it could scarcely have been anticipated that he should daily surrender his wishes to mine — if not without discussion, yet always without displeasure. So, however, it was. No habit, of whatever long standing, could be objected to as injurious to his health, but he would generally renounce it. And he had this excellent custom in such cases, that either he would resolutely and at once decide for his own opinion, or, if he professed to follow his friend's, he would follow it sincerely, and not try it unfairly by trying it imperfectly. Any plan, however trifling, which he had once consented to adopt on the suggestion of another, was never afterwards defeated or embarrassed by unseasonable interposition from his own humors. And thus, the very period of his decay drew forth so many fresh expressions of his character, in its amiable or noble features, as daily increased my affection and reverence for his person.

Having mentioned his servants, I shall here take occasion to give some account of his man-servant Lampe. It was a great misfortune for Kant, in his old age and infirmities, that this man also became old, and subject to a different sort of infirmities. This Lampe had originally served in the Prussian army; on quitting which he entered the service of Kant. In this situation he had lived about forty years; and, though always dull and stupid, had, in the early part of this period, discharged his duties with tolerable fidelity. But latterly, presuming upon his own indispensableness, from his perfect knowledge of all the domestic arrangements, and upon his master's weakness, he had fallen into great irregularities and neglect of his duties. Kant had been obliged, therefore, of late, to threaten repeatedly that he would discharge him. I, who knew that Kant, though one of the kindest-hearted men, was also one of the firmest, foresaw that this discharge, once given, would be irrevocable: for the word of Kant was as sacred as other men's oaths. Consequently, upon every opportunity, I remonstrated with Lampe on the folly of his conduct, and his wife joined me on these occasions. Indeed, it was high time that a change should be made in some quarter; for it now became dangerous to leave Kant, who was constantly falling from weakness, to the care of an old ruffian, who was himself apt to fall from intoxication. The fact was, that from the moment I undertook the management of Kant's affairs, Lampe saw there was an end to his old system of abusing his master's confidence in pecuniary affairs, and the other advantages which he took of his helpless situation. This made him desperate, and he behaved worse and worse; until one morning, in January, 1802, Kant told me, that, humiliating as he felt such a confession, the fact was, that Lampe had just treated him in a way which he was ashamed to repeat. I was too much shocked to distress him by inquiring into the particulars. But the result was, that Kant now insisted, temperately but firmly, on Lampe's dismissal. Accordingly, a new servant, of the name of Kaufmann, was immediately engaged; and on the next day Lampe was discharged with a handsome pension for life.

Here I must mention a little circumstance which does honor to Kant's benevolence. In his last will, on the assumption that Lampe would continue with him to his death, he had made a very liberal provision for him; but upon this new arrangement of the pension, which was to take effect immediately, it became necessary to revoke that part of his will, which he did in a separate codicil, that began thus:— 'In consequence of the ill behavior of my servant Lampe, I think fit,' &c. But soon after, considering that such a record of Lampe's misconduct might be seriously injurious to his interests, he cancelled the passage, and expressed it in such a way, that no trace remained behind of his just displeasure. And his benign nature was gratified with knowing, that, this one sentence blotted out, there remained no other in all his numerous writings, published or confidential, which spoke the language of anger, or could leave any ground for doubting that he died in charity with all the world. Upon Lampe's calling to demand a written character, he was, however, a good deal embarrassed; his stern reverence for truth being, in this instance, armed against the first impulses of his kindness. Long and anxiously he sat, with the certificate lying

before him, debating how he should fill up the blanks. I was present, but in such a matter I did not take the liberty of suggesting any advice. At last, he took his pen, and filled up the blank as follows:—' — has served me long and faithfully,' — (for Kant was not aware that he had robbed him,)— 'but did not display those particular qualifications which fitted him for waiting on an old and infirm man like myself.'

This scene of disturbance over, which to Kant, a lover of peace and tranquillity, caused a shock that he would gladly have been spared; it was fortunate that no other of that nature occurred during the rest of his life. Kaufmann, the successor of Lampe, turned out to be a respectable and upright man, and soon conceived a great attachment to his master's person. Things now put on a new face in Kant's family: by the removal of one of the belligerents, peace was once more restored amongst his servants; for hitherto there had been eternal wars between Lampe and the cook. Sometimes it was Lampe that carried a war of aggression into the cook's territory of the kitchen; sometimes it was the cook that revenged these insults, by sallying out upon Lampe in the neutral ground of the hall, or invaded him even in his own sanctuary of the butler's pantry. The uproars were everlasting; and thus far it was fortunate for the peace of the philosopher, that his hearing had begun to fail; by which means he was spared many an exhibition of hateful passions and ruffian violence, which annoyed his guests and friends. But now all things had changed: deep silence reigned in the pantry; the kitchen rang no more with martial alarums; and the hall was unvexed with skirmish or pursuit. Yet it may be readily supposed that to Kant, at the age of seventy-eight, changes, even for the better, were not welcome: so intense had been the uniformity of his life and habits, that the least innovation in the arrangement of articles as trifling as a penknife, or a pair of scissors, disturbed him; and not merely if they were pushed two or three inches out of their customary position, but even if they were laid a little awry; and as to larger objects, such as chairs, &c., any dislocation of their usual arrangement, any trans position, or addition to their number, perfectly confounded him; and his eye appeared restlessly to haunt the seat of the mal-arrangement, until the ancient order was restored. With such habits the reader may conceive how distressing it must have been to him, at this period of decaying powers, to adapt himself to a new servant, a new voice, a new step, &c.

Aware of this, I had on the day before he entered upon his duties, written down for the new servant upon a sheet of paper the entire routine of Kant's daily life, down to the minutest and most trivial circumstances; all which he mastered with the greatest rapidity. To make sure, however, we went through a rehearsal of the whole ritual; he performing the manoeuvres, I looking on and giving the word. Still I felt uneasy at the idea of his being left entirely to his own discretion on his first *debut* in good earnest, and therefore I made a point of attending on this important day; and in the few instances where the new recruit missed the accurate manoeuvre, a glance or a nod from me easily made him comprehend his failure.

One part only there was of the daily ceremonial, where all of us were at a loss, as it was a part which no mortal eyes had ever witnessed but those of Lampe: this was breakfast. However, that we might do all in our power, I myself attended at four o'clock in the morning. The day happened, as I remember, to be the 1st of February, 1802. Precisely at five, Kant made his appearance; and nothing could equal his astonishment on finding me in the room. Fresh from the confusion of dreaming, and bewildered alike by the sight of his new servant, by Lampe's absence, and by my presence, he could with difficulty be made to comprehend the purpose of my visit. A friend in need is a friend indeed; and we would now have given any money to that learned person who could have instructed us in the arrangement of the breakfast table. But this was a mystery revealed to none but Lampe. At length Kant took this task upon himself; and apparently all was now settled to his satisfaction. Yet still it struck me that he was under some embarrassment or constraint. Upon this I said — that, with his permission, I would take a cup of tea, and afterwards smoke a pipe with him. He accepted my offer with his usual courteous demeanor; but seemed unable to familiarize himself with the novelty of his situation. I was at this time sitting directly opposite to him; and at last he frankly told me, but with the kindest and most apologetic air, that he was really under the necessity of begging that I would sit out of his sight; for that, having sat alone at the breakfast table for

considerably more than half a century, he could not abruptly adapt his mind to a change in this respect; and he found his thoughts very sensibly disturbed. I did as he desired; the servant retired into an antiroom, where he waited within call; and Kant recovered his wonted composure. Just the same scene passed over again, when I called at the same hour on a fine summer morning some months after.

Henceforth all went right: or, if occasionally some little mistake occurred, Kant showed himself very considerate and indulgent, and would remark of his own accord, that a new servant could not be expected to know all his peculiar ways and humors. In one respect, indeed, this man adapted himself to Kant's scholarlike taste, in a way which Lampe was incapable of doing. Kant was somewhat fastidious in matters of pronunciation; and this man had a great facility in catching the true sound of Latin words, the titles of books, and the names or designations of Kant's friends: not one of which accomplishments could Lampe, the most insufferable of blockheads, ever attain to. In particular, I have been told by Kant's old friends, that for the space of more than thirty years, during which he had been in the habit of reading the newspaper published by Hartung, Lampe delivered it with the same identical blunder on every day of publication.— 'Mr. Professor, here is Hart*mann's* journal.' Upon which Kant would reply— 'Eh! what? — What's that you say? Hartmann's journal? I tell you, it is not Hartmann, but Hartung: now, repeat it after me — not Hartmann, but Hartung.' Then Lampe, looking sulky, and drawing himself up with the stiff air of a soldier on guard, and in the very same monotonous tone with which he had been used to sing out his challenge of — *Who goes there?* would roar— 'not Hartmann, but Hartung.' 'Now again!' Kant would say: on which again Lampe roared— 'not Hartmann, but Hartung.' 'Now a third time,' cried Kant: on which for a third time the unhappy Lampe would howl out— 'not Hartmann, but Hartung.' And this whimsical scene of parade duty was continually repeated: duly as the day of publication came, the irreclaimable old dunce was put through the same manoeuvres, which were as invariably followed by the same blunder on the next. In spite, however, of this advantage, in the new servant, and his general superiority to his predecessor, Kant's nature was too kind and good, and too indulgent to all people's infirmities but his own, not to miss the voice and the 'old familiar face' that he had been accustomed to for forty years. And I met with what struck me as an affecting instance of Kant's yearning after his old good-for-nothing servant in his memorandum-book: other people record what they wish to remember; but Kant had here recorded what he was to forget. 'Mem.: February, 1802, the name of Lampe must now be remembered no more.'

In the spring of this year, 1802, I advised Kant to take the air. It was very long since he had been out of doors, [Footnote: Wasianski here returns thanks to some unknown person, who, having observed that Kant in his latter walks took pleasure in leaning against a particular wall to view the prospect, had caused a seat to be fixed at that point for his use.] and walking was now out of the question. But I thought the motion of a carriage and the air would be likely to revive him. On the power of vernal sights and sounds I did not much rely; for these had long ceased to affect him. Of all the changes that spring brings with it, there was one only that now interested Kant; and he longed for it with an eagerness and intensity of expectation, that it was almost painful to witness: this was the return of a hedge sparrow that sang in his garden, and before his window. This bird, either the same, or one of the next generation, had sung for years in the same situation; and Kant grew uneasy when the cold weather, lasting longer than usual, retarded its return. Like Lord Bacon, indeed, he had a childlike love for birds in general, and in particular, took pains to encourage the sparrows to build above the windows of his study; and when this happened, (as it often did, from the silence which prevailed in his study,) he watched their proceedings with the delight and the tenderness which others give to a human interest. To return to the point I was speaking of, Kant was at first very unwilling to accede to my proposal of going abroad. 'I shall sink down in the carriage,' said he, 'and fall together like a heap of old rags.' But I persisted with a gentle importunity in urging him to the attempt, assuring him that we would return immediately if he found the effort too much for him. Accordingly, upon a tolerably warm day of early [Footnote: Mr. Wasianski says

— *late* in summer: but, as he elsewhere describes by the same expression of 'late in summer,' a day which was confessedly *before* the longest day, and as the multitude of birds which continued to sing will not allow us to suppose that the summer could be very far advanced, I have translated accordingly.] summer, I, and an old friend of Kant's, accompanied him to a little place which I rented in the country. As we drove through the streets, Kant was delighted to find that he could sit upright, and bear the motion of the carriage, and seemed to draw youthful pleasure from the sight of the towers and other public buildings, which he had not seen for years. We reached the place of our destination in high spirits. Kant drank a cup of coffee, and attempted to smoke a little. After this, he sat and sunned himself, listening with delight to the warbling of birds, which congregated in great numbers about this spot. He distinguished every bird by its song, and called it by its right name. After staying about half an hour, we set off on our homeward journey, Kant still cheerful, but apparently satiated with his day's enjoyment.

I had on this occasion purposely avoided taking him to any public gardens, that I might not disturb his pleasure by exposing him to the distressing gaze of public curiosity. However, it was known in Königsberg that Kant had gone out; and accordingly, as the carriage moved through the streets which led to his residence, there was a general rush from all quarters in that direction, and, when we turned into the street where the house stood, we found it already choked up with people. As we slowly drew up to the door, a lane was formed in the crowd, through which Kant was led, I and my friend supporting him on our arms. Looking at the crowd, I observed the faces of many persons of rank, and distinguished strangers, some of whom now saw Kant for the first time, and many of them for the last.

As the winter of 1802-3 approached, he complained more than ever of an affection of the stomach, which no medical man had been able to mitigate, or even to explain. The winter passed over in a complaining way; he was weary of life, and longed for the hour of dismission. 'I can be of service to the world no more,' said he, 'and am a burden to myself.' Often I endeavored to cheer him by the anticipation of excursions that we would make together when summer came again. On these he calculated with so much earnestness, that he had made a regular scale or classification of them — l. Airings; 2. Journeys; 3. Travels. And nothing could equal the yearning impatience expressed for the coming of spring and summer, not so much for their own peculiar attractions, as because they were the seasons for travelling. In his memorandum-book, he made this note:— 'The three summer months are June, July, and August' — meaning that they were the three months for travelling. And in conversation he expressed the feverish strength of his wishes so plaintively and affectingly, that everybody was drawn into powerful sympathy with him, and wished for some magical means of ante-dating the course of the seasons.

In this winter his bed-room was often warmed. This was the room in which he kept his little collection of books, of about four hundred and fifty volumes, chiefly presentation-copies from the authors. It may seem singular that Kant, who read so extensively, should have no larger library; but he had less need of one than most scholars, having in his earlier years been librarian at the Royal Library of the Castle; and since then having enjoyed from the liberality of Hartknoch, his publisher, (who, in his turn, had profited by the liberal terms on which Kant had made over to him the copyright of his own works,) the first sight of every new book that appeared.

At the close of this winter, that is in 1803, Kant first began to complain of unpleasant dreams, sometimes of very terrific ones, which awakened him in great agitation. Oftentimes melodies, which he had heard in earliest youth sung in the streets of Königsberg, resounded painfully in his ears, and dwelt upon them in a way from which no efforts of abstraction could release him. These kept him awake to unseasonable hours; and often when, after long watching, he had fallen asleep, however deep his sleep might be, it was suddenly broken up by terrific dreams, which alarmed him beyond description. Almost every night, the bell-rope, which communicated with a bell in the room above his own, where his servant slept, was pulled violently, and with the utmost agitation. No matter how fast the servant might hurry down, he was almost always too late, and was pretty sure to find his master out of bed, and often making

his way in terror to some other part of the house. The weakness of his feet exposed him to such dreadful falls on these occasions, that at length (but with much difficulty) I persuaded him to let his servant sleep in the same room with himself.

The morbid affection of the stomach began now to be more and more distressing; and he tried various applications, which he had formerly been loud in condemning, such as a few drops of rum upon a piece of sugar, naphtha, [Footnote: For Kant's particular complaint, as described by other biographers, a quarter of a grain of opium, every twelve hours, would have been the best remedy, perhaps a perfect remedy.] &c. But all these were only palliatives; for his advanced age precluded the hope of a radical cure. His dreadful dreams became continually more appalling: single scenes, or passages in these dreams, were sufficient to compose the whole course of mighty tragedies, the impression from which was so profound as to stretch far into his waking hours. Amongst other phantasmata more shocking and indescribable, his dreams constantly represented to him the forms of murderers advancing to his bedside; and so agitated was he by the awful trains of phantoms that swept past him nightly, that in the first confusion of awaking he generally mistook his servant, who was hastening to his assistance, for a murderer. In the day-time we often conversed upon these shadowy illusions; and Kant, with his usual spirit of stoical contempt for nervous weakness of every sort, laughed at them; and, to fortify his own resolution to contend against them, he wrote down in his memorandum-book, 'There must be no yielding to panics of darkness.' At my suggestion, however, he now burned a light in his chamber, so placed as that the rays might be shaded from his face. At first he was very averse to this, though gradually he became reconciled to it. But that he could bear it at all, was to me an expression of the great revolution accomplished by the terrific agency of his dreams. Heretofore, darkness and utter silence were the two pillars on which his sleep rested: no step must approach his room; and as to light, if he saw but a moonbeam penetrating a crevice of the shutters, it made him unhappy; and, in fact, the windows of his bed-chamber were barricadoed night and day. But now darkness was a terror to him, and silence an oppression. In addition to his lamp, therefore, he had now a repeater in his room; the sound was at first too loud, but, after muffling the hammer with cloth, both the ticking and the striking became companionable sounds to him.

At this time (spring of 1803) his appetite began to fail, which I thought no good sign. Many persons insist that Kant was in the habit of eating too much for health. [Footnote: Who these worthy people were that criticised Kant's eating, is not mentioned. They could have had no opportunity of exercising their abilities on this question, except as hosts, guests, or fellow-guests; and in any of those characters, a gentleman, one would suppose, must feel himself degraded by directing his attention to a point of that nature. However, the merits of the case stand thus between the parlies: Kant, it is agreed by all his biographers, ate only once a day; for as to his breakfast, it was nothing more than a very weak infusion of tea, (vide Jachmann's Letters, ,) with no bread, or eatable of any kind. Now, his critics, by general confession, ate their way, from 'morn to dewy eve,' through the following course of meals: 1. Breakfast early in the morning; 2. Breakfast *à la fourchette* about ten, A.M.; 3. Dinner at one or two; 4. Vesper Brod; 5. Abend Brod; all which does really seem a very fair allowance for a man who means to lecture upon abstinence at night. But I shall cut this matter short by stating one plain fact; there were two things, and no more, for which Kant had an inordinate craving during his whole life; these were tobacco and coffee; and from both these he abstained almost altogether, merely under a sense of duty, resting probably upon erroneous grounds. Of the first he allowed himself a very small quantity, (and everybody knows that temperance is a more difficult virtue than abstinence;) of the other none at all, until the labors of his life were accomplished.] I, however, cannot assent to this opinion; for he ate but once a day, and drank no beer. Of this liquor, (I mean the strong black beer,) he was, indeed, the most determined enemy. If ever a man died prematurely, Kant would say— 'He has been drinking beer, I presume.' Or, if another were indisposed, you might be sure he would ask, 'But does he drink beer?' And, according to the answer on this point, he regulated his anticipations for the patient. Strong beer, in short, he uniformly maintained to

be a slow poison. Voltaire, by the way, had said to a young physician who denounced coffee under the same bad name of a 'slow poison,' 'You're right there, my friend, however; slow it is, and horribly slow; for I have been drinking it these seventy years, and it has not killed me yet;' but this was an answer which, in the case of beer, Kant would not allow of.

On the 22d of April, 1803, his birth-day, the last which he lived to see, was celebrated in a full assembly of his friends. This festival he had long looked forward to with great expectation, and delighted even to hear the progress made in the preparations for it. But when the day came, the over-excitement and tension of expectation seemed to have defeated itself. He tried to appear happy; but the bustle of a numerous company confounded and distressed him; and his spirits were manifestly forced. He seemed first to revive to any real sense of pleasure at night, when the company had departed, and he was undressing in his study. He then talked with much pleasure about the presents which, as usual, would be made to his servants on this occasion; for Kant was never happy himself, unless he saw all around him happy. He was a great maker of presents; but at the same time he had no toleration for the studied theatrical effect, the accompaniment of formal congratulations, and the sentimental pathos with which birth-day presents are made in Germany. [Footnote: In this, as in many other things, the taste of Kant was entirely English and Roman; as, on the other hand, some eminent Englishmen, I am sorry to say, have, on this very point, shown the effeminacy and *falsetto* taste of the Germans. In particular, Mr. Coleridge, describing, in The Friend, the custom amongst German children of making presents to their parents on Christmas Eve, (a custom which he unaccountably supposes to be peculiar to Ratzeburg,) represents the mother as 'weeping aloud for joy' — the old idiot of a father with 'tears running down his face,' &c. &c., and all for what? For a snuff-box, a pencil-case, or some article of jewellery. Now, we English agree with Kant on such maudlin display of stage sentimentality, and are prone to suspect that papa's tears are the product of rum-punch. Tenderness let us have by all means, and the deepest you can imagine, but upon proportionate occasions, and with causes fitted to justify it and sustain its dignity.] In all this, his masculine taste gave him a sense of something fade and ludicrous.

The summer of 1803 was now come, and, visiting Kant one day, I was thunderstruck to hear him direct me, in the most serious tone, to provide the funds necessary for an extensive foreign tour. I made no opposition, but asked his reasons for such a plan; he alleged the miserable sensations he had in his stomach, which were no longer endurable. Knowing what power over Kant a quotation from a Roman poet had always had, I simply replied— 'Post equitem sedet atra cura,' and for the present he said no more. But the touching and pathetic earnestness with which he was continually ejaculating prayers for warmer weather, made it doubtful to me whether his wishes on this point ought not, partially at least, to be gratified; and I therefore proposed to him a little excursion to the cottage we had visited the year before. 'Anywhere,' said he, 'no matter whither, provided it be far enough.' Towards the latter end of June, therefore, we executed this scheme; on getting into the carriage, the order of the day with Kant was, 'Distance, distance. Only let us go far enough,' said he: but scarcely had we reached the city-gates before the journey seemed already to have lasted too long. On reaching the cottage we found coffee waiting for us; but he would scarcely allow himself time for drinking it, before he ordered the carriage to the door; and the journey back seemed insupportably long to him, though it was performed in something less than twenty minutes. 'Is this never to have an end?' was his continual exclamation; and great was his joy when he found himself once more in his study, undressed, and in bed. And for this night he slept in peace, and once again was liberated from the persecution of dreams.

Soon after he began again to talk of journeys, of travels in remote countries, &c., and, in consequence, we repeated our former excursion several times; and though the circumstances were pretty nearly the same on every occasion, and always terminating in disappointment as to the immediate pleasure anticipated, yet, undoubtedly, they were, on the whole, salutary to his spirits. In particular, the cottage itself, standing under the shelter of tall alders, with a valley stretched beneath it, through which a little

brook meandered, broken by a water-fall, whose pealing sound dwelt pleasantly on the ear, sometimes, on a quiet sunny day, gave a lively delight to Kant: and once, under accidental circumstances of summer clouds and sun-lights, the little pastoral landscape suddenly awakened a lively remembrance which had been long laid asleep, of a heavenly summer morning in youth, which he had passed in a bower upon the banks of a rivulet that ran through the grounds of a dear and early friend, Gen. Von Lossow. The strength of the impression was such, that he seemed actually to be living over that morning again, thinking as he then thought, and conversing with those that were no more.

His very last excursion was in August of this year, (1803,) not to my cottage, but to the garden of a friend. But on this day he manifested great impatience. It had been arranged that he was to meet an old friend at the gardens; and I, with two other gentlemen, attended him. It happened that *out* party arrived first; and such was Kant's weakness, and total loss of power to estimate the duration of time, that, after waiting a few moments, he insisted that some hours had elapsed — that his friend could not be expected — and went away in great discomposure of mind. And so ended Kant's travelling in this world.

In the beginning of autumn the sight of his right eye began to fail him; the left he had long lost the use of. This earliest of his losses, by the way, he discovered by mere accident, and without any previous warning. Sitting down one day to rest himself in the course of a walk, it occurred to him that he would try the comparative strength of his eyes; but on taking out a newspaper which he had in his pocket, he was surprised to find that with his left eye he could not distinguish a letter. In earlier life he had two remarkable affections of the eyes: once, on returning from a walk, he saw objects double for a long space of time; and twice he became stone-blind. Whether these accidents are to be considered as uncommon, I leave to the decision of oculists. Certain it is, they gave very little disturbance to Kant; who, until old age had reduced his powers, lived in a constant state of stoical preparation for the worst that could befall him. I was now shocked to think of the degree in which his burthensome sense of dependence would be aggravated, if he should totally lose the power of sight. As it was, he read and wrote with great difficulty: in fact, his writing was little better than that which most people can produce as a trial of skill with their eyes shut. From old habits of solitary study, he had no pleasure in hearing others read to him; and he daily distressed me by the pathetic earnestness of his entreaties that I would have a reading-glass devised for him. Whatever my own optical skill could suggest, I tried; and the best opticians were sent for to bring their glasses, and take his directions for altering them; but all was to no purpose.

In this last year of his life Kant very unwillingly received the visits of strangers; and, unless under particular circumstances, wholly declined them. Yet, when travellers had come a very great way out of their road to see him, I confess that I was at a loss how to conduct myself. To have refused too pertinaciously, could not but give me the air of wishing to make myself of importance. And I must acknowledge, that, amongst some instances of importunity and coarse expressions of low-bred curiosity, I witnessed, on the part of many people of rank, a most delicate sensibility to the condition of the aged recluse. On sending in their cards, they would generally accompany them by some message, expressive of their unwillingness to gratify their wish to see him at any risk of distressing him. The fact was, that such visits *did* distress him much; for he felt it a degradation to be exhibited in his helpless state, when he was aware of his own incapacity to meet properly the attention that was paid to him. Some, however, were admitted, [Footnote: To whom it appears that Kant would generally reply, upon their expressing the pleasure it gave them to see him, 'In me you behold a poor superannuated, weak, old man.'] according to the circumstances of the case, and the state of Kant's spirits at the moment. Amongst these, I remember that we were particularly pleased with M. Otto, the same who signed the treaty of peace between France and England with the present Lord Liverpool, (then Lord Hawkesbury.) A young Russian also rises to my recollection at this moment, from the excessive (and I think unaffected) enthusiasm which he displayed. On being introduced to Kant, he advanced hastily, took both his hands, and kissed them. Kant, who, from living so much amongst his English friends, had a good deal of the English dignified reserve about him,

and hated anything like *scenes*, appeared to shrink a little from this mode of salutation, and was rather embarrassed. However, the young man's manner, I believe, was not at all beyond his genuine feelings; for next day he called again, made some inquiries about Kant's health, was very anxious to know whether his old age were burthensome to him, and above all things entreated for some little memorial of the great man to carry away with him. By accident the servant had found a small cancelled fragment of the original MS. of Kant's 'Anthropologie:' this, with my sanction, he gave to the Russian; who received it with rapture, kissed it, and then gave him in return the only dollar he had about him; and, thinking that not enough, actually pulled off his coat and waistcoat and forced them upon the man. Kant, whose native simplicity of character very much indisposed him to sympathy with any extravagances of feeling, could not, however, forbear smiling good-humoredly on being made acquainted with this instance of *naïveté* and enthusiasm in his young admirer.

I now come to an event in Kant's life, which ushered in its closing stage. On the 8th of October, 1803, for the first time since his youth, he was seriously ill. When a student at the University, he had once suffered from an ague, which, however, gave way to pedestrian exercise; and in later years, he had endured some pain from a contusion on his head; but, with these two exceptions, (if they can be considered such,) he had never (properly speaking) been ill. The cause of his illness was this: his appetite had latterly been irregular, or rather I should say depraved; and he no longer took pleasure in anything but bread and butter, and English cheese.[Footnote: Mr. W. here falls into the ordinary mistake of confounding the cause and the occasion, and would leave the impression, that Kant (who from his youth up had been a model of temperance) died of sensual indulgence. The cause of Kant's death was clearly the general decay of the vital powers, and in particular the atony of the digestive organs, which must soon have destroyed him under any care or abstinence whatever. This was the cause. The accidental occasion, which made that cause operative on the 7th of October, might or might not be what Mr. W. says. But in Kant's burthensome state of existence, it could not be a question of much importance whether his illness were to commence in an October or a November.] On the 7th of October, at dinner, he ate little else, in spite of everything that I and another friend then dining with him, could urge to dissuade him. And for the first time I fancied that he seemed displeased with my importunity, as though I were overstepping the just line of my duties. He insisted that the cheese never had done him any harm, nor would now. I had no course left me but to hold my tongue; and he did as he pleased. The consequence was what might have been anticipated — a restless night, succeeded by a day of memorable illness. The next morning all went on as usual, till nine o'clock, when Kant, who was then leaning on his sister's arm, suddenly fell senseless to the ground. A messenger was immediately despatched for me; and I hurried down to his house, where I found him lying in his bed, which had now been removed into his study, speechless and insensible. I had already summoned his physician; but, before he arrived, nature put forth efforts which brought Kant a little to himself. In about an hour he opened his eyes, and continued to mutter unintelligibly till towards the evening, when he rallied a little, and began to talk rationally. For the first time in his life, he was now, for a few days, confined to his bed, and ate nothing. On the 12th October, he again took some refreshment, and would have had his favorite food; but I was now resolved, at any risk of his displeasure, to oppose him firmly. I therefore stated to him the whole consequences of his last indulgence, of all which he manifestly had no recollection. He listened to what I said very attentively, and calmly expressed his conviction that I was perfectly in the wrong; but for the present he submitted. However, some days after, I found that he had offered a florin for a little bread and cheese, and then a dollar, and even more. Being again refused, he complained heavily; but gradually he weaned himself from asking for it, though at times he betrayed involuntarily how much he desired it.

On the 13th of October, his usual dinner parties were resumed, and he was considered convalescent; but it was seldom indeed that he recovered the tone of tranquil spirits which he had preserved until his late attack. Hitherto he had always loved to prolong this meal, the only one he took — or, as he expressed

it in classical phrase, ‘coenam *ducere;*’ but now it was difficult to hurry it over fast enough for his wishes. From dinner, which terminated about two o’clock, he went straight to bed, and at intervals fell into slumbers; from which, however, he was regularly awoke by phantasmata or terrific dreams. At seven in the evening came on duly a period of great agitation, which lasted till five or six in the morning — sometimes later; and he continued through the night alternately to walk about and lie down, occasionally tranquil, but more often in great distress. It now became necessary that somebody should sit up with him, his man-servant being wearied out with the toils of the day. No person seemed to be so proper for this office as his sister, both as having long received a very liberal pension from him, and also as his nearest relative, who would be the best witness to the fact that her illustrious brother had wanted no comforts or attention in his last hours, which his situation admitted of. Accordingly she was applied to, and undertook to watch him alternately with his footman — a separate table being kept for her, and a very handsome addition made to her allowance. She turned out to be a quiet gentle-minded woman, who raised no disturbances amongst the servants, and soon won her brother’s regard by the modest and retiring style of her manners; I may add, also, by the truly sisterly affection which she displayed towards him to the last.

The 8th of October had grievously affected Kant’s faculties, but had not wholly destroyed them. For short intervals the clouds seemed to roll away that had settled upon his majestic intellect, and it shone forth as heretofore. During these moments of brief self-possession, his wonted benignity returned to him; and he expressed his gratitude for the exertions of those about him, and his sense of the trouble they underwent, in a very affecting way. With regard to his man-servant in particular, he was very anxious that he should be rewarded by liberal presents; and he pressed me earnestly on no account to be parsimonious. Indeed Kant was nothing less than princely in his use of money; and there was no occasion on which he was known to express the passion of scorn very powerfully, but when he was commenting on mean and penurious acts or habits. Those who knew him only in the streets, fancied that he was not liberal; for he steadily refused, upon principle, to relieve all common beggars. But, on the other hand, he was liberal to the public charitable institutions; he secretly assisted his own poor relations in a much ampler way than could reasonably have been expected of him; and it now appeared that he had many other deserving pensioners upon his bounty; a fact that was utterly unknown to any of us, until his increasing blindness and other infirmities devolved the duty of paying these pensions upon myself. It must be recollected, also, that Kant’s whole fortune, which amounted to about twenty thousand dollars, was the product of his own honorable toils for nearly threescore years; and that he had himself suffered all the hardships of poverty in his youth, though he never once ran into any man’s debt, — circumstances in his history, which, as they express how fully he must have been acquainted with the value of money, greatly enhance the merit of his munificence.

In December, 1803, he became incapable of signing his name. His sight, indeed, had for some time failed him so much, that at dinner he could not find his spoon without assistance; and, when I happened to dine with him, I first cut in pieces whatever was on his plate, next put it into a spoon, and then guided his hand to find the spoon. But his inability to sign his name did not arise merely from blindness: the fact was, that, from irretention of memory, he could not recollect the letters which composed his name; and, when they were repeated to him, he could not represent the figure of the letters in his imagination. At the latter end of November, I had remarked that these incapacities were rapidly growing upon him, and in consequence I prevailed on him to sign beforehand all the receipts, &c., which would be wanted at the end of the year; and, afterwards, on my representation, to prevent all disputes, he gave me a regular legal power to sign on his behalf.

Much as Kant was now reduced, yet he had occasionally moods of social hilarity. His birth-day was always an agreeable subject to him: some weeks before his death, I was calculating the time which it still wanted of that anniversary, and cheering him with the prospect of the rejoicings which would then take place: ‘All your old friends,’ said I, ‘will meet together, and drink a glass of champagne to your health.’

‘That,’ said he, ‘must be done upon the spot:’ and he was not satisfied till the party was actually assembled. He drank a glass of wine with them, and with great elevation of spirits celebrated this birthday which he was destined never to see.

In the latter weeks of his life, however, a great change took place in the tone of his spirits. At his dinner-table, where heretofore such a cloudless spirit of joviality had reigned, there was now a melancholy silence. It disturbed him to see his two dinner companions conversing privately together, whilst he himself sat like a mute on the stage with no part to perform. Yet to have engaged him in the conversation would have been still more distressing; for his hearing was now very imperfect; the effort to hear was itself painful to him; and his expressions, even when his thoughts were accurate enough, became nearly unintelligible. It is remarkable, however, that at the very lowest point of his depression, when he became perfectly incapable of conversing with any rational meaning on the ordinary affairs of life, he was still able to answer correctly and distinctly, in a degree that was perfectly astonishing, upon any question of philosophy or of science, especially of physical geography, [Footnote: *Physical* Geography, in opposition to *Political*.] chemistry, or natural history. He talked satisfactorily, in his very worst state, of the gases, and stated very accurately different propositions of Kepler’s, especially the law of the planetary motions. And I remember in particular, that upon the very last Monday of his life, when the extremity of his weakness moved a circle of his friends to tears, and he sat amongst us insensible to all we could say to him, cowering down, or rather I might say collapsing into a shapeless heap upon his chair, deaf, blind, torpid, motionless, — even then I whispered to the others that I would engage that Kant should take his part in conversation with propriety and animation. This they found it difficult to believe. Upon which I drew close to his ear, and put a question to him about the Moors of Barbary. To the surprise of everybody but myself, he immediately gave us a summary account of their habits and customs; and told us by the way, that in the word *Algiers*, the *g* ought to be pronounced hard (as in the English word *gear*).

During the last fortnight of Kant’s life, he busied himself unceasingly in a way that seemed not merely purposeless but self-contradictory. Twenty times in a minute he would unloose and tie his neck handkerchief — so also with a sort of belt which he wore about his dressing-gown, the moment it was clasped, he unclasped it with impatience, and was then equally impatient to have it clasped again. But no description can convey an adequate impression of the weary restlessness with which from morning to night he pursued these labors of Sisyphus — doing and undoing — fretting that he could not do it, fretting that he had done it.

By this time he seldom knew any of us who were about him, but took us all for strangers. This happened first with his sister, then with me, and finally with his servant. Such an alienation distressed me more than any other instance of his decay: though I knew that he had not really withdrawn his affection from me, yet his air and mode of addressing me gave me constantly that feeling. So much the more affecting was it, when the sanity of his perceptions and his remembrances returned; but these intervals were of slower and slower occurrence. In this condition, silent or babbling childishly, self-involved and torpidly abstracted, or else busy with self-created phantoms and delusions, what a contrast did he offer to *that* Kant who had once been the brilliant centre of the most brilliant circles for rank, wit, or knowledge, that Prussia afforded! A distinguished person from Berlin, who had called upon him during the preceding summer, was greatly shocked at his appearance, and said, ‘This is not Kant that I have seen, but the shell of Kant!’ How much more would he have said this, if he had seen him now!

Now came February, 1804, which was the last month that Kant was destined to see. It is remarkable that, in the memorandum book which I have before mentioned, I found a fragment of an old song, (inserted by Kant, and dated in the summer about six months before the time of his death,) which expressed that February was the month in which people had the least weight to carry, for the obvious reason that it was shorter by two and by three days than the others; and the concluding sentiment was in a tone of fanciful pathos to this effect— ‘Oh, happy February! in which man has least to bear — least pain, least sorrow,

least self-reproach!' Even of this short month, however, Kant had not twelve entire days to bear; for it was on the 12th that he died; and in fact he may be said to have been dying from the 1st. He now barely vegetated; though there were still transitory gleams flashing by fits from the embers of his ancient intellect.

On the 3d of February the springs of life seemed to be ceasing from their play, for, from this day, strictly speaking, he ate nothing more. His existence henceforward seemed to be the mere prolongation of an impetus derived from an eighty years' life, after the moving power of the mechanism was withdrawn. His physician visited him every day at a particular hour; and it was settled that I should always be there to meet him. Nine days before his death, on paying his usual visit, the following little circumstance occurred, which affected us both, by recalling forcibly to our minds the ineradicable courtesy and goodness of Kant's nature. When the physician was announced, I went up to Kant and said to him, 'Here is Dr. A —— .' Kant rose from his chair, and, offering his hand to the Doctor, murmured something in which the word 'posts' was frequently repeated, but with an air as though he wished to be helped out with the rest of the sentence. Dr. A —— , who thought that, by *posts*, he meant the stations for relays of post-horses, and therefore that his mind was wandering, replied that all the horses were engaged, and begged him to compose himself. But Kant went on, with great effort to himself, and added— 'Many posts, heavy posts — then much goodness — then much gratitude.' All this he said with apparent incoherence, but with great warmth, and increasing self-possession. I meantime perfectly divined what it was that Kant, under his cloud of imbecility, wished to say, and I interpreted accordingly. 'What the Professor wishes to say, Dr. A —— , is this, that, considering the many and weighty offices which you fill in the city and in the university, it argues great goodness on your part to give up so much of your time to him,' (for Dr. A —— would never take any fees from Kant;) 'and that he has the deepest sense of this goodness.' 'Right,' said Kant, earnestly, 'right!' But he still continued to stand, and was nearly sinking to the ground. Upon which I remarked to the physician, that I was so well acquainted with Kant, that I was satisfied he would not sit down, however much he suffered from standing, until he knew that his visitors were seated. The Doctor seemed to doubt this — but Kant, who heard what I said, by a prodigious effort confirmed my construction of his conduct, and spoke distinctly these words— 'God forbid I should be sunk so low as to forget the offices of humanity.'

When dinner was announced, Dr. A —— took his leave. Another guest had now arrived, and I was in hopes, from the animation which Kant had so recently displayed, that we should to-day have a pleasant party, but my hopes were vain — Kant was more than usually exhausted, and though he raised a spoon to his mouth, he swallowed nothing. For some time everything had been tasteless to him; and I had endeavored, but with little success, to stimulate the organs of taste by nutmeg, cinnamon, &c. To-day all failed, and I could not even prevail upon him to taste a biscuit, rusk, or anything of that sort. I had once heard him say that several of his friends, who had died of *marasmus,* had closed their illness by four or five days of entire freedom from pain, but totally without appetite, and then slumbered tranquilly away. Through this state I apprehended that he was himself now passing.

Saturday, the 4th of February, I heard his guests loudly expressing their fears that they should never meet him again; and I could not but share these fears myself. However, on

Sunday, the 5th, I dined at his table in company with his particular friend Mr. R. R. V. Kant was still present, but so weak that his head drooped upon his knees, and he sank down against the right side of the chair. I went and arranged his pillows so as to raise and support his head; and, having done this, I said— 'Now, my dear Sir, you are again in right order.' Great was our astonishment when he answered clearly and audibly in the Roman military phrase— 'Yes, *testudine et facie;*' and immediately after added, 'Ready for the enemy, and in battle array.' His powers of mind were (if I may be allowed that expression) smouldering away in their ashes; but every now and then some lambent flame, or grand emanation of light, shot forth to make it evident that the ancient fire still slumbered below.

Monday, the 6th, he was much weaker and more torpid: he spoke not a word, except on the occasion of my question about the Moors, as previously stated, and sate with sightless eyes, lost in himself, and manifesting no sense of our presence, so that we had the feeling of some mighty shade or phantom from some forgotten century being seated amongst us.

About this time, Kant had become much more tranquil and composed. In the earlier periods of his illness, when his yet unbroken strength was brought into active contest with the first attacks of decay, he was apt to be peevish, and sometimes spoke roughly or even harshly to his servants. This, though very opposite to his natural disposition, was altogether excusable under the circumstances. He could not make himself understood: things were therefore brought to him continually which he had not asked for; and often it happened that what he really wanted he could not obtain, because all his efforts to name it were unintelligible. A violent nervous irritation, besides, affected him from the unsettling of the equilibrium in the different functions of his nature; weakness in one organ being made more palpable to him by disproportionate strength in another. But now the strife was over; the whole system was at length undermined, and in rapid and harmonious progress to dissolution. And from this time forward, no movement of impatience, or expression of fretfulness, ever escaped him.

I now visited him three times a-day; and on

Tuesday, Feb. 7th, going about dinner-time, I found the usual party of friends sitting down alone; for Kant was in bed. This was a new scene in his house, and increased our fears that his end was now at hand. However, having seen him rally so often, I would not run the risk of leaving him without a dinner-party for the next day; and accordingly, at the customary hour of one, we assembled in his house on

Wednesday, Feb. 8th. I paid my respects to him as cheerfully as possible, and ordered dinner to be served up. Kant sat at the table with us; and, taking a spoon with a little soup in it, put it to his lips; but immediately put it down again, and retired to bed, from which he never rose again, except during the few minutes when it was re-arranged.

Thursday, the 9th, he had sunk into the weakness of a dying person, and the corpse-like appearance had already taken possession of him. I visited him frequently through the day; and, going at ten o’clock at night, I found him in a state of insensibility. I could not draw any sign from him that he knew me, and I left him to the care of his sister and his servant.

Friday, the 10th, I went to see him at six o’clock in the morning. It was very stormy, and a deep snow had fallen in the night-time. And, by the way, I remember that a gang of house-breakers had forced their way through the premises in order to reach Kant’s next neighbor, who was a goldsmith. As I drew near to his bed-side, I said, ‘Good morning.’ He returned my salutation by saying, ‘Good morning,’ but in so feeble and faltering a voice that it was hardly articulate. I was rejoiced to find him sensible, and I asked him if he knew me:— ‘Yes,’ he replied; and, stretching out his hand, touched me gently upon the cheek. Through the rest of the day, whenever I visited him, he seemed to have relapsed into a state of insensibility.

Saturday, the 11th, he lay with fixed and rayless eyes; but to all appearance in perfect peace. I asked him again, on this day, if he knew me. He was speechless, but he turned his face towards me and made signs that I should kiss him. Deep emotion thrilled me, as I stooped down to kiss his pallid lips; for I knew that in this solemn act of tenderness he meant to express his thankfulness for our long friendship, and to signify his affection and his last farewell. I had never seen him confer this mark of his love upon anybody, except once, and that was a few weeks before his death, when he drew his sister to him and kissed her. The kiss which he now gave to me was the last memorial that he knew me.

Whatever fluid was now offered to him passed the oesophagus with a rattling sound, as often happens with dying people; and there were all the signs of death being close at hand.

I wished to stay with him till all was over; and as I had been witness of his life, to be witness also of his departure; and therefore I never quitted him except when I was called off for a few minutes to attend

some private business. The whole of this night I spent at his bed-side. Though he had passed the day in a state of insensibility, yet in the evening he made intelligible signs that he wished to have his bed put in order; he was therefore lifted out in our arms, and the bed-clothes and pillows being hastily arranged, he was carried back again. He did not sleep; and a spoonful of liquid, which was sometimes put to his lips, he usually pushed aside; but about one o'clock in the night he himself made a motion towards the spoon, from which I collected that he was thirsty; and I gave him a small quantity of wine and water sweetened; but the muscles of his mouth had not strength enough to retain it, so that to prevent its flowing back he raised his hand to his lips, until with a rattling sound it was swallowed. He seemed to wish for more; and I continued to give him more, until he said, in a way that I was just able to understand,— 'It is enough.' And these were his last words. At intervals he pushed away the bed-clothes, and exposed his person; I constantly restored the clothes to their situation, and on one of these occasions I found that the whole body and extremities were already growing cold, and the pulse intermitting.

At a quarter after three o'clock on Sunday morning, February 12, Kant stretched himself out as if taking a position for his final act, and settled into the precise posture which he preserved to the moment of death. The pulse was now no longer perceptible to the touch in his hands, feet or neck. I tried every part where a pulse beats, and found none anywhere but in the left hip, where it beat with violence, but often intermitted.

About ten o'clock in the forenoon he suffered a remarkable change; his eye was rigid and his face and lips became discolored by a cadaverous pallor. Still, such was the effect of his previous habits, that no trace appeared of the cold sweat which naturally accompanies the last mortal agony.

It was near eleven o'clock when the moment of dissolution approached. His sister was standing at the foot of the bed, his sister's son at the head. I, for the purpose of still observing the fluctuations of the pulse in his hip, was kneeling at the bed-side; and I called his servant to come and witness the death of his good master. Now began the last agony, if to him it could be called an agony, where there seemed to be no struggle. And precisely at this moment, his distinguished friend, Mr. R. R. V., whom I had summoned by a messenger, entered the room. First of all, the breath grew feebler; then it missed its regularity of return; then it wholly intermitted, and the upper lip was slightly convulsed; after this there followed one slight respiration or sigh; and after that no more; but the pulse still beat for a few seconds — slower and fainter, till it ceased altogether; the mechanism stopped; the last motion was at an end; and exactly at that moment the clock struck eleven.

Soon after his death the head of Kant was shaved; and, under the direction of Professor Knorr, a plaster cast was taken, not a masque merely, but a cast of the whole bead, designed (I believe) to enrich the craniological collection of Dr. Gall.

The corpse being laid out and properly attired, immense numbers of people of every rank, from the highest to the lowest, flocked to see it. Everybody was anxious to make use of the last opportunity he would have for entitling himself to say— 'I too have seen Kant.' This went on for many days — during which, from morning to night, the house was thronged with the public. Great was the astonishment of all people at the meagreness of Kant's appearance; and it was universally agreed that a corpse so wasted and fleshless had never been beheld. His head rested upon the same cushion on which once the gentlemen of the university had presented an address to him; and I thought that I could not apply it to a more honorable purpose than by placing it in the coffin, as the final pillow of that immortal head.

Upon the style and mode of his funeral, Kant had expressed his wishes in earlier years in a separate memorandum. He there desired that it should take place early in the morning, with as little noise and disturbance as possible, and attended only by a few of his most intimate friends. Happening to meet with this memorandum, whilst I was engaged at his request in arranging his papers, I very frankly gave him my opinion, that such an injunction would lay me, as the executor of his will, under great embarrassments; for that circumstances might very probably arise under which it would be next to impossible to carry it into effect. Upon this Kant tore the paper, and left the whole to my own discretion. The fact was, I foresaw that

the students of the University would never allow themselves to be robbed of this occasion for expressing their veneration by a public funeral. The event showed that I was right; for a funeral such as Kant's, one so solemn and so magnificent, the city of Königsberg has never witnessed before or since. The public journals, and separate accounts in pamphlets, etc., have given so minute an account of its details, that I shall here notice only the heads of the ceremony.

On the 28th of February, at two o'clock in the afternoon, all the dignitaries of church and state, not only those resident in Königsberg, but from the remotest parts of Prussia, assembled in the church of the Castle. Hence they were escorted by the whole body of the University, splendidly dressed for the occasion, and by many military officers of rank, with whom Kant had always been a great favorite, to the house of the deceased Professor; from which the corpse was carried by torch-light, the bells of every church in Königsberg tolling, to the Cathedral which was lit up by innumerable wax-lights. A never-ending train of many thousand persons followed it on foot. In the Cathedral, after the usual burial rites, accompanied with every possible expression of national veneration to the deceased, there was a grand musical service, most admirably performed, at the close of which Kant's mortal remains were lowered into the academic vault, where he now rests among the ancient patriarchs of the University. PEACE BE TO HIS DUST, AND EVERLASTING HONOR!

AN OUTLINE OF THE HISTORY OF CHRISTIAN THOUGHT SINCE KANT by Edward Caldwell Moore

CONTENTS

PREFATORY NOTE
CHAPTER I. A. INTRODUCTION
CHAPTER II. IDEALISTIC PHILOSOPHY
CHAPTER III. THEOLOGICAL RECONSTRUCTION
CHAPTER IV. THE CRITICAL AND HISTORICAL MOVEMENT
CHAPTER V. THE CONTRIBUTION OF THE NATURAL AND SOCIAL SCIENCES
CHAPTER VI. THE ENGLISH-SPEAKING PEOPLES: ACTION AND REACTION

PREFATORY NOTE

It is hoped that this book may serve as an outline for a larger work, in which the Judgments here expressed may be supported in detail. Especially, the author desires to treat the literature of the social question and of the modernist movement with a fulness which has not been possible within the limits of this sketch. The philosophy of religion and the history of religions should have place, as also that estimate of the essence of Christianity which is suggested by the contact of Christianity with the living religions of the Orient.

PASQUE ISLAND, MASS.,
July 28, 1911.

CHAPTER I. A. INTRODUCTION

The Protestant Reformation marked an era both in life and thought for the modern world. It ushered in a revolution in Europe. It established distinctions and initiated tendencies which are still significant. These distinctions have been significant not for Europe alone. They have had influence also upon those continents which since the Reformation have come under the dominion of Europeans. Yet few would now regard the Reformation as epoch-making in the sense in which that pre-eminence has been claimed. No one now esteems that it separates the modern from the mediæval and ancient world in the manner once supposed. The perspective of history makes it evident that large areas of life and thought remained then untouched by the new spirit. Assumptions which had their origin in feudal or even in classical culture continued unquestioned. More than this, impulses in rational life and in the interpretation of religion, which showed themselves with clearness in one and another of the reformers themselves, were lost sight of, if not actually repudiated, by their successors. It is possible to view many things in the intellectual and religious life of the nineteenth century, even some which Protestants have passionately reprobated, as but the taking up again of clues which the reformers had let fall, the carrying out of purposes of their movement which were partly hidden from themselves.

Men have asserted that the Renaissance inaugurated a period of paganism. They have gloried that there supervened upon this paganism the religious revival which the Reformation was. Even these men will, however, not deny that it was the intellectual rejuvenation which made the religious reformation possible or, at all events, effective. Nor can it be denied that after the Revolution, in the Protestant communities the intellectual element was thrust into the background. The practical and devotional prevailed. Humanism was for a time shut out. There was more room for it in the Roman Church than among Protestants. Again, the Renaissance itself had been not so much an era of discovery of a new intellectual and spiritual world. It had been, rather, the rediscovery of valid principles of life in an ancient culture and civilisation. That thorough-going review of the principles at the basis of all relations of the life of man, which once seemed possible to Renaissance and Reformation, was postponed to a much later date. When it did take place, it was under far different auspices.

There is a remarkable unity in the history of Protestant thought in the period from the Reformation to the end of the eighteenth century. There is a still more surprising unity of Protestant thought in this period with the thought of the mediæval and ancient Church. The basis and methods are the same. Upon many points the conclusions are identical. There was nothing of which the Protestant scholastics were more proud than of their agreement with the Fathers of the early Church. They did not perceive in how large degree they were at one with Christian thinkers of the Roman communion as well. Few seem to have realised how largely Catholic in principle Protestant thought has been. The fundamental principles at the basis of the reasoning have been the same. The notions of revelation and inspiration were identical. The idea of authority was common to both, only the instance in which that authority is lodged was different. The thoughts of God and man, of the world, of creation, of providence and prayer, of the nature and means of salvation, are similar. Newman was right in discovering that from the first he had thought, only and always, in what he called Catholic terms. It was veiled from him that many of those who ardently opposed him thought in those same terms.

It is impossible to write upon the theme which this book sets itself without using the terms Catholic and Protestant in the conventional sense. The words stand for certain historic magnitudes. It is equally impossible to conceal from ourselves how misleading the language often is. The line between that which has been happily called the religion of authority and the religion of the spirit does not run between

Catholic and Protestant. It runs through the middle of many Protestant bodies, through the border only of some, and who will say that the Roman Church knows nothing of this contrast? The sole use of recurrence here to the historic distinction is to emphasise the fact that this distinction stands for less than has commonly been supposed. In a large way the history of Christian thought, from earliest times to the end of the eighteenth century, presents a very striking unity.

In contrast with this, that modern reflection which has taken the phenomenon known as religion and, specifically, that historic form of religion known as Christianity, as its object, has indeed also slowly revealed the fact that it is in possession of certain principles. Furthermore, these principles, as they have emerged, have been felt to be new and distinctive principles. They are essentially modern principles. They are the principles which, taken together, differentiate the thinker of the nineteenth century from all who have ever been before him. They are principles which unite all thinkers at the end of the nineteenth and the beginning of the twentieth centuries, in practically every portion of the world, as they think of all subjects except religion. It comes more and more to be felt that these principles must be reckoned with in our thought concerning religion as well.

One of these principles is, for example, that of dealing in true critical fashion with problems of history and literature. Long before the end of the age of rationalism, this principle had been applied to literature and history, other than those called sacred. The thorough going application of this scientific method to the literatures and history of the Old and New Testaments is almost wholly an achievement of the nineteenth century. It has completely altered the view of revelation and inspiration. The altered view of the nature of the documents of revelation has had immeasurable consequences for dogma.

Another of these elements is the new view of nature and of man’s relation to nature. Certain notable discoveries in physics and astronomy had proved possible of combination with traditional religion, as in the case of Newton. Or again, they had proved impossible of combination with any religion, as in the case of Laplace. The review of the religious and Christian problem in the light of the ever increasing volume of scientific discoveries — this is the new thing in the period which we have undertaken to describe. A theory of nature as a totality, in which man, not merely as physical, but even also as social and moral and religious being, has place in a series which suggests no break, has affected the doctrines of God and of man in a way which neither those who revered nor those who repudiated religion at the beginning of the nineteenth century could have imagined.

Another leading principle grows out of Kant’s distinction of two worlds and two orders of reason. That distinction issued in a new theory of knowledge. It laid a new foundation for an idealistic construing of the universe. In one way it was the answer of a profoundly religious nature to the triviality and effrontery into which the great rationalistic movement had run out. By it the philosopher gave standing forever to much that prophets and mystics in every age had felt to be true, yet had never been able to prove by any method which the ordered reasoning of man had provided. Religion as feeling regained its place. Ethics was set once more in the light of the eternal. The soul of man became the object of a scientific study.

There have been thus indicated three, at least, of the larger factors which enter into an interpretation of Christianity which may fairly be said to be new in the nineteenth century. They are new in a sense in which the intellectual elements entering into the reconsideration of Christianity in the age of the Reformation were not new. They are characteristic of the nineteenth century. They would naturally issue in an interpretation of Christianity in the general context of the life and thought of that century. The philosophical revolution inaugurated by Kant, with the general drift toward monism in the interpretation of the universe, separates from their forebears men who have lived since Kant, by a greater interval than that which divided Kant from Plato. The evolutionary view of nature, as developed from Schelling and Comte through Darwin to Bergson, divides men now living from the contemporaries of Kant in his youthful studies of nature, as those men were not divided from the followers of Aristotle.

Of purpose, the phrase Christian thought has been interpreted as thought concerning Christianity. The

problem which this book essays is that of an outline of the history of the thought which has been devoted, during this period of marvellous progress, to that particular object in consciousness and history which is known as Christianity. Christianity, as object of the philosophical, critical, and scientific reflection of the age — this it is which we propose to consider. Our religion as affected in its interpretation by principles of thought which are already widespread, and bid fair to become universal among educated men — this it is which in this little volume we aim to discuss. The term religious thought has not always had this significance. Philosophy of religion has signified, often, a philosophising of which religion was, so to say, the atmosphere. We cannot wonder if, in these circumstances, to the minds of some, the atmosphere has seemed to hinder clearness of vision. The whole subject of the philosophy of religion has within the last few decades undergone a revival, since it has been accepted that the aim is not to philosophise upon things in general in a religious spirit. On the contrary, the aim is to consider religion itself, with the best aid which current philosophy and science afford. In this sense only can we give the study of religion and Christianity a place among the sciences.

It remains true, now as always, that the majority, at all events, of those who have thought profoundly concerning Christianity will be found to have been Christian men. Religion is a form of consciousness. It will be those who have had experience to which that consciousness corresponds, whose judgments can be supposed to have weight. That remark is true, for example, of æsthetic matters as well. To be a good judge of music one must have musical feeling and experience. To speak with any deeper reasonableness concerning faith, one must have faith. To think profoundly concerning Christianity one needs to have had the Christian experience. But this is very different from saying that to speak worthily of the Christian religion, one must needs have made his own the statements of religion which men of a former generation may have found serviceable. The distinction between religion itself, on the one hand, and the expression of religion in doctrines and rites, or the application of religion through institutions, on the other hand, is in itself one of the great achievements of the nineteenth century. It is one which separates us from Christian men in previous centuries as markedly as it does any other. It is a simple implication of the Kantian theory of knowledge. The evidence for its validity has come through the application of historical criticism to all the creeds. Mystics of all ages have seen the truth from far. The fact that we may assume the prevalence of this distinction among Christian men, and lay it at the base of the discussion we propose, is assuredly one of the gains which the nineteenth century has to record.

It follows that not all of the thinkers with whom we have to deal will have been, in their own time, of the number of avowedly Christian men. Some who have greatly furthered movements which in the end proved fruitful for Christian thought, have been men who in their own time alienated from professed and official religion. In the retrospect we must often feel that their opposition to that which they took to be religion was justifiable. Yet their identification of that with religion itself, and their frank declaration of what they called their own irreligion, was often a mistake. It was a mistake to which both they and their opponents in due proportion contributed. A still larger class of those with whom we have to do have indeed asserted for themselves a personal adherence to Christianity. But their identification with Christianity, or with a particular Christian Church, has been often bitterly denied by those who bore official responsibility in the Church. The heresy of one generation is the orthodoxy of the next. There is something perverse in Gottfried Arnold’s maxim, that the true Church, in any age, is to be found with those who have just been excommunicated from the actual Church. However, the maxim points in the direction of a truth. By far the larger part of those with whom we have to do have had acknowledged relation to the Christian tradition and institution. They were Christians and, at the same time, true children of the intellectual life of their own age. They esteemed it not merely their privilege, but also their duty, to endeavour to ponder anew the religious and Christian problem, and to state that which they thought in a manner congruous with the thoughts which the men of the age would naturally have concerning other themes.

It has been to most of these men axiomatic that doctrine has only relative truth. Doctrine is but a composite of the content of the religious consciousness with materials which the intellect of a given man or age or nation in the total view of life affords. As such, doctrine is necessary and inevitable for all those who in any measure live the life of the mind. But the condition of doctrine is its mobile, its fluid and changing character. It is the combination of a more or less stable and characteristic experience, with a reflection which, exactly in proportion as it is genuine, is transformed from age to age, is modified by qualities of race and, in the last analysis, differs with individual men. Dogma is that portion of doctrine which has been elevated by decree of ecclesiastical authority, or even only by common consent, into an absoluteness which is altogether foreign to its nature. It is that part of doctrine concerning which men have forgotten that it had a history, and have decided that it shall have no more. In its very notion dogma confounds a statement of truth, which must of necessity be human, with the truth itself, which is divine. In its identification of statement and truth it demands credence instead of faith. Men have confounded doctrine and dogma; they have been taught so to do. They have felt the history of Christian doctrine to be an unfruitful and uninteresting theme. But the history of Christian thought would seek to set forth the series of interpretations put, by successive generations, upon the greatest of all human experiences, the experience of the communion of men with God. These interpretations ray out at all edges into the general intellectual life of the age. They draw one whole set of their formative impulses from the general intellectual life of the age. It is this relation of the progress of doctrine to the general history of thought in the nineteenth century, which the writer designed to emphasise in choosing the title of this work.

As was indicated in the closing paragraphs of the preceding volume of this series, the issue of the age of rationalism had been for the cause of religion on the whole a distressing one. The majority of those who were resolved to follow reason were agreed in abjuring religion. That they had, as it seems to us, but a meagre understanding of what religion is, made little difference in their conclusion. Bishop Butler complains in his *Analogy* that religion was in his time hardly considered a subject for discussion among reasonable men. Schleiermacher in the very title of his *Discourses* makes it plain that in Germany the situation was not different. If the reasonable eschewed religious protests in Germany, evangelicals in England, the men of the great revivals in America, many of them, took up a corresponding position as towards the life of reason, especially toward the use of reason in religion. The sinister cast which the word rationalism bears in much of the popular speech is evidence of this fact. To many minds it appeared as if one could not be an adherent both of reason and of faith. That was a contradiction which Kant, first of all in his own experience, and then through his system of thought, did much to transcend. The deliverance which he wrought has been compared to the deliverance which Luther in his time achieved for those who had been in bondage to scholasticism in the Roman Church. Although Kant has been dead a hundred years, both the defence of religion and the assertion of the right of reason are still, with many, on the ancient lines. There is no such strife between rationality and belief as has been supposed. But the confidence of that fact is still far from being shared by all Christians at the beginning of the twentieth century. The course in reinterpretation and readjustment of Christianity, which that calm conviction would imply, is still far from being the one taken by all of those who bear the Christian name. If it is permissible in the writing of a book like this to have an aim besides that of the most objective delineation, the author may perhaps be permitted to say that he writes with the earnest hope that in some measure he may contribute also to the establishment of an understanding upon which so much both for the Church and the world depends.

We should say a word at this point as to the general relation of religion and philosophy. We realise the evil which Kant first in clearness pointed out. It was the evil of an apprehension which made the study of religion a department of metaphysics. The tendency of that apprehension was to do but scant justice to the historical content of Christianity. Religion is an historical phenomenon. Especially is this true of Christianity. It is a fact, or rather, a vast complex of facts. It is a positive religion. It is connected with

personalities, above all with one transcendent personality, that of Jesus. It sprang out of another religion which had already emerged into the light of world-history. It has been associated for two thousand years with portions of the race which have made achievements in culture and left record of those achievements. It is the function of speculation to interpret this phenomenon. When speculation is tempted to spin by its own processes something which it would set beside this historic magnitude or put in place of it, and still call that Christianity, we must disallow the claim. It was the licence of its speculative endeavour, and the identification of these endeavours with Christianity, which finally discredited Hegelianism with religious men. Nor can it be denied that theologians themselves have been sinners in this respect. The disposition to regard Christianity as a revealed and divinely authoritative metaphysic began early and continued long. When the theologians also set out to interpret Christianity and end in offering us a substitute, which, if it were acknowledged as absolute truth, would do away with Christianity as historic fact, as little can we allow the claim.

Again, Christianity exists not merely as a matter of history. It exists also as a fact in living consciousness. It is the function of psychology to investigate that consciousness. We must say that, accurately speaking, there is no such thing as Christian philosophy. There are philosophies, good or bad, current or obsolete. These are Christian only in being applied to the history of Christianity and the content of the Christian consciousness. There is, strictly speaking, no such thing as Christian consciousness. There is the human consciousness, operating with and operated upon by the impulse of Christianity. It is the great human experience from which we single out for investigation that part which is concerned with religion, and call that the religious experience. It is essential, therefore, that those general investigations of human consciousness and experience, as such, which are being carried on all about us should be reckoned with, if our Christian life and thought are not altogether to fall out of touch with advancing knowledge. For this reason we have misgiving about the position of some followers of Ritschl. Their opinion, pushed to the limit, seems to mean that we have nothing to do with philosophy, or with the advance of science. Religion is a feeling of which he alone who possesses it can give account. He alone who has it can appreciate such an account when given. We acknowledge that religion is in part a feeling. But that feeling must have rational justification. It must also have rational guidance if it is to be saved from degenerating into fanaticism.

To say that we have nothing to do with philosophy ends in our having to do with a bad philosophy. In that case we have a philosophy with which we operate without having investigated it, instead of having one with which we operate because we have investigated it. The philosophy of which we are aware we have. The philosophy of which we are not aware has us. No doubt, we may have religion without philosophy, but we cannot formulate it even in the rudest way to ourselves, we cannot communicate it in any way whatsoever to others, except in the terms of a philosophy. In the general sense in which every man has a philosophy, this is merely the deposit of the regnant notions of the time. It may be amended or superseded, and our theology with it. Yet while it lasts it is our one possible vehicle of expression. It is the interpreter and the critique of what we have experienced. It is not open to a man to retreat within himself and say, I am a Christian, I feel thus, I think so, these thoughts are the content of Christianity. The consequence of that position is that we make the religious experience to be no part of the normal human experience. If we contend that the being a Christian is the great human experience, that the religious life is the true human life, we must pursue the opposite course. We must make the religious life coherent with all the other phases and elements of life. If we would contend that religious thought is the truest and deepest thought, we must begin at this very point. We must make it conform absolutely to the laws of all other thought. To contend for its isolation, as an area by itself and a process subject only to its own laws, is to court the judgment of men, that in its zeal to be Christian it has ceased to be thought.

Our most profitable mode of procedure would seem to be this. We shall seek to follow, as we may,

those few main movements of thought marking the nineteenth century which have immediate bearing upon our theme. We shall try to register the effect which these movements have had upon religious conceptions. It will not be possible at any point to do more than to select typical examples. Perhaps the true method is that we should go back to the beginnings of each one of these movements. We should mark the emergence of a few great ideas. It is the emergence of an idea which is dramatically interesting. It is the moment of emergence in which that which is characteristic appears. Our subject is far too complicated to permit that the ramifications of these influences should be followed in detail. Modifications, subtractions, additions, the reader must make for himself.

These main movements of thought are, as has been said, three in number. We shall take them in their chronological order. There is first the philosophical revolution which is commonly associated with the name of Kant. If we were to seek with arbitrary exactitude to fix a date for the beginning of this movement, this might be the year of the publication of his first great work, *Kritik der reinen Vernunft*, in 1781. Kant was indeed himself, both intellectually and spiritually, the product of tendencies which had long been gathering strength. He was the exponent of ideas which in fragmentary way had been expressed by others, but he gathered into himself in amazing fashion the impulses of his age. Out from some portion of his works lead almost all the paths which philosophical thinkers since his time have trod. One cannot say even of his work, *Der Religion innerhalb der Grenzen der blossen Vernunft*, 1793, that it is the sole source, or even the greatest source, of his influence upon religious thinking. But from the body of his work as a whole, there came a new theory of knowledge which has changed completely the notion of revelation. There came also a view of the universe as an ideal unity which, especially as elaborated by Fichte, Schelling and Hegel, has radically altered the traditional ideas of God, of man, of nature and of their relations, the one to the other.

Footnote 1:(return)

In the text the titles of books which are discussed are given for the first time in the language in which they are written. Books which are merely alluded to are mentioned in English.

We shall have then, secondly, to note the historical and critical movement. It is the effort to apply consistently and without fear the maxims of historical and literary criticism to the documents of the Old and New Testaments. With still greater arbitrariness, and yet with appreciation of the significance of Strauss' endeavour, we might set as the date of the full impact of this movement upon cherished religious convictions, that of the publication of his *Leben Jesu*, 1835. This movement has supported with abundant evidence the insight of the philosophers as to the nature of revelation. It has shown that that which we actually have in the Scriptures is just that which Kant, with his reverence for the freedom of the human mind, had indicated that we must have, if revelation is to be believed in at all. With this changed view has come an altered attitude toward many statements which devout men had held that they must accept as true, because these were found in Scripture. With this changed view the whole history, whether of the Jewish people or of Jesus and the origins of the Christian Church, has been set in a new light.

In the third place, we shall have to deal with the influence of the sciences of nature and of society, as these have been developed throughout the whole course of the nineteenth century. If one must have a date for an outstanding event in this portion of the history, perhaps that of the publication of Darwin's *Origin of Species*, 1859, would serve as well as any other. The principles of these sciences have come to underlie in a great measure all the reflection of cultivated men in our time. In amazing degree they have percolated, through elementary instruction, through popular literature, and through the newspapers, to the masses of mankind. They are recognised as the basis of a triumphant material civilisation, which has made everything pertaining to the inner and spiritual life seem remote. Through the social sciences there has come an impulse to the transfer of emphasis from the individual to society, the disposition to see everything in its social bearing, to do everything in the light of its social antecedents and of its social consequences. Here again we have to note the profoundest influence upon religious conceptions. The very

notion connected with the words redemption and salvation appears to have been changed.

In the case of each of these particular movements the church, as the organ of Christianity, has passed through a period of antagonism to these influences, of fear of their consequences, of resistance to their progress. In large portions of the church at the present moment the protest is renewed. The substance of these modern teachings, which yet seem to be the very warp and woof of the intellectual life of the modern man, is repudiated and denounced. It is held to imperil the salvation of the soul. It is pronounced impossible of combination with belief in a divinely revealed truth concerning the universe and a saving faith for men. In other churches, outside the churches, the forms in which men hold their Christianity have been in large measure adjusted to the results of these great movements of thought. They have, as these men themselves believe, been immensely strengthened and made sure by those very influences which were once considered dangerous.

In connection with this indication of the nature of our materials, we have sought to say something of the time of emergence of the salient elements. It may be in point also to give some intimation of the place of their origins, that is to say, of the participation of the various nationalities in this common task of the modern Christian world. That international quality of scholarship which seems to us natural, is a thing of very recent date. That a discovery should within a reasonable interval become the property of all educated men, that scholars of one nation should profit by that which the learned of another land have done, appears to us a thing to be assumed. It has not always been so, especially not in matters of religious faith. The Roman Church and the Latin language gave to medieval Christian thought a certain international character. Again the Renaissance and Reformation had a certain world wide quality. The relations of the English Church in the reigns of the last Tudors to Germany, Switzerland, and France are not to be forgotten. But the life of the Protestant national churches in the eighteenth century shows little of this trait. The barriers of language counted for something. The provincialism of national churches and denominational predilections counted for more.

In the philosophical movement we must begin with the Germans. The movement of English thought known as deism was a distinct forerunner of the rationalist movement, within the particular area of the discussion of religion. However, it ran into the sand. The rationalist movement, considered in its other aspects, never attained in England in the eighteenth century the proportions which it assumed in France and Germany. In France that movement ran its full course, both among the learned and, equally, as a radical and revolutionary influence among the unlearned. It had momentous practical consequences. In no sphere was it more radical than in that of religion. Not in vain had Voltaire for years cried, '*Écrasez l'infâme*,' and Rousseau preached that the youth would all be wise and pure, if only the kind of education which he had had in the religious schools were made impossible. There was for many minds no alternative between clericalism and atheism. Quite logically, therefore, after the downfall of the Republic and of the Empire there set in a great reaction. Still it was simply a reversion to the absolute religion of the Roman Catholic Church as set forth by the Jesuit party. There was no real transcending of the rationalist movement in France in the interest of religion. There has been no great constructive movement in religious thought in France in the nineteenth century. There is relatively little literature of our subject in the French language until recent years.

In Germany, on the other hand, the rationalist movement had always had over against it the great foil and counterpoise of the pietist movement. Rationalism ran a much soberer course than in France. It was never a revolutionary and destructive movement as in France. It was not a dilettante and aristocratic movement as deism had been in England. It was far more creative and constructive than elsewhere. Here also before the end of the century it had run its course. Yet here the men who transcended the rationalist movement and shaped the spiritual revival in the beginning of the nineteenth century were men who had themselves been trained in the bosom of the rationalist movement. They had appropriated the benefits of

it. They did not represent a violent reaction against it, but a natural and inevitable progress within and beyond it. This it was which gave to the Germans their leadership at the beginning of the nineteenth century in the sphere of the intellectual life. It is worthy of note that the great heroes of the intellectual life in Germany, in the period of which we speak, were most of them deeply interested in the problem of religion. The first man to bring to England the leaven of this new spirit, and therewith to transcend the old philosophical standpoint of Locke and Hume, was Coleridge with his *Aids to Reflection*, published in 1825. But even after this impulse of Coleridge the movement remained in England a sporadic and uncertain one. It had nothing of the volume and conservativeness which belonged to it in Germany.

Coleridge left among his literary remains a work published in 1840 under the title of *Confessions of an Enquiring Spirit*. What is here written is largely upon the basis of intuition and forecast like that of Remarus and Lessing a half-century earlier in Germany. Strauss and others were already at work in Germany upon the problem of the New Testament, Vatke and Reuss upon that of the Old. This was a different kind of labour, and destined to have immeasurably greater significance. George Eliot’s maiden literary labour was the translation into English of Strauss’ first edition. But the results of that criticism were only slowly appropriated by the English. The ostensible results were at first radical and subversive in the extreme. They were fiercely repudiated in Strauss’ own country. Yet in the main there was acknowledgement of the correctness of the principle for which Strauss had stood. Hardly before the decade of the sixties was that method accepted in England in any wider way, and hardly before the decade of the seventies in America. Ronan was the first to set forth, in 1863, the historical and critical problem in the new spirit, in a way that the wide public which read French understood.

When we come to speak of the scientific movement it is not easy to say where the leadership lay. Many Englishmen were in the first rank of investigators and accumulators of material. The first attempt at a systematisation of the results of the modern sciences was that of Auguste Comte in his *Philosophie Positive*. This philosophy, however, under its name of Positivism, exerted a far greater influence, both in Comte’s time and subsequently, in England than it did in France. Herbert Spencer, after the middle of the decade of the sixties, essayed to do something of the sort which Comte had attempted. He had far greater advantages for the solution of the problem. Comte’s foil in all of his discussions of religion was the Catholicism of the south of France. None the less, the religion which in his later years he created, bears striking resemblance to that which in his earlier years he had sought to destroy. Spencer’s attitude toward religion was in his earlier work one of more pronounced antagonism or, at least, of more complete agnosticism than in later days he found requisite to the maintenance of his scientific freedom and conscientiousness. Both of these men represent the effort to construe the world, including man, from the point of view of the natural and also of the social sciences, and to define the place of religion in that view of the world which is thus set forth. The fact that there had been no such philosophical readjustment in Great Britain as in Germany, made the acceptance of the evolutionary theory of the universe, which more and more the sciences enforced, slower and more difficult. The period of resistance on the part of those interested in religion extended far into the decade of the seventies.

A word may be added concerning America. The early settlers had been proud of their connection with the English universities. An extraordinary number of them, in Massachusetts at least, had been Cambridge men. Yet a tradition of learning was later developed, which was not without the traits of isolation natural in the circumstances. The residence, for a time, even of a man like Berkeley in this country, altered that but little. The clergy remained in singular degree the educated and highly influential class. The churches had developed, in consonance with their Puritan character, a theology and philosophy so portentous in their conclusions, that we can without difficulty understand the reaction which was brought about. Wesleyanism had modified it in some portions of the country, but intensified it in others. Deism apparently had had no great influence. When the rationalist movement of the old world began to make itself felt, it

was at first largely through the influence of France. The religious life of the country at the beginning of the nineteenth century was at a low ebb. Men like Belaham and Priestley were known as apostles of a freer spirit in the treatment of the problem of religion. Priestley came to Pennsylvania in his exile. In the large, however, one may say that the New England liberal movement, which came by and by to be called Unitarian, was as truly American as was the orthodoxy to which it was opposed. Channing reminds one often of Schleiermacher. There is no evidence that he had learned from Schleiermacher. The liberal movement by its very impetuosity gave a new lease of life to an orthodoxy which, without that antagonism, would sooner have waned. The great revivals, which were a benediction to the life of the country, were thought to have closer relation to the theology of those who participated in them than they had. The breach between the liberal and conservative tendencies of religious thought in this country came at a time when the philosophical reconstruction was already well under way in Europe. The debate continued until long after the biblical-critical movement was in progress. The controversy was conducted upon both sides in practically total ignorance of these facts. There are traces upon both sides of that insight which makes the mystic a discoverer in religion, before the logic known to him will sustain the conclusion which he draws. There will always be interest in the literature of a discussion conducted by reverent and, in their own way, learned and original men. Yet there is a pathos about the sturdy originality of good men expended upon a problem which had been already solved. The men in either camp proceeded from assumptions which are now impossible to the men of both. It was not until after the Civil War that American students of theology began in numbers to study in Germany. It is a much more recent thing that one may assume the immediate reading of foreign books, or boast of current contribution from American scholars to the labour of the world’s thought upon these themes.

We should make a great mistake if we supposed that the progress has been an unceasing forward movement. Quite the contrary, in every aspect of it the life of the early part of the nineteenth century presents the spectacle of a great reaction. The resurgence of old ideas and forces seems almost incredible. In the political world we are wont to attribute this fact to the disillusionment which the French Revolution had wrought, and the suffering which the Napoleonic Empire had entailed. The reaction in the world of thought, and particularly of religious thought, was, moreover, as marked as that in the world of deeds. The Roman Church profited by this swing of the pendulum in the minds of men as much as did the absolute State. Almost the first act of Pius VII. after his return to Rome in 1814, was the revival of the Society of Jesus, which had been after long agony in 1773 dissolved by the papacy itself. ‘Altar and throne’ became the watchword of an ardent attempt at restoration of all of that which millions had given their lives to do away. All too easily, one who writes in sympathy with that which is conventionally called progress may give the impression that our period is one in which movement has been all in one direction. That is far from being true. One whose very ideal of progress is that of movement in directions opposite to those we have described may well say that the nineteenth century has had its gifts for him as well. The life of mankind is too complex that one should write of it with one exclusive standard as to loss and gain. And whatever be one’s standard the facts cannot be ignored.

The France of the thirties and the forties saw a liberal movement within the Roman Church. The names of Lamennais, of Lacordaire, of Montalembert and Ozanam, the title *l’Avenir* occur to men’s minds at once. Perhaps there has never been in France a party more truly Catholic, more devout, refined and tolerant, more fitted to heal the breach between the cultivated and the Church. However, before the Second Empire, an end had been made of that. It cannot be said that the French Church exactly favoured the infallibility. It certainly did not stand against the decree as in the old days it would have done. The decree of infallibility is itself the greatest witness of the steady progress of reaction in the Roman Church. That action, theoretically at least, does away with even that measure of popular constitution in the Church to which the end of the Middle Age had held fast without wavering, which the mightiest of popes had not been able to abolish and the council of Trent had not dared earnestly to debate. Whether the decree of

1870 is viewed in the light of the *Syllabus of Errors* of 1864, and again of the *Encyclical* of 1907, or whether the encyclicals are viewed in the light of the decree, the fact remains that a power has been given to the Curia against what has come to be called Modernism such as Innocent never wielded against the heresies of his day. Meantime, so hostile are exactly those peoples among whom Roman Catholicism has had full sway, that it would almost appear that the hope of the Roman Church is in those countries in which, in the sequence of the Reformation, a religious tolerance obtains, which the Roman Church would have done everything in its power to prevent.

Again, we should deceive ourselves if we supposed that the reaction had been felt only in Roman Catholic lands. A minister of Prussia forbade Kant to speak concerning religion. The Prussia of Frederick William III. and of Frederick William IV. was almost as reactionary as if Metternich had ruled in Berlin as well as in Vienna. The history of the censorship of the press and of the repression of free thought in Germany until the year 1848 is a sad chapter. The ruling influences in the Lutheran Church in that era, practically throughout Germany, were reactionary. The universities did indeed in large measure retain their ancient freedom. But the church in which Hengstenberg could be a leader, and in which staunch seventeenth-century Lutheranism could be effectively sustained, was almost doomed to further that alienation between the life of piety and the life of learning which is so much to be deplored. In the Church the conservatives have to this moment largely triumphed. In the theological faculties of the universities the liberals in the main have held their own. The fact that both Church and faculties are functionaries of the State is often cited as sure in the end to bring about a solution of this unhappy state of things. For such a solution, it must be owned, we wait.

The England of the period after 1815 had indeed no such cause for reaction as obtained in France or even in Germany. The nation having had its Revolution in the seventeenth century escaped that of the eighteenth. Still the country was exhausted in the conflict against Napoleon. Commercial, industrial and social problems agitated it. The Church slumbered. For a time the liberal thought of England found utterance mainly through the poets. By the decade of the thirties movement had begun. The opinions of the Noetics in Oriel College, Oxford, now seem distinctly mild. They were sufficient to awaken Newman and Pusey, Froude, Keble, and the rest. Then followed the most significant ecclesiastical movement which the Church of England in the nineteenth century has seen, the Oxford or Tractarian movement, as it has been called. There was conscious recurrence of a mind like that of Newman to the Catholic position. He had never been able to conceive religion in any other terms than those of dogma, or the Christian assurance on any other basis than that of external authority. Nothing could be franker than the antagonism of the movement, from its inception, to the liberal spirit of the age. By inner logic Newman found himself at last in the Roman Church. Yet the Anglo-Catholic movement is to-day overwhelmingly in the ascendant in the English Church. The Broad Churchmen of the middle of the century have had few successors. It is the High Church which stands over against the great mass of the dissenting churches which, taken in the large, can hardly be said to be theologically more liberal than itself. It is the High Church which has showed Franciscanlike devotion in the problems of social readjustment which England to-day presents. It has shown in some part of its constituency a power of assimilation of new philosophical, critical and scientific views, which makes all comparison of it with the Roman Church misleading. And yet it remains in its own consciousness Catholic to the core.

In America also the vigour of onset of the liberalising forces at the beginning of this century tended to provoke reaction. The alarm with which the defection of so considerable a portion of the Puritan Church was viewed gave coherence to the opposition. There were those who devoutly held that the hope of religion lay in its further liberalisation. Equally there were those who deeply felt that the deliverance lay in resistance to liberalisation. One of the concrete effects of the division of the churches was the separation of the education of the clergy from the universities, the entrusting it to isolated theological schools under denominational control. The system has done less harm than might have been expected. Yet

at present there would appear to be a general movement of recurrence to the elder tradition. The maintenance of the religious life is to some extent a matter of nurture and observances, of religious habit and practice. This truth is one which liberals, in their emphasis upon liberty and the individual, are always in danger of overlooking. The great revivals of religion in this century, like those of the century previous, have been connected with a form of religious thought pronouncedly pietistic. The building up of religious institutions in the new regions of the West, and the participation of the churches of the country in missions, wear predominantly this cast. Antecedently, one might have said that the lack of ecclesiastical cohesion among the Christians of the land, the ease with which a small group might split off for the furtherance of its own particular view, would tend to liberalisation. It is doubtful whether this is true. Isolation is not necessarily a condition of progress. The emphasis upon trivial differences becomes rather a condition of their permanence. The middle of the nineteenth century in the United States was a period of intense denominationalism. That is synonymous with a period of the stagnation of Christian thought. The religion of a people absorbed in the practical is likely to be one which they at least suppose to be a practical religion. In one age the most practical thing will appear to men to be to escape hell, in another to further socialism. The need of adjustment of religion to the great intellectual life of the world comes with contact with that life. What strikes one in the survey of the religious thought of the country, by and large, for a century and a quarter, is not so much that it has been reactionary, as that it has been stationary. Almost every other aspect of the life of our country, including even that of religious life as distinguished from religious thought, has gone ahead by leaps and bounds. This it is which in a measure has created the tension which we feel.

B. THE BACKGROUND

Deism

In England before the end of the Civil War a movement for the rationalisation of religion had begun to make itself felt. It was in full force in the time of the Revolution of 1688. It had not altogether spent itself by the middle of the eighteenth century. The movement has borne the name of Deism. In so far as it had one watchword, this came to be ‘natural religion.’ The antithesis had in mind was that to revealed religion, as this had been set forth in the tradition of the Church, and particularly under the bibliolatry of the Puritans. It is a witness to the liberty of speech enjoyed by Englishmen in that day and to their interest in religion, that such a movement could have arisen largely among laymen who were often men of rank. It is an honour to the English race that, in the period of the rising might of the rational spirit throughout the western world, men should have sought at once to utilise that force for the restatement of religion. Yet one may say quite simply that this undertaking of the deists was premature. The time was not ripe for the endeavour. The rationalist movement itself needed greater breadth and deeper understanding of itself. Above all, it needed the salutary correction of opposing principles before it could avail for this delicate and difficult task. Religion is the most conservative of human interests. Rationalism would be successful in establishing a new interpretation of religion only after it had been successful in many other fields. The arguments of the deists were never successfully refuted. On the contrary, the striking thing is that their opponents, the militant divines and writings of numberless volumes of ‘Evidences for Christianity,’ had come to the same rational basis with the deists. They referred even the most subtle questions to the pure reason, as no one now would do. The deistical movement was not really defeated. It largely compelled its opponents to adopt its methods. It left a deposit which is more nearly rated at its worth at the present than it was in its own time. But it ceased to command confidence, or even interest. Samuel Johnson said, as to the publication of Bolingbroke’s work by his executor, three years after the author’s death: ‘It was a rusty

old blunderbuss, which he need not have been afraid to discharge himself, instead of leaving a half-crown to a Scotchman to let it off after his death.’

It is a great mistake, however, in describing the influence of rationalism upon Christian thought to deal mainly with deism. English deism made itself felt in France, as one may see in the case of Voltaire. Kant was at one time deeply moved by some English writers who would be assigned to this class. In a sense Kant showed traces of the deistical view to the last. The centre of the rationalistic movement had, however, long since passed from England to the Continent. The religious problem was no longer its central problem. We quite fail to appreciate what the nineteenth century owes to the eighteenth and to the rationalist movement in general, unless we view this latter in a far greater way.

Rationalism

In 1784 Kant wrote a tractate entitled, *Was ist Aufklärung?* He said: ‘Aufklärung is the advance of man beyond the stage of voluntary immaturity. By immaturity is meant a man’s inability to use his understanding except under the guidance of another. The immaturity is voluntary when the cause is not want of intelligence but of resolution. *Sapere aude!* “Dare to use thine own understanding,” is therefore the motto of free thought. If it be asked, “Do we live in a free-thinking age?” the answer is, “No, but we live in an age of free thought.” As things are at present, men in general are very far from possessing, or even from being able to acquire, the power of making a sure and right use of their own understanding without the guidance of others. On the other hand, we have clear indications that the field now lies, nevertheless, open before them, to which they can freely make their way and that the hindrances to general freedom of thought are gradually becoming less. And again he says: ‘If we wish to insure the true use of the understanding by a method which is universally valid, we must first critically examine the laws which are involved in the very nature of the understanding itself. For the knowledge of a truth which is valid for everyone is possible only when based on laws which are involved in the nature of the human mind, as such, and have not been imported into it from without through facts of experience, which must always be accidental and conditional.’

There speaks, of course, the prophet of the new age which was to transcend the old rationalist movement. Men had come to harp in complacency upon reason. They had never inquired into the nature and laws of action of the reason itself. Kant, though in fullest sympathy with its fundamental principles, was yet aware of the excesses and weaknesses in which the rationalist movement was running out. No man was ever more truly a child of rationalism. No man has ever written, to whom the human reason was more divine and inviolable. Yet no man ever had greater reserves within himself which rationalism, as it had been, had never touched. It was he, therefore, who could lay the foundations for a new and nobler philosophy for the future. The word *Aufklärung*, which the speech of the Fatherland furnished him, is a better word than ours. It is a better word than the French *l’Illuminisme*, the Enlightenment. Still we are apparently committed to the term Rationalism, although it is not an altogether fortunate designation which the English-speaking race has given to a tendency practically universal in the thinking of Europe, from about 1650 to the beginning of the nineteenth century. Historically, the rationalistic movement was the necessary preliminary for the modern period of European civilization as distinguished from the ecclesiastically and theologically determined culture which had prevailed up to that time. It marks the great cleft between the ancient and mediæval world of culture on the one hand and the modern world on the other. The Reformation had but pushed ajar the door to the modern world and then seemed in surprise and fear about to close it again. The thread of the Renaissance was taken up again only in the Enlightenment. The stream flowed underground which was yet to fertilise the modern world.

We are here mainly concerned to note the breadth and universality of the movement. It was a

transformation of culture, a change in the principles underlying civilisation, in all departments of life. It had indeed, as one of its most general traits, the antagonism to ecclesiastical and theological authority. Whatever it was doing, it was never without a sidelong glance at religion. That was because the alleged divine right of churches and states was the one might which it seemed everywhere necessary to break. The conflict with ecclesiasticism, however, was taken up also by Pietism, the other great spiritual force of the age. This was in spite of the fact that the Pietists' view of religion was the opposite of the rationalist view. Rationalism was characterised by thorough-going antagonism to supernaturalism with all its consequences. This arose from its zeal for the natural and the human, in a day when all men, defenders and assailants of religion alike, accepted the dictum that what was human could not be divine, the divine must necessarily be the opposite of the human. In reality this general trait of opposition to religion deceives us. It is superficial. In large part the rationalists were willing to leave the question of religion on one side if the ecclesiastics would let them alone. This is true in spite of the fact that the pot-house rationalism of Germany and France in the eighteenth century found the main butt of its ridicule in the priesthood and the Church. On its sober side, in the studies of scholars, in the bureaux of statesmen, in the laboratories of discoverers, it found more solid work. It accomplished results which that other trivial aspect must not hide from us.

Troeltsch first in our own day has given us a satisfactory account of the vast achievement of the movement in every department of human life. It annihilated the theological notion of the State. In the period after the Thirty Years' War men began to question what had been the purpose of it all. Diplomacy freed itself from Jesuitical and papal notions. It turned preponderantly to commercial and economic aims. A secular view of the purpose of God in history began to prevail in all classes of society. The Grand Monarque was ready to proclaim the divine right of the State which was himself. Still, not until the period of his dotage did that claim bear any relation to what even he would have called religion. Publicists, both Catholic and Protestant, sought to recur to the *lex naturæ* in contradistinction with the old *lex divina*. The natural rights of man, the rights of the people, the rationally conditioned rights of the State, a natural, prudential, utilitarian morality interested men. One of the consequences of this theory of the State was a complete alteration in the thought of the relation of State and Church. The nature of the Church itself as an empirical institution in the midst of human society was subjected to the same criticism with the State. Men saw the Church in a new light. As the State was viewed as a kind of contract in men's social interest, so the Church was regarded as but a voluntary association to care for their religious interests. It was to be judged according to the practical success with which it performed this function.

Footnote 2:(return)

Troeltsch, Art. 'Aufklärung' in Herzog-Hauck, *Realencylopädie*, 3 Aufl., Bd. ii., s. 225 f.

Then also, in the economic and social field the rational spirit made itself felt. Commerce and the growth of colonies, the extension of the middle class, the redistribution of wealth, the growth of cities, the dependence in relations of trade of one nation upon another, all these things shook the ancient organisation of society. The industrial system grew up upon the basis of a naturalistic theory of all economic relations. Unlimited freedom in labour and in the use of capital were claimed. There came a great revolution in public opinion upon all matters of morals. The ferocity of religious wars, the cruelty of religious controversies, the bigotry of the confessional, these all, which, only a generation earlier, had been taken by long-suffering humanity as if they had been matters of course, were now viewed with contrition by the more exalted spirits and with contempt and embitterment by the rest. Men said, if religion can give us not better morality than this, it is high time we looked to the natural basis of morality. Natural morality came to be the phrase ever on the lips of the leading spirits. Too frequently they had come to look askance at the morality of those who alleged a supernatural sanction for that which they at least enjoined upon others. We come in this field also, as in others, upon the assertion of the human as nobler and more beautiful than that which had by the theologians been alleged to be divine. The assertion came indeed to be made in

ribald and blasphemous forms, but it was not without a great measure of provocation.

Then there was the altered view of nature which came through the scientific discoveries of the age. Bacon, Copernicus, Kepler, Galileo, Gassendi, Newton, are the fathers of the modern sciences. These are the men who brought new worlds to our knowledge and new methods to our use. That the sun does not move about the earth, that the earth is but a speck in space, that heaven cannot be above nor hell beneath, these are thoughts which have consequences. Instead of the old deductive method, that of the mediæval Aristotelianism, which had been worse than fruitless in the study of nature, men now set out with a great enthusiasm to study facts, and to observe their laws. Modern optics, acoustics, chemistry, geology, zoology, psychology and medicine, took their rises within the period of which we speak. The influence was indescribable. Newton might maintain his own simple piety side by side, so to say, with his character, as a scientific man, though even he did not escape the accusation of being a Unitarian. In the resistance which official religion offered at every step to the advance of the sciences, it is small wonder if natures less placid found the maintenance of their ancestral faith too difficult. Natural science was deistic with Locke and Voltaire, it was pantheistic in the antique sense with Shaftesbury, it was pantheistic-mystical with Spinoza, spiritualistic with Descartes, theistic with Leibnitz, materialistic with the men of the Encyclopædia. It was orthodox with nobody. The miracle as traditionally defined became impossible. At all events it became the millstone around the neck of the apologists. The movement went to an extreme. All the evils of excess upon this side from which we since have suffered were forecast. They were in a measure called out by the evils and errors which had so long reigned upon the other side.

Again, in the field of the writing of history and of the critique of ancient literatures, the principles of rational criticism were worked out and applied in all seriousness. Then these maxims began to be applied, sometimes timidly and sometimes in scorn and shallowness, to the sacred history and literature as well. To claim, as the defenders of the faith were fain to do, that this one department of history was exempt, was only to tempt historians to say that this was equivalent to confession that we have not here to do with history at all.

Nor can we overlook the fact that the seventeenth and eighteenth centuries witnessed a great philosophical revival. Here again it is the rationalist principle which is everywhere at work. The observations upon nature, the new feeling concerning man, the vast complex of facts and impulses which we have been able in these few words to suggest, demanded a new philosophical treatment. The philosophy which now took its rise was no longer the servant of theology. It was, at most, the friend, and even possibly the enemy, of theology. Before the end of the rationalist period it was the master of theology, though often wholly indifferent to theology, exactly because of its sense of mastery. The great philosophers of the eighteenth century, Hume, Berkeley, and Kant, belong with a part only of their work and tendency to the rationalist movement. Still their work rested upon that which had already been done by Spinoza and Malebranche, by Hobbes and Leibnitz, by Descartes and Bayle, by Locke and Wolff, by Voltaire and the Encyclopædists. With all of the contrasts among these men there are common elements. There is an ever increasing antipathy to the thought of original sin and of supernatural revelation, there is the confidence of human reason, the trust in the will of man, the enthusiasm for the simple, the natural, the intelligible and practical, the hatred of what was scholastic and, above all, the repudiation of authority.

All these elements led, toward the end of the period, to the effort at the construction of a really rational theology. Leibnitz and Lessing both worked at that problem. However, not until after the labours of Kant was it possible to utilise the results of the rationalist movement for the reconstruction of theology. If evidence for this statement were wanting, it could be abundantly given from the work of Herder. He was younger than Kant, yet the latter seems to have exerted but slight influence upon him. He earnestly desired to reinterpret Christianity in the new light of his time, yet perhaps no part of his work is so futile.

Pietism

Allusion has been made to pietism. We have no need to set forth its own achievements. We must recur to it merely as one of the influences which made the transition from the century of rationalism to bear, in Germany, an aspect different from that which it bore in any other land. Pietism had at first much in common with rationalism. It shared with the latter its opposition to the whole administration of religion established by the State, its antagonism to the social distinctions which prevailed, its individualism, its emphasis upon the practical. It was part of a general religious reaction against ecclesiasticism, as were also Jansenism in France, and Methodism in England, and the Whitefieldian revival in America. But, through the character of Spener, and through the peculiarity of German social relations, it gained an influence over the educated classes, such as Methodism never had in England, nor, on the whole, the Great Awakening in America. In virtue of this, German pietism was able, among influential persons, to present victorious opposition to the merely secular tendencies of the rationalistic movement. In no small measure it breathed into that movement a religious quality which in other lands was utterly lacking. It gave to it an ethical seriousness from which in other places it had too often set itself free.

In England there had followed upon the age of the great religious conflict one of astounding ebb of spiritual interest. Men turned with all energy to the political and economic interests of a wholly modern civilisation. They retained, after a short period of friction, a smug and latitudinarian orthodoxy, which Methodism did little to change. In France not only was the Huguenot Church annihilated, but the Jansenist movement was savagely suppressed. The tyranny of the Bourbon State and the corruption of the Gallican Church which was so deeply identified with it caused the rationalist movement to bear the trait of a passionate opposition to religion. In the time of Pascal, Jansenism had a moment when it bade fair to be to France what pietism was to Germany. Later, in the anguish and isolation of the conflict the movement lost its poise and intellectual quality. In Germany, even after the temporary alliance of pietism and rationalism against the Church had been transcended, and the length and breadth of their mutual antagonism had been revealed, there remained a deep mutual respect and salutary interaction. Obscurantists and sentimentalists might denounce rationalism. Vulgar ranters like Dippel and Barth might defame religion. That had little weight as compared with the fact that Klopstock, Hamann and Herder, Jacobi, Goethe and Jean Paul, had all passed at some time under the influence of pietism. Lessing learned from the Moravians the undogmatic essence of religion. Schleiermacher was bred among the devoted followers of Zinzendorf. Even the radicalism of Kant retained from the teaching of his pietistic youth the stringency of its ethic, the sense of the radical evil of human nature and of the categorical imperative of duty. It would be hard to find anything to surpass his testimony to the purity of character and spirit of his parents, or the beauty of the home life in which he was bred. Such facts as these made themselves felt both in the philosophy and in the poetry of the age. The rationalist movement itself came to have an ethical and spiritual trait. The triviality, the morbidness and superstition of pietism received their just condemnation. But among the leaders of the nation in every walk of life were some who felt the drawing to deal with ethical and religious problems in the untrammelled fashion which the century had taught.

We may be permitted to try to show the meaning of pietism by a concrete example. No one can read the correspondence between the youthful Schleiermacher and his loving but mistaken father, or again, the lifelong correspondence of Schleiermacher with his sister, without receiving, if he has any religion of his own, a touching impression of what the pietistic religion meant. The father had long before, unknown to the son, passed through the torments of the rational assault upon a faith which was sacred to him. He had preached, through years, in the misery of contradiction with himself. He had rescued his drowning soul in the ark of the most intolerant confessional orthodoxy. In the crisis of his son's life he pitiably concealed these facts. They should have been the bond of sympathy. The son, a sorrowful little motherless boy, was sent to the Moravian school at Niesky, and then to Barby. He was to escape the contamination of the universities, and the woes through which his father had passed. Even there the spirit of the age pursued

him. The precocious lad, in his loneliness, raised every question which the race was wrestling with. He long concealed these facts, dreading to wound the man he so revered. Then in a burst of filial candour, he threw himself upon his father's mercy, only to be abused and measurelessly condemned. He had his way. He resorted to Halle, turned his back on sacred things, worked in titanic fashion at everything but the problem of religion. At least he kept his life clean and his soul sensitive among the flagrantly immoral who were all about him, even in the pietists' own university. He laid the foundations for his future philosophical construction. He bathed in the sentiments and sympathies, poetic, artistic and humanitarian, of the romanticist movement. In his early Berlin period he was almost swept from his feet by its flood. He rescued himself, however, by his rationalism and romanticism into a breadth and power of faith which made him the prophet of the new age. By him, for a generation, men like-minded saved their souls. As one reads, one realises that it was the pietists' religion which saved him, and which, in another sense, he saved. His recollections of his instruction among the Herrnhuter are full of beauty and pathos. His sister never advanced a step upon the long road which he travelled. Yet his sympathy with her remained unimpaired. The two poles of the life of the age are visible here. The episode, full of exquisite personal charm, is a veritable miniature of the first fifty years of the movement which we have to record. No one did for England or for France what Schleiermacher had done for the Fatherland.

Æsthetic Idealism

Besides pietism, the Germany of the end of the eighteenth century possessed still another foil and counterpoise to its decadent rationalism. This was the so-called æsthetic-idealistic movement, which shades off into romanticism. The debt of Schleiermacher to that movement has been already hinted at. It was the revolt of those who had this in common with the pietists, that they hated and despised the outworn rationalism. They thought they wanted no religion. It is open to us to say that they misunderstood religion. It was this misunderstanding which Schleiermacher sought to bring home to them. What religion they understood, ecclesiasticism, Roman or Lutheran, or again, the banalities and fanaticisms of middle-class pietism, they despised. Their war with rationalism was not because it had deprived man of religion. It had been equally destructive of another side of the life of feeling, the æsthetic. Their war was not on behalf of the good, it was in the name of the beautiful. Rationalism had starved the soul, it had minimised and derided feeling. It had suppressed emotion. It had been fatal to art. It was barren of poetry. It had had no sympathy with history and no understanding of history. It had reduced everything to the process by which two and two make four. The pietists said that the frenzy for reason had made man oblivious of the element of the divine. The æsthetic idealists said that it had been fatal to the element of the human. From this point of view their movement has been called the new humanism. The glamour of life was gone, they said. Mystery had vanished. And mystery is the womb of every art. Rationalism had been absolutely uncreative, only and always destructive. Rousseau had earlier uttered this wail in France, and had greatly influenced certain minds in Germany. Shelley and Keats were saying something of the sort in England. Even as to Wordsworth, it may be an open question if his religion was not mainly romanticism. All these men used language which had been conventionally associated with religion, to describe this other emotion.

Rationalism had ended in proving deadly to ideals. This was true. But men forgot for the moment how glorious an ideal it had once been to be rational and to assert the rationality of the universe. Still the time had come when, in Germany at all events, the great cry was, 'back to the ideal.' It is curious that men always cry 'back' when they mean 'forward.' For it was not the old idealism, either religious or æsthetic, which they were seeking. It was a new one in which the sober fruits of rationalism should find place. Still, for the moment, as we have seen, the air was full of the cry, 'back to the State by divine right, back to the Church, back to the Middle Age, back to the beauty of classical antiquity.' The poetry, the romance, the artistic criticism of this movement set themselves free at a stroke from theological bondage and from

the externality of conventional ethics. It shook off the dust of the doctrinaires. It ridiculed the petty utilitarianism which had been the vogue. It had such an horizon as men had never dreamed before. It owed that horizon to the rationalism it despised. From its new elevation it surveyed all the great elements of the life of man. It saw morals and religion, language and society, along with art and itself, as the free and unconscious product through the ages, of the vitality of the human spirit. It must be said that it neither solved nor put away the ancient questions. Especially through its one-sided æstheticism it veiled that element of dualism in the world which Kant clearly saw, and we now see again, after a century which has sometimes leaned to easy pantheism. However, it led to a study of the human soul and of all its activities, which came closer to living nature than anything which the world had yet seen.

To this group of æsthetic idealists belong, not to mention lesser names, Lessing and Hamann and Winckelmann, but above all Herder and Goethe. Herder was surely the finest spirit among the elder contemporaries of Goethe. Bitterly hostile to the rationalists, he had been moved by Rousseau to enthusiasm for the free creative life of the human spirit. With Lessing he felt the worth of every art in and for itself, and the greatness of life in its own fulfilment. He sets out from the analysis of the poetic and artistic powers, the appreciation of which seemed to him to be the key to the understanding of the spiritual world. Then first he approaches the analysis of the ethical and religious feeling. All the knowledge and insight thus gained he gathers together into a history of the spiritual life of mankind. This life of the human spirit comes forth everywhere from nature, is bound to nature. It constitutes one whole with a nature which the devout soul calls God, and apprehends within itself as the secret of all that it is and does. Even in the period in which he had become passionately Christian, Herder never was able to attain to a scientific establishing of his Christianity, or to any sense of the specific aim of its development. He felt himself to be separated from Kant by an impassable gulf. All the sharp antinomies among which Kant moved, contrasts of that which is sensuous with that which is reasonable, of experience with pure conception, of substance and form in thought, of nature and freedom, of inclination and duty, seemed to Herder grossly exaggerated, if not absolutely false. Sometimes Herder speaks as if the end of life were simply the happiness which a man gets out of the use of all his powers and out of the mere fact of existence. Deeper is Kant’s contention, that the true aim of life can be only moral culture, even independent of happiness, or rather one must find his noblest happiness in that moral culture.

At a period in his life when Herder had undergone conversion to court orthodoxy at Bückeburg and threatened to throw away that for which his life had stood, he was greatly helped by Goethe. The identification of Herder with Christianity continued to be more deep and direct than that of Goethe ever became, yet Goethe has also his measure of significance for our theme. If he steadied Herder in his religious experience, he steadied others in their poetical emotionalism and artistic sentimentality, which were fast becoming vices of the time. The classic repose of his spirit, his apparently unconscious illustration of the ancient maxim, ‘nothing too much,’ was the more remarkable, because there were few influences in the whole gamut of human life to which he did not sooner or later surrender himself, few experiences which he did not seek, few areas of thought upon which he did not enter. Systems and theories were never much to his mind. A fact, even if it were inexplicable, interested him much more. To the evolution of formal thought in his age he held himself receptive rather than directing. He kept, to the last, his own manner of brooding and creating, within the limits of a poetic impressionableness which instinctively viewed the material world and the life of the soul in substantially similar fashion. There is something almost humorous in the way in which he eagerly appropriated the results of the philosophising of his time, in so far as he could use these to sustain his own positions, and caustically rejected those which he could not thus use. He soon got by heart the negative lessons of Voltaire and found, to use the words which he puts into the mouth of Faust, that while it freed him from his superstitions, at the same time it made the world empty and dismal beyond endurance. In the mechanical philosophy which presented itself in the *Système de la Nature* as a positive substitute for his lost faith, he found only that

which filled his poet’s soul with horror. ‘It appeared to us,’ he says, ‘so grey, so cimmerian and so dead that we shuddered at it as at a ghost. We thought it the very quintessence of old age. All was said to be necessary, and therefore there was no God. Why not a necessity for a God to take its place among the other necessities!’ On the other hand, the ordinary teleological theology, with its external architect of the world and its externally determined designs, could not seem to Goethe more satisfactory than the mechanical philosophy. He joined for a time in Rousseau’s cry for the return to nature. But Goethe was far too well balanced not to perceive that such a cry may be the expression of a very artificial and sophisticated state of mind. It begins indeed in the desire to throw off that which is really oppressive. It ends in a fretful and reckless revolt against the most necessary conditions of human life. Goethe lived long enough to see in France that dissolution of all authority, whether of State or Church, for which Rousseau had pined. He saw it result in the return of a portion of mankind to what we now believe to have been their primitive state, a state in which they were ‘red in tooth and claw.’ It was not that paradisaic state of love and innocence, which, curiously enough, both Rousseau and the theologians seem to have imagined was the primitive state.

The thought of the discipline and renunciation of our lower nature in order to the realisation of a higher nature of mankind is written upon the very face of the second part of *Faust*. Certain passages in *Dichtung* and *Wahrheit* are even more familiar. ‘Our physical as well as our social life, morality, custom, knowledge of the world, philosophy, religion, even many an accidental occurrence in our daily life, all tell us that we must renounce.’ ‘Renunciation, once for all, in view of the eternal,’ that was the lesson which he said made him feel an atmosphere of peace breathed upon him. He perceived the supreme moral prominence of certain Christian ideas, especially that of the atonement as he interpreted it. ‘It is altogether strange to me,’ he writes to Jacobi, ‘that I, an old heathen, should see the cross planted in my own garden, and hear Christ’s blood preached without its offending me.’

Goethe’s quarrel with Christianity was due to two causes. In the first place, it was due to his viewing Christianity as mainly, if not exclusively, a religion of the other world, as it has been called, a religion whose God is not the principle of all life and nature and for which nature and life are not divine. In the second place, it was due to the prominence of the negative or ascetic element in Christianity as commonly presented, to the fact that in that presentation the law of self-sacrifice bore no relation to the law of self-realisation. In both of these respects he would have found himself much more at home with the apprehension of Christianity which we have inherited from the nineteenth century. The programme of charity which he outlines in the *Wanderjahre* as a substitute for religion would be taken to-day, so far as it goes, as a rather moderate expression of the very spirit of the Christian religion.

CHAPTER II. IDEALISTIC PHILOSOPHY

The causes which we have named, religious and æsthetic, as well as purely speculative, led to such a revision of philosophical principles in Germany as took place in no other land. The new idealistic philosophy, as it took shape primarily at the hands of Kant, completed the dissolution of the old rationalism. It laid the foundation for the speculative thought of the western world for the century which was to come. The answers which æstheticism and pietism gave to rationalism were incomplete. They consisted largely in calling attention to that which rationalism had overlooked. Kant's idealism, however, met the intellectual movement on its own grounds. It triumphed over it with its own weapons. The others set feeling over against thought. He taught men a new method in thinking. The others put emotion over against reason. He criticised in drastic fashion the use which had been made of reason. He inquired into the nature of reason. He vindicated the reasonableness of some truths which men had indeed felt to be indefeasibly true, but which they had not been able to establish by reasoning.

KANT

Immanuel Kant was born in 1724 in Königsberg, possibly of remoter Scottish ancestry. His father was a saddler, as Melanchthon's had been an armourer and Wolff's a tanner. His native city with its university was the scene of his whole life and labour. He was never outside of Prussia except for a brief interval when Königsberg belonged to Russia. He was a German professor of the old style. Studying, teaching, writing books, these were his whole existence. He was the fourth of nine children of a devoted pietist household. Two of his sisters served in the houses of friends. The consistorial-rath opened the way to the university. An uncle aided him to publish his first books. His earlier interest was in the natural sciences. He was slow in coming to promotion. Only after 1770 was he full professor of logic and metaphysics. In 1781 he published the first of the books upon which rests his world-wide fame. Nevertheless, he lived to see the triumph of his philosophy in most of the German universities. His subjects are abstruse, his style involved. It never occurred to him to make the treatment of his themes easier by use of the imagination. He had but a modicum of that quality. He was hostile to the pride of intellect often manifested by petty rationalists. He was almost equally hostile to excessive enthusiasm in religion. The note of his life, apart from his intellectual power, was his ethical seriousness. He was in conflict with ecclesiastical personages and out of sympathy with much of institutional religion. None the less, he was in his own way one of the most religious of men. His brief conflict with Wöllner's government was the only instance in which his peace and public honour were disturbed. He never married. He died in Königsberg in 1804. He had been for ten years so much enfeebled that his death was a merciful release.

Kant used the word 'critique' so often that his philosophy has been called the 'critical philosophy.' The word therefore needs an explanation. Kant himself distinguished two types of philosophy, which he called the dogmatic and critical types. The essence of a dogmatic philosophy is that it makes belief to rest upon knowledge. Its endeavour is to demonstrate that which is believed. It brings out as its foil the characteristically sceptical philosophy. This esteems that the proofs advanced in the interest of belief are inadequate. The belief itself is therefore an illusion. The essence of a critical philosophy, on the other hand, consists in this, that it makes a distinction between the functions of knowing and believing. It distinguishes between the perception of that which is in accordance with natural law and the understanding of the moral meaning of things. Kant thus uses his word critique in accordance with the strict etymological meaning of the root. He seeks to make a clear separation between the provinces of belief and knowledge, and thus to find an adjustment of their claims. Of an object of belief we may indeed say that we know it. Yet we must make clear to ourselves that we know it in a different sense from that in

which we know physical fact. Faith, since it does not spring from the pure reason, cannot indeed, as the old dogmatisms, both philosophical and theological, have united in asserting, be demonstrated by the reason. Equally it cannot, as scepticism has declared, be overthrown by the pure reason.

The ancient positive dogmatism had been the idealistic philosophy of Plato and Aristotle. The old negative dogmatism had been the materialism of the Epicureans. To Plato the world was the realisation of ideas. Ideas, spiritual entities, were the counterparts and necessary antecedents of the natural objects and actual facts of life. To the Epicureans, on the other hand, there are only material bodies and natural laws. There are no ideas or purposes. In the footsteps of the former moved all the scholastics of the Middle Age, and again, even Locke and Leibnitz in their so-called 'natural theology.' In the footsteps of the latter moved the men who had made materialism and scepticism to be the dominant philosophy of France in the latter half of the eighteenth century. The aim of Kant was to resolve this age-long contradiction. Free, unprejudiced investigation of the facts and laws of the phenomenal world can never touch the foundations of faith. Natural science can lead in the knowledge only of the realm of the laws of things. It cannot give us the inner moral sense of those things. To speak of the purposes of nature as men had done was absurd. Natural theology, as men had talked of it, was impossible. What science can give is a knowledge of the facts about us in the world, of the growth of the cosmos, of the development of life, of the course of history, all viewed as necessary sequences of cause and effect.

Footnote 3:(return)

Paulsen, *Kant*, a. 2.

On the other hand, with the idealists, Kant is fully persuaded that there is a meaning in things and that we can know it. There is a sense in life. With immediate certainty we set moral good as the absolute aim in life. This is done, however, not through the pure reason or by scientific thinking, but primarily through the will, or as Kant prefers to call it, the practical reason. What is meant by the practical reason is the intelligence, the will and the affections operating together; that is to say, the whole man and not merely his intellect, directed to those problems upon which, in sympathy and moral reaction, the whole man must be directed and upon which the pure reason, the mere faculty of ratiocination, does not adequately operate. In the practical reason the will is the central thing. The will is that faculty of man to which moral magnitudes appeal. It is with moral magnitudes that the will is primarily concerned. The pure reason may operate without the will and the affections. The will, as a source of knowledge, never works without the intelligence and the affections. But it is the will which alone judges according to the predicates good and evil. The pure reason judges according to the predicates true and false. It is the practical reason which ventures the credence that moral worth is the supreme worth in life. It then confirms this ventured credence in a manifold experience that yields a certainty with which no certainty of objects given in the senses is for a moment to be compared. We know that which we have believed. We know it as well as that two and two make four. Still we do not know it in the same way. Nor can we bring knowledge of it to others save through an act of freedom on their part, which is parallel to the original act of freedom on our own part.

How can these two modes of thought stand related the one to the other? Kant's answer is that they correspond to the distinction between two worlds, the world of sense and the transcendental or supersensible world. The pure and the practical reason are the faculties of man for dealing with these two worlds respectively, the phenomenal and the noumenal. The world which is the object of scientific investigation is not the actuality itself. This is true in spite of the fact that to the common man the material and sensible is always, as he would say, the real. On the contrary, in Kant's opinion the material world is only the presentation to our senses of something deeper, of which our senses are no judge. The reality lies behind this sensible presentation and appearance. The world of religious belief is the world of this transcendent reality. The spirit of man, which is not pure reason only, but moral will as well, recognises itself also as part of this reality. It expresses the essence of that mysterious reality in terms of its own

essence. Its own essence as free spirit is the highest aspect of reality of which it is aware. It may be unconscious of the symbolic nature of its language in describing that which is higher than anything which we know, by the highest which we do know. Yet, granting that, and supposing that it is not a contradiction to attempt a description of the transcendent at all, there is no description which carries us so far.

This series of ideas was perhaps that which gave to Kant's philosophy its immediate and immense effect upon the minds of men wearied with the endless strife and insoluble contradiction of the dogmatic and sceptical spirits. We may disagree with much else in the Kantian system. Even here we may say that we have not two reasons, but only two functionings of one. We have not two worlds. The philosophical myth of two worlds has no better standing than the religious myth of two worlds. We have two characteristic aspects of one and the same world. These perfectly interpenetrate the one the other, if we may help ourselves with the language of space. Each is everywhere present. Furthermore, these actions of reason and aspects of world shade into one another by imperceptible degrees. Almost all functionings of reason have something of the qualities of both. However, when all is said, it was of greatest worth to have had these two opposite poles of thought brought clearly to mind. The dogmatists, in the interest of faith, were resisting at every step the progress of the sciences, feeling that that progress was inimical to faith. The devotees of science were saying that its processes were of universal validity, its conclusions irresistible, the gradual dissolution of faith was certain. Kant made plain that neither party had the right to such conclusions. Each was attempting to apply the processes appropriate to one form of rational activity within the sphere which belonged to the other. Nothing but confusion could result. The religious man has no reason to be jealous of the advance of the sciences. The interests of faith itself are furthered by such investigation. Illusions as to fact which have been mistakenly identified with faith are thus done away. Nevertheless, its own eternal right is assured to faith. With it lies the interpretation of the facts of nature and of history, whatever those facts may be found to be. With the practical reason is the interpretation of these facts according to their moral worth, a worth of which the pure reason knows nothing and scientific investigation reveals nothing.

Here was a deliverance not unlike that which the Reformation had brought. The mingling of Aristotelianism and religion in the scholastic theology Luther had assailed. Instead of assent to human dogmas Luther had the immediate assurance of the heart that God was on his side. And what is that but a judgment of the practical reason, the response of the heart in man to the spiritual universe? It is given in experience. It is not mediated by argument. It cannot be destroyed by syllogism. It needs no confirmation from science. It is capable of combination with any of the changing interpretations which science may put upon the outward universe. The Reformation had, however, not held fast to its great truth. It had gone back to the old scholastic position. It had rested faith in an essentially rationalistic manner upon supposed facts in nature and alleged events of history in connection with the revelation. It had thus jeopardised the whole content of faith, should these supposed facts of nature or events in history be at any time disproved. Men had made faith to rest upon statements of Scripture, alleging such and such acts and events. They did not recognise these as the naïve and childlike assumptions concerning nature and history which the authors of Scripture would naturally have. When, therefore, these statements began with the progress of the sciences to be disproved, the defenders of the faith presented always the feeble spectacle of being driven from one form of evidence to another, as the old were in turn destroyed. The assumption was rife at the end of the eighteenth century that Christianity was discredited in the minds of all free and reasonable men. Its tenets were incompatible with that which enlightened men infallibly knew to be true. It could be no long time until the hollowness and sham would be patent to all. Even the interested and the ignorant would be compelled to give it up. Of course, the invincibly devout in every nation felt of instinct that this was not true. They felt that there is an inexpugnable truth of religion. Still that was merely an intuition of their hearts. They were right. But they were unable to prove that they were right, or even to get a hearing with many of the cultivated of their age. To Kant we owe the debt, that he put an end to this state of things. He

made the real evidence for religion that of the moral sense, of the nonscience and hearts of men themselves. The real ground of religious conviction is the religious experience. He thus set free both science and religion from an embarrassment under which both laboured, and by which both had been injured.

Kant parted company with the empirical philosophy which had held that all knowledge arises from without, comes from experienced sensations, is essentially perception. This theory had not been able to explain the fact that human experience always conforms to certain laws. On the other hand, the philosophy of so-called innate ideas had sought to derive all knowledge from the constitution of the mind itself. It left out of consideration the dependence of the mind upon experience. It tended to confound the creations of its own speculation with reality, or rather, to claim correspondence with fact for statements which had no warrant in experience. There was no limit to which this speculative process might not be pushed. By this process the medieval theologians, with all gravity, propounded the most absurd speculations concerning nature. By this process men made the most astonishing declarations upon the basis, as they supposed, of revelation. They made allegations concerning history and the religious experience which the most rudimentary knowledge of history or reflection upon consciousness proved to be quite contrary to fact.

Both empiricism and the theory of innate ideas had agreed in regarding all knowledge as something given, from without or from within. The knowing mind was only a passive recipient of impressions thus imparted to it. It was as wax under the stylus, *tabula rasa*, clean paper waiting to be written upon. Kant departed from this radically. He declared that all cognition rests upon the union of the mind's activity with its receptivity. The material of thought, or at least some of the materials of thought, must be given us in the multiformity of our perceptions, through what we call experience from the outer world. On the other hand, the formation of this material into knowledge is the work of the activity of our own minds. Knowledge is the result of the systematising of experience and of reflection upon it. This activity of the mind takes place always in accordance with the mind's own laws. Kant held them to the absolute dependence of knowledge upon material applied in experience. He compared himself to Copernicus who had taught men that they themselves revolved around a central fact of the universe. They had supposed that the facts revolved about them. The central fact of the intellectual world is experience. This experience seems to be given us in the forms of time and space and cause. These are merely forms of the mind's own activity. It is not possible for us to know 'the thing in itself,' the *Ding an sich* in Kant's phrase, which is the external factor in any sensation or perception. We cannot distinguish that external factor from the contribution to it, as it stands in our perception, which our own minds have made. If we cannot do that even for ourselves, how much less can we do it for others! It is the subject, the thinking being who says 'I,' which, by means of its characteristic and necessary active processes, in the perception of things under the forms of time and space, converts the chaotic material of knowledge into a regular and ordered world of reasoned experience. In this sense the understanding itself imposes laws, if not upon nature, yet, at least, upon nature as we can ever know it. There is thus in Kant's philosophy a sceptical aspect. Knowledge is limited to phenomena. We cannot by pure reason know anything of the world which lies beyond experience. This thought had been put forth by Locke and Berkeley, and by Hume also, in a different way. But with Kant this scepticism was not the gist of his philosophy. It was urged rather as the basis of the unconditioned character which he proposed to assert for the practical reason. Kant's scepticism is therefore very different from that of Hume. It does not militate against the profoundest religious conviction. Yet it prepared the way for some of the just claims of modern agnosticism.

According to Kant, it is as much the province of the practical reason to lay down laws for action as it is the province of pure reason to determine the conditions of thought, though the practical reason can define only the form of action which shall be in the spirit of duty. It cannot present duty to us as an object of desire. Desire can be only a form of self-love. In the end it reckons with the advantage of having done one's duty. It thus becomes selfish and degraded. The identification of duty and interest was particularly

offensive to Kant. He was at war with every form of hedonism. To do one's duty because one expects to reap advantage is not to have done one's duty. The doing of duty in this spirit simply resolves itself into a subtler and more pervasive form of selfishness. He castigates the popular presentation of religion as fostering this same fault. On the other hand, there is a trait of rigorism in Kant, a survival of the ancient dualism, which was not altogether consistent with the implications of his own philosophy. This philosophy afforded, as we have seen, the basis for a monistic view of the universe. But to his mind the natural inclinations of man are opposed to good conscience and sound reason. He had contempt for the shallow optimism of his time, according to which the nature of man was all good, and needed only to be allowed to run its natural course to produce highest ethical results. He does not seem to have penetrated to the root of Rousseau's fallacy, the double sense in which he constantly used the words 'nature' and 'natural.' Otherwise, Kant would have been able to repudiate the preposterous doctrine of Rousseau, without himself falling back upon the doctrine of the radical evil of human nature. In this doctrine he is practically at one with the popular teaching of his own pietistic background, and with Calvinism as it prevailed with many of the religiously-minded of his day. In its extreme statements the latter reminds one of the pagan and oriental dualisms which so long ran parallel to the development of Christian thought and so profoundly influenced it.

Kant's system is not at one with itself at this point. According to him the natural inclinations of men are such as to produce a never-ending struggle between duty and desire. To desire to do a thing made him suspicious that he was not actuated by the pure spirit of duty in doing it. The sense in which man may be in his nature both a child of God, and, at the same time, part of the great complex of nature, was not yet clear either to Kant or to his opponents. His pessimism was a reflection of his moral seriousness. Yet it failed to reckon with that which is yet a glorious fact. One of the chief results of doing one's duty is the gradual escape from the desire to do the contrary. It is the gradual fostering by us, the ultimate dominance in us, of the desire to do that duty. Even to have seen one's duty is the dawning in us of this high desire. In the lowest man there is indeed the superficial desire to indulge his passions. There is also the latent longing to be conformed to the good. There is the sense that he fulfils himself then only when he is obedient to the good. One of the great facts of spiritual experience is this gradual, or even sudden, inversion of standard within us. We do really cease to desire the things which are against right reason and conscience. We come to desire the good, even if it shall cost us pain and sacrifice to do it. Paul could write: 'When I would do good, evil is present with me.' But, in the vividness of his identification of his willing self with his better self against his sinning self, he could also write: 'So then it is no more I that do the sin.' *Das radicale Böse* of human nature is less radical than Kant supposed, and 'the categorical imperative' of duty less externally categorical than he alleged. Still it is the great merit of Kant's philosophy to have brought out with all possible emphasis, not merely as against the optimism of the shallow, but as against the hedonism of soberer people, that our life is a conflict between inclination and duty. The claims of duty are the higher ones. They are mandatory, absolute. We do our duty whether or not we superficially desire to do it. We do our duty whether or not we foresee advantage in having done it. We should do it if we foresaw with clearness disadvantage. We should find our satisfaction in having done it, even at the cost of all our other satisfactions. There is a must which is over and above all our desires. This is what Kant really means by the categorical imperative. Nevertheless, his statement comes in conflict with the principle of freedom, which is one of the most fundamental in his system. The phrases above used only eddy about the one point which is to be held fast. There may be that in the universe which destroys the man who does not conform to it, but in the last analysis he is self-destroyed, that is, he chooses not to conform. If he is saved, it is because he chooses thus to conform. Man would be then most truly man in resisting that which would merely overpower him, even if it were goodness. Of course, there can be no goodness which overpowers. There can be no goodness which is not willed. Nothing can be a motive except through awakening our desire. That which one desires is never wholly external to oneself.

According to Kant, morality becomes religion when that which the former shows to be the end of man is conceived also to be the end of the supreme law-giver, God. Religion is the recognition of our duties as divine commands. The distinction between revealed and natural religion is stated thus: In the former we know a thing to be a divine command before we recognise it as our duty. In the latter we know it to be our duty before we recognise it as a divine command. Religion may be both natural and revealed. Its tenets may be such that man can be conceived as arriving at them by unaided reason. But he would thus have arrived at them at a later period in the evolution of the race. Hence revelation might be salutary or even necessary for certain times and places without being essential at all times or, for that matter, a permanent guarantee of the truth of religion. There is nothing here which is new or original with Kant. This line of reasoning was one by which men since Lessing had helped themselves over certain difficulties. It is cited only to show how Kant, too, failed to transcend his age in some matters, although he so splendidly transcended it in others.

The orthodox had immemorially asserted that revelation imparted information not otherwise attainable, or not then attainable. The rationalists here allege the same. Kant is held fast in this view. Assuredly what revelation imparts is not information of any sort whatsoever, not even information concerning God. What revelation imparts is God himself, through the will and the affection, the practical reason. Revelation is experience, not instruction. The revealers are those who have experienced God, Jesus the foremost among them. They have experienced God, whom then they have manifested as best they could, but far more significantly in what they were than in what they said. There is surely the gravest exaggeration of what is statutory and external in that which Kant says of the relation of ethics and religion. How can we know that to be a command of God, which does not commend itself in our own heart and conscience? The traditionalist would have said, by documents miraculously confirmed. It was not in consonance with his noblest ideas for Kant to say that. On the other hand, that which I perceive to be my duty I, as religious man, feel to be a command of God, whether or not a mandate of God to that effect can be adduced. Whether an alleged revelation from God inculcates such a truth or duty may be incidental. In a sense it is accidental. The content of all historic revelation is conditioned in the circumstances of the man to whom the revelation is addressed. It is clear that the whole matter of revelation is thus apprehended by Kant with more externality than we should have believed. His thought is still essentially archaic and dualistic. He is, therefore, now and then upon the point of denying that such a thing as revelation is possible. The very idea of revelation, in this form, does violence to his fundamental principle of the autonomy of the human reason and will. At many points in his reflection it is transparently clear that nothing can ever come to a man, or be given forth by him, which is not creatively shaped by himself. As regards revelation, however, Kant never frankly took that step. The implications of his own system would have led him to that step. They led to an idea of revelation which was psychologically in harmony with the assumptions of his system, and historically could be conceived as taking place without the interjection of the miraculous in the ordinary sense. If the divine revelation is to be thought as taking place within the human spirit, and in consonance with the laws of all other experience, then the human spirit must itself be conceived as standing in such relation to the divine that the eternal reason may express and reveal itself in the regular course of the mind’s own activity. Then the manifold moral and religious ideals of mankind in all history must take their place as integral factors also in the progress of the divine revelation.

When we come to the more specific topics of his religious teaching, freedom, immortality, God, Kant is prompt to assert that these cannot be objects of theoretical knowledge. Insoluble contradictions arise whenever a proof of them is attempted. If an object of faith could be demonstrated it would cease to be an object of faith. It would have been brought down out of the transcendental world. Were God to us an object among other objects, he would cease to be a God. Were the soul a demonstrable object like any other object, it would cease to be the transcendental aspect of ourselves. Kant makes short work of the so-called proofs for the existence of God which had done duty in the scholastic theology. With subtilty,

sometimes also with bitter irony, he shows that they one and all assume that which they set out to prove. They are theoretically insufficient and practically unnecessary. They have such high-sounding names — the ontological argument, the cosmological, the physico-theological — that almost in spite of ourselves we bring a reverential mood to them. They have been set forth with solemnity by such redoubtable thinkers that there is something almost startling in the way that Kant knocks them about. The fact that the ordinary man among us easily perceives that Kant was right shows only how the climate of the intellectual world has changed. Freedom, immortality, God, are not indeed provable. If given at all, they can be given only in the practical reason. Still they are postulates in the moral order which makes man the citizen of an intelligible world. There can be no 'ought' for a being who is necessitated. We can perceive, and do perceive, that we ought to do a thing. It follows that we can do it. However, the hindrances to the realisation of the moral ideal are such that it cannot be realised in a finite time. Hence the postulate of eternal life for the individual. Finally, reason demands realisation of a supreme good, both a perfect virtue and a corresponding happiness. Man is a final end only as a moral subject. There must be One who is not only a law-giver, but in himself also the realisation of the law of the moral world.

Kant's moral argument thus steps off the line of the others. It is not a proof at all in the sense in which they attempted to be proofs. The existence of God appears as a necessary assumption, if the highest good and value in the world are to be fulfilled. But the conception and possibility of realisation of a highest good is itself something which cannot be concluded with theoretical evidentiality. It is the object of a belief which in entire freedom is directed to that end. Kant lays stress upon the fact that among the practical ideas of reason, that of freedom is the one whose reality admits most nearly of being proved by the laws of pure reason, as well as in conduct and experience. Upon an act of freedom, then, belief rests. 'It is the free holding that to be true, which for the fulfilment of a purpose we find necessary.' Now, as object of this 'free holding something to be true,' he sets forth the conception of the highest good in the world, to be realised through freedom. It is clear that before this argument would prove that a God is necessary to the realisation of the moral order, it would have to be shown that there are no adequate forces immanent within society itself for the establishment and fulfilment of that order. As a matter of fact, reflexion in the nineteenth century, devoted as it has been to the evolution of society, has busied itself with hardly anything more than with the study of those immanent elements which make for morality. It is therefore not an external guarantor of morals, such as Kant thought, which is here given. It is the immanent God who is revealed in the history and life of the race, even as also it is the immanent God who is revealed in the consciousness of the individual soul. Even the moral argument, therefore, in the form in which Kant puts it, sounds remote and strange to us. His reasoning strains and creaks almost as if he were still trying to do that which he had just declared could not be done. What remains of significance for us, is this. All the debate about first causes, absolute beings, and the rest, gives us no God such as our souls need. If a man is to find the witness for soul, immortality and God at all, he must find it within himself and in the spiritual history of his fellows. He must venture, in freedom, the belief in these things, and find their corroboration in the contribution which they make to the solution of the mystery of life. One must venture to win them. One must continue to venture, to keep them. If it were not so, they would not be objects of faith.

The source of the radical evil in man is an intelligible act of human freedom not further to be explained. Moral evil is not, as such, transmitted. Moral qualities are inseparable from the responsibility of the person who commits the deeds. Yet this radical disposition to evil is to be changed into a good one, not altogether by a process of moral reformation. There is such a thing as a fundamental revolution of a man's habit of thought, a conscious and voluntary transference of a man's intention to obey, from the superficial and selfish desires which he has followed, to the deep and spiritual ones which he will henceforth allow. There is an epoch in a man's life when he makes the transition. He probably does it under the spell of personal influence, by the power of example, through the beauty of another personality. To Kant salvation

was character. It was of and in and by character. To no thinker has the moral participation of a man in the regeneration of his own character been more certain and necessary than to Kant. Yet, the change in direction of the will generally comes by an impulse from without. It comes by the impress of a noble personality. It is sustained by enthusiasm for that personality. Kant has therefore a perfectly rational and ethical and vital meaning for the phrase ‘new birth.’

For the purpose of this impulse to goodness, nothing is so effective as the contemplation of an historical example of such surpassing moral grandeur as that which we behold in Jesus. For this reason we may look to Jesus as the ideal of goodness presented to us in flesh and blood. Yet the assertion that Jesus’ historical personality altogether corresponds with the complete and eternal ethical ideal is one which we have no need to make. We do not possess in our own minds the absolute ideal with which in that assertion we compare him.

The ethical ideal of the race is still in process of development. Jesus has been the greatest factor urging forward that development. We ourselves stand at a certain point in that development. We have the ideals which we have because we stand at that point at which we do. The men who come after us will have a worthier ideal than we do. Again, to say that Jesus in his words and conduct expressed in its totality the eternal ethical ideal, would make of his life something different from the real, human life. Every real, human life is lived within certain actual antitheses which call out certain qualities and do not call out others. They demand certain reactions and not others. This is the concrete element without which nothing historical can be conceived. To say that Jesus lived in entire conformity to the ethical ideal so far as we are able to conceive it, and within the circumstances which his own time and place imposed, is the most that we can say. But in any case, Kant insists, the real object of our religious faith is not the historic man, but the ideal of humanity well-pleasing to God. Since this ideal is not of our own creation, but is given us in our super-sensible nature, it may be conceived as the Son of God come down from heaven.

The turn of this last phrase is an absolutely characteristic one, and brings out another quality of Kant’s mind in dealing with the Christian doctrines. They are to him but symbols, forms into which a variety of meanings may be run. He had no great appreciation of the historical element in doctrine. He had no deep sense of the social element and of that for which Christian institutions stand. We may illustrate with that which he says concerning Christ’s vicarious sacrifice. Substitution cannot take place in the moral world. Ethical salvation could not be conferred through such a substitution, even if this could take place. Still, the conception of the vicarious suffering of Christ may be taken as a symbolical expression of the idea that in the pain of self-discipline, of obedience and patience, the new man in us suffers, as it were vicariously, for the old. The atonement is a continual ethical process in the heart of the religious man. It is a grave defect of Kant’s religious philosophy, that it was so absolutely individualistic. Had he realised more deeply than he did the social character of religion and the meaning of these doctrines, not alone as between man and God, but as between man and man, he surely would have drawn nearer to that interpretation of the doctrine of the atonement which has come more and more to prevail. This is the solution which finds in the atonement of Christ the last and most glorious example of a universal law of human life and history. That law is that no redemptive good for men is ever secured without the suffering and sacrifice of those who seek to confer that good upon their fellows. Kant was disposed to regard the traditional forms of Christian doctrine, not as the old rationalism had done, as impositions of a priesthood or inherently absurd. He sought to divest them indeed of that which was speculatively untrue, though he saw in them only symbols of the great moral truths which lie at the heart of religion. The historical spirit of the next fifty years was to teach men a very different way of dealing with these same doctrines.

Kant had said that the primary condition, fundamental not merely to knowledge, but to all connected experience, is the knowing, experiencing, thinking, acting self. It is that which says ‘I,’ the ego, the

permanent subject. But that is not enough. The knowing self demands in turn a knowable world. It must have something outside of itself to which it yet stands related, the object of knowledge. Knowledge is somehow the combination of those two, the result of their co-operation. How have we to think of this co-operation? Both Hume and Berkeley had ended in scepticism as to the reality of knowledge. Hume was in doubt as to the reality of the subject, Berkeley as to that of the object. Kant dissented from both. He vindicated the undoubted reality of the impression which we have concerning a thing. Yet how far that impression is the reproduction of the thing as it is in itself, we can never perfectly know. What we have in our minds is not the object. It is a notion of that object, although we may be assured that we could have no such notion were there no object. Equally, the notion is what it is because the subject is what it is. We can never get outside the processes of our own thought. We cannot know the thing as it is, the *Ding-an-sich*, in Kant's phrase. We know only that there must be a 'thing in itself.'

FICHTE

Fichte asked, Why? Why must there be a *Ding-an-sich*? Why is not that also the result of the activity of the ego? Why is not the ego, the thinking subject, all that is, the creator of the world, according to the laws of thought? If so much is reduced to idea, why not all? This was Fichte's rather forced resolution of the old dualism of thought and thing. It is not the denial of the reality of things, but the assertion that their ideal element, that part of them which is not mere 'thing,' the action and subject of the action, is their underlying reality. According to Kant things exist in a world beyond us. Man has no faculty by which he can penetrate into that world. Still, the farther we follow Kant in his analysis the more does the contribution to knowledge from the side of the mind tend to increase, and the more does the factor in our impressions from the side of things tend to fade away. This basis of impression being wholly unknowable is as good as non-existent for us. Yet it never actually disappears. There would seem to be inevitable a sort of kernel of matter or prick of sense about which all our thoughts are generated. Yet this residue is a vanishing quantity. This seemed to Fichte to be a self-contradiction and a half-way measure. Only two positions appeared to him thorough-going and consequent. Either one posits as fundamental the thing itself, matter, independent of any consciousness of it. So Spinoza had taught. Or else one takes consciousness, the conscious subject, independent of any matter or thing as fundamental. This last Fichte claimed to be the real issue of Kant's thought. He asserts that from the point of view of the thing in itself we can never explain knowledge. We may be as skilful as possible in placing one thing behind another in the relation of cause to effect. It is, however, an unending series. It is like the cosmogony of the Eastern people which fabled that the earth rests upon the back of an elephant. The elephant stands upon a tortoise. The question is, upon what does the tortoise stand? So here, we may say, in the conclusive manner in which men have always said, that God made the world. Yet sooner or later we come to the child's question: Who made God? Fichte rightly replied: 'If God is for us only an object of knowledge, the *Ding-an-sich* at the end of the series, there is no escape from the answer that man, the thinker, in thinking God made him.' All the world, including man, is but the reflexion, the revelation in forms of the finite, of an unceasing action of thought of which the ego is the object. Nothing more paradoxical than this conclusion can be imagined. It seems to make the human subject, the man myself, the creator of the universe, and the universe only that which I happen to think it to be.

This interpretation was at first put upon Fichte's reasoning with such vigour that he was accused of atheism. He was driven from his chair in Jena. Only after several years was he called to a corresponding post in Berlin. Later, in his *Vocation of Man*, he brought his thought to clearness in this form: 'If God be only the object of thought, it remains true that he is then but the creation of man's thought. God is, however, to be understood as subject, as the real subject, the transcendent thinking and knowing subject, indwelling in the world and making the world what it is, indwelling in us and making us what we are. We

ourselves are subjects only in so far as we are parts of God. We think and know only in so far as God thinks and knows and acts and lives in us. The world, including ourselves, is but the reflection of the thought of God, who thus only has existence. Neither the world nor we have existence apart from him.'

Johann Gottlieb Fichte was born at Rammenau in 1762. His father was a ribbon weaver. He came of a family distinguished for piety and uprightness. He studied at Jena, and became an instructor there in 1793. He was at first a devout disciple of Kant, but gradually separated himself from his master. There is a humorous tale as to one of his early books which was, through mistake of the publisher, put forth without the author's name. For a brief time it was hailed as a work of Kant — his *Critique of Revelation*. Fichte was a man of high moral enthusiasm, very uncompromising, unable to put himself in the place of an opponent, in incessant strife. The great work of his Jena period was his *Wissenschaftslehre,* 1794. His popular Works, *Die Bestimmung des Menschen* and *Anweisung zum seligen Leben*, belong to his Berlin period. The disasters of 1806 drove him out of Berlin. Amidst the dangers and discouragements of the next few years he wrote his famous *Reden an die deutsche Nation*. He drew up the plan for the founding of the University of Berlin. In 1810 he was called to be rector of the newly established university. He was, perhaps, the chief adviser of Frederick William III in the laying of the foundations of the university, which was surely a notable venture for those trying years. In the autumn of 1812 and again in 1813, when the hospitals were full of sick and wounded after the Russian and Leipzig campaigns, Fichte and his wife were unceasing in their care of the sufferers. He died of fever contracted in the hospital in January 1814.

According to Fichte, as we have seen, the world of sense is the reflection of our own inner activity. It exists for us as the sphere and material of our duty. The moral order only is divine. We, the finite intelligences, exist only in and through the infinite intelligence. All our life is thus God's life. We are immortal because he is immortal. Our consciousness is his consciousness. Our life and moral force is his, the reflection and manifestation of his being, individuation of the infinite reason which is everywhere present in the finite. In God we see the world also in a new light. There is no longer any nature which is external to ourselves and unrelated to ourselves. There is only God manifesting himself in nature. Even the evil is only a means to good and, therefore, only an apparent evil. We are God's immediate manifestation, being spirit like himself. The world is his mediate manifestation. The world of dead matter, as men have called it, does not exist. God is the reality within the forms of nature and within ourselves, by which alone we have reality. The duty to which a God outside of ourselves could only command us, becomes a privilege to which we need no commandment, but to the fulfilment of which, rather, we are drawn in joy by the forces of our own being. How a man could, even in the immature stages of these thoughts, have been persecuted for atheism, it is not easy to see, although we may admit that his earlier forms of statement were bewildering. When we have his whole thought before us we should say rather that it borders on acosmic pantheism, for which everything is God and the world does not exist.

We have no need to follow Fichte farther. Suffice it to say, with reference to the theory of knowledge, that he had discovered that one could not stand still with Kant. One must either go back toward the position of the old empiricism which assumed the reality of the world exactly as it appeared, or else one must go forward to an idealism more thorough-going than Kant had planned. Of the two paths which, with all the vast advance of the natural sciences, the thought of the nineteenth century might traverse, that of the denial of everything except the mechanism of nature, and that of the assertion that nature is but the organ of spirit and is instinct with reason, Fichte chose the latter and blazed out the path along which all the idealists have followed him. In reference to the philosophy of religion, we must say that, with all the extravagance, the pantheism and mysticism of his phrases, Fichte's great contribution was his breaking down of the old dualism between God and man which was still fundamental to Kant. It was his assertion of the unity of man and God and of the life of God in man. This thought has been appropriated in all of modern theology.

It was the meagreness of Fichte’s treatment of nature which impelled Schelling to what he called his outbreak into reality. Nature will not be dismissed, as simply that which is not I. You cannot say that nature is only the sphere of my self-realisation. Individuals are in their way the children of nature. They are this in respect of their souls as much as of their bodies. Nature was before they were. Nature is, moreover, not alien to intelligence. On the contrary, it is a treasure-house of intelligible forms which demand to be treated as such. It appeared to Schelling, therefore, a truer idealism to work out an intelligible system of nature, exhibiting its essential oneness with personality.

Friedrich Wilhelm Joseph von Schelling was born in 1775 at Leonberg in Württemberg. His father was a clergyman. He was precocious in his intellectual development and much spoiled by vanity. Before he was twenty years old he had published three works upon problems suggested by Fichte. At twenty-three he was extraordinarius at Jena. He had apparently a brilliant career before him. He published his *Erster Entwurf eines Systems der Naturphilosophe*, 1799, and also his *System des transcendentalen Idealismus*, 1800. Even his short residence at Jena was troubled by violent conflicts with his colleagues. It was brought to an end by his marriage with the wife of Augustus von Schlegel, who had been divorced for the purpose. From 1806 to 1841 he lived in Munich in retirement. The long-expected books which were to fulfil his early promise never appeared. Hegel’s stricture was just. Schelling had no taste for the prolonged and intense labour which his brilliant early works marked out. He died in 1854, having reached the age of seventy-nine years, of which at least fifty were as melancholy and fruitless as could well be imagined.

The dominating idea of Schelling’s philosophy of nature may be said to be the exhibition of nature as the progress of intelligence toward consciousness and personality. Nature is the ego in evolution, personality in the making. All natural objects are visible analogues and counterparts of mind. The intelligence which their structure reveals, men had interpreted as residing in the mind of a maker of the world. Nature had been spoken of as if it were a watch. God was its great artificer. No one asserted that its intelligence and power of development lay within itself. On the contrary, nature is always in the process of advance from lower, less highly organised and less intelligible forms, to those which are more highly organised, more nearly the counterpart of the active intelligence in man himself. The personality of man had been viewed as standing over against nature, this last being thought of as static and permanent. On the contrary, the personality of man, with all of its intelligence and free will, is but the climax and fulfilment of a long succession of intelligible forms in nature, passing upward from the inorganic to the organic, from the unconscious to the conscious, from the non-moral to the moral, as these are at last seen in man. Of course, it was the life of organic nature which first suggested this notion to Schelling. An organism is a self-moving, self-producing whole. It is an idea in process of self-realisation. What was observed in the organism was then made by Schelling the root idea of universal nature. Nature is in all its parts living, self-moving along the lines of its development, productivity and product both in one. Empirical science may deal with separate products of nature. It may treat them as objects of analysis and investigation. It may even take the whole of nature as an object. But nature is not mere object. Philosophy has to treat of the inner life which moves the whole of nature as intelligible productivity, as subject, no longer as object. Personality has slowly arisen out of nature. Nature was going through this process of self-development before there were any men to contemplate it. It would go through this process were there no longer men to contemplate it.

Schelling has here rounded out the theory of absolute idealism which Fichte had carried through in a one-sided way. He has given us also a wonderful anticipation of certain modern ideas concerning nature’s preparation for the doctrine of evolution, which was a stroke of genius in its way. He attempted to arrange the realm of unconscious intelligences in an ascending series which should bridge the gulf between the

lowest of natural forms and the fully equipped organism in which self consciousness, with the intellectual, the emotional, and moral life, at last integrated. Inadequate material and a fondness for analogies led Schelling into vagaries in following out this scheme. Nevertheless, it is only in detail that we can look askance at his attempt. In principle our own conception of the universe is the same. It is the dynamic view of nature and an application of the principle of evolution in the widest sense. His errors were those into which a man was bound to fall who undertook to forestall by a sweep of the imagination that which has been the result of the detailed and patient investigation of three generations. What Schelling attempted was to take nature as we know it and to exhibit it as in reality a function of intelligence, pointing, through all the gradations of its varied forms, towards its necessary goal in self-conscious personality. Instead, therefore, of our having in nature and personality two things which cannot be brought together, these become members of one great organism of intelligence of which the immanent God is the source and the sustaining power. These ideas constitute Schelling's contribution to an idealistic and, of course, an essentially monistic view of the universe. The unity of man with God, Fichte had asserted. Schelling set forth the oneness of God and nature, and again of man and nature. The circle was complete.

If we have succeeded in conveying a clear idea of the movement of thought from Kant to Hegel, that idea might be stated thus. There are but three possible objects which can engage the thought of man. These are nature and man and God. There is the universe, of which we become aware through experience from our earliest childhood. Then there is man, the man given in self-consciousness, primarily the man myself. In this sense man seems to stand over against nature. Then, as the third possible object of thought, we have God. Upon the thought of God we usually come from the point of view of the category of cause. God is the name which men give to that which lies behind nature and man as the origin and explanation of both. Plato's chief interest was in man. He talked much concerning a God who was somehow the speculative postulate of the spiritual nature in man. Aristotle began a real observation of nature. But the ancient and, still more, the mediæval study of nature was dominated by abstract and theological assumptions. These prevented any real study of that nature in the midst of which man lives, in reaction against which he develops his powers, and to which, on one whole side of his nature, he belongs. Even in respect of that which men reverently took to be thought concerning God, they seem to have been unaware how much of their material was imaginative and poetic symbolism drawn from the experience of man. The traditional idea of revelation proved a disturbing factor. Assuming that revelation gave information concerning God, and not rather the religious experience of communion with God himself, men accepted statements of the documents of revelation as if they had been definitions graciously given from out the realm of the unseen. In reality, they were but fetches from out the world of the known into the world of the unknown.

The point of interest is this: — In all possible combinations in which, throughout the history of thought, these three objects had been set, the one with the others, they had always remained three objects. There was no essential relation of the one to the other. They were like the points of a triangle of which any one stood over against the other two. God stood over against the man whom he had fashioned, man over against the God to whom he was responsible. The consequences for theology are evident. When men wished to describe, for example, Jesus as the Son of God, they laid emphasis upon every quality which he had, or was supposed to have, which was not common to him with other men. They lost sight of that profound interest of religion which has always claimed that, in some sense, all men are sons of God and Jesus was the son of man. Jesus was then only truly honoured as divine when every trait of his humanity was ignored. Similarly, when men spoke of revelation they laid emphasis upon those particulars in which this supposed method of coming by information was unlike all other methods. Knowledge derived directly from God through revelation was in no sense the parallel of knowledge derived by men in any other way. So also God stood over against nature. God was indeed declared to have made nature. He had, however, but given it, so to say, an original impulse. That impulse also it had in some strange way lost or perverted,

so that the world, though it had been made by God, was not good. For the most part it moved itself, although God's sovereignty was evidenced in that he could still supervene upon it, if he chose. The supernatural was the realm of God. Natural and supernatural were mutually exclusive terms, just as we saw that divine and human were exclusive terms. So also, on the third side of our triangle, man stood over against nature. Nature was to primitive men the realm of caprice, in which they imagined demons, spirits and the like. These were antagonistic to men, as also hostile to God. Then, when with the advance of reflexion these spirits, and equally their counterparts, the good genii and angels, had all died, nature became the realm of iron necessity, of regardless law, of all-destroying force, of cruel and indifferent fate. From this men took refuge in the thought of a compassionate God, though they could not withdraw themselves or those whom they loved from the inexorable laws of nature. They could not see that God always, or even often, intervened on their behalf. It cannot be denied that these ideas prevail to some extent in the popular theology at the present moment. Much of our popular religious language is an inheritance from a time when they universally prevailed. The religious intuition even of psalmists and prophets opposed many of these notions. The pure religious intuition of Jesus opposed almost every one of them. Mystics in every religion have had, at times, insight into an altogether different scheme of things. The philosophy, however, even of the learned, would, in the main, have supported the views above described, from the dawn of reflexion almost to our own time.

It was Kant who first began the resolution of this three-cornered difficulty. When he pointed out that into the world, as we know it, an element of spirit goes, that in it an element of the ideal inheres, he began a movement which has issued in modern monism. He affirmed that that element from my thought which enters into the world, as I know it, may be so great that only just a point of matter and a prick of sense remains. Fichte said: 'Why do we put it all in so perverse a way? Why reduce the world of matter to just a point? Why is it not taken for what it is, and yet understood to be all alive with God and we able to think of it, because we are parts of the great thinker God?' Still Fichte had busied himself almost wholly with consciousness. Schelling endeavoured to correct that. Nature lives and moves in God, just as truly in one way as does man in another. Men arise out of nature. A circle has been drawn through the points of our triangle. Nature and man are in a new and deeper sense revelations of God. In fact, supplementing one another, they constitute the only possible channels for the manifestation of God. It hardly needs to be said that these thoughts are widely appropriated in our modern world. These once novel speculations of the kings of thought have made their way slowly to all strata of society. Remote and difficult in their first expression in the language of the schools, their implications are to-day on everybody's lips. It is this unitary view of the universe which has made difficult the acceptance of a theology, the understandlng of a religion, which are still largely phrased in the language of a philosophy to which these ideas did not belong. There is not an historic creed, there is hardly a greater system of theology, which is not stated in terms of a philosophy and science which no longer reign. Men are asking: 'cannot Christianity be so stated and interpreted that it shall meet the needs of men of the twentieth century, as truly as it met those of men of the first or of the sixteenth?' Hegel, the last of this great group of idealistic philosophers whom we shall name, enthusiastically believed in this new interpretation of the faith which was profoundly dear to him. He made important contribution to that interpretation.

HEGEL

Georg Wilhelm Friedrich Hegel was born in Stuttgart in 1770. His father was in the fiscal service of the King of Württemberg. He studied in Tübingen. He was heavy and slow of development, in striking contrast with Schelling. He served as tutor in Bern and Frankfort, and began to lecture in Jena in 1801. He was much overshadowed by Schelling. The victory of Napoleon at Jena in 1806 closed the university for a time. In 1818 he was called to Fichte's old chair in Berlin. Never on very good terms with the Prussian

Government, he yet showed his large sympathy with life in every way. After 1820 a school of philosophical thinkers began to gather about him. His first great book, his *Phenomenologie des Geistes* 1807 (translated, Baillie, London, 1910), was published at the end of his Jena period. His *Philosophie der Religion* and *Philosophie der Geschichte* were edited after his death. They are mainly in the form which his notes took between 1823 and 1827. He died during an epidemic of cholera in Berlin in 1831.

Besides his deep interest in history the most striking feature of Hegel's preliminary training was his profound study of Christianity. He might almost be said to have turned to philosophy as a means of formulating the ideas which he had conceived concerning the development of the religious consciousness, which seemed to him to have been the bearer of all human culture. No one could fail to see that the idea of the relation of God and man, of which we have been speaking, was bound to make itself felt in the interpretation of the doctrine of the incarnation and of all the dogmas, like that of the trinity, which are connected with it. Characteristically, Hegel had pure joy in the speculative aspects of the problem. If one may speak in all reverence, and, at the same time, not without a shade of humour, Hegel rejoiced to find himself able, as he supposed, to rehabilitate the dogma of the trinity, rationalised in approved fashion. It is as if the dogma had been a revered form or mould, which was for him indeed emptied of its original content. He felt bound to fill it anew. Or to speak more justly, he was really convinced that the new meaning which he poured into the dogma was the true meaning which the Church Fathers had been seeking all the while. In the light of two generations of sober dealing, as historians, with such problems, we can but view his solution in a manner very different from that which he indulged. He was even disposed mildly to censure the professional theologians for leaving the defence of the doctrine of the trinity to the philosophers. There were then, and have since been, defenders of the doctrine who have thought that Hegel tendered them great aid. As a matter of fact, despite his own utter seriousness and reverent desire, his solution was a complete dissolution of the doctrine and of much else besides. His view would have been fatal, not merely to that particular form of orthodox thought, but, what is much more serious, to the religious meaning for which it stood. Sooner or later men have seen that the whole drift of Hegelianism was to transform religion into intellectualism. One might say that it was exactly this which the ancient metaphysicians, in the classic doctrine of the trinity, had done. They had transformed religion into metaphysics. The matter would not have been remedied by having a modern metaphysician do the same thing in another way.

Hegel was weary of Fichte's endless discussion of the ego and Schelling's of the absolute. It was not the abyss of the unknowable from which things said to come, or that into which they go, which interested Hegel. It was their process and progress which we can know. It was that part of their movement which is observable within actual experience, with which he was concerned. Now one of the laws of the movement of all things, he said, is that by which every thought suggests, and every force tends directly to produce, its opposite. Nothing stands alone. Everything exists by the balance and friction of opposing tendencies. We have the universal contrasts of heat and cold, of light and darkness, of inward and outward, of static and dynamic, of yes and no. There are two sides to every case, democratic government and absolutism, freedom of religion and authority, the individualistic and the social principles, a materialistic and a spiritual interpretation of the universe. Only things which are dead have ceased to have this tide and alternation. Christ is for living religion now a man, now God, revelation now natural, now supernatural. Religion in the eternal conflict between reason and faith, morals the struggle of good and evil, God now mysterious and now manifest.

Fichte had said: The essence of the universe is spirit. Hegel said: Yes, but the true notion of spirit is that of the resolution of contradiction, of the exhibition of opposites as held together in their unity. This is the meaning of the trinity. In the trinity we have God who wills to manifest himself, Jesus in whom he is manifest, and the spirit common to them both. God's existence is not static, it is dynamic. It is motion, not rest. God is revealer, recipient, and revelation all in one. The trinity was for Hegel the central doctrine of

Christianity. Popular orthodoxy had drawn near to the assertion of three Gods. The revolt, however, in asserting the unity of God, had made of God a meaningless absolute as foundation of the universe. The orthodox, in respect to the person of Christ, had always indeed asserted in laboured way that Jesus was both God and man. Starting from their own abstract conception of God, and attributing to Jesus the qualities of that abstraction, they had ended in making of the humanity of Jesus a perfectly unreal thing. On the other hand, those who had set out from Jesus's real humanity had been unable to see that he was anything more than a mere man, as their phrase was. On their own assumption of the mutual exclusiveness of the conceptions of God and man, they could not do otherwise.

Hegel saw clearly that God can be known to us only in and through manifestation. We can certainly make no predication as to how God exists, in himself, as men say, and apart from our knowledge. He exists for our knowledge only as manifest in nature and man. Man is for Hegel part of nature and Jesus is the highest point which the nature of God as manifest in man has reached. In this sense Hegel sometimes even calls nature the Son of God, and mankind and Jesus are thought of as parts of this one manifestation of God. If the Scripture asserts, as it seemed to the framers of the creeds to do, that God manifested himself from before all worlds in and to a self-conscious personality like his own, Hegel would answer: But the Scripture is no third source of knowledge, besides nature and man. Scripture is only the record of God's revelation of himself in and to men. If these men framed their profoundest thought in this way, that is only because they lived in an age when men had all their thoughts of this sort in a form which we can historically trace. For Platonists and Neoplatonists, such as the makers of the creeds — and some portions of the Scripture show this influence, as well — the divine, the ideal, was always thought of as eternal. It always existed as pure archetype before it ever existed as historic fact. The rabbins had a speculation to the same effect. The divine which exists must have pre-existed. Jesus as Son of God could not be thought of by the ancient world in any terms but these. The divine was static, changelessly perfect. For the modern man the divinest of all things is the mystery of growth. The perfect man is not at the beginning, but far down the immeasurable series of approaches to perfection. The perfection of other men is the work of still other ages, in which this extraordinary and inexplicable moral magnitude which Jesus is, has had its influence, and conferred upon them power to aid them in the fulfilment of God's intent for themselves, which is like that intent for himself which Jesus has fulfilled.

Surely enough has been said to show that what we have here is only the absorption of even the profoundest religious meanings into the vortex of an all-dissolving metaphysical system. The most obvious meaning of the phrase 'Son of God,' its moral and spiritual, its real religious meaning, is dwelt on, here in Hegel, as little as Hegel claimed that the Nicene trinitarians had dwelt upon it. Nothing marks more clearly the distance we have travelled since Hegel than does the general recognition that his attempted solution does not even lie in the right direction. It is an attempt within the same area as that of the Nicene Council and the creeds, namely, the metaphysical area. What is at stake is not the pre-existence or the two natures. Hegel was right in what he said concerning these. The pre-existence cannot be thought of except as ideal. The two natures we assert for every man, only not in such a manner as to destroy unity in the personality. The heart of the dogma is not in these. It is the oneness of God and man, a moral and spiritual oneness, oneness in conduct and consciousness, the presence and realisation of God, who is spirit, in a real man, the divineness of Jesus, in a sense which sees no meaning any longer in the old debate as between his divinity and his deity.

In the light of the new theory of the universe which we have reviewed, it flashes upon us that both defenders and assailants of the doctrine of the incarnation, in the age-long debate, have proceeded from the assumption that God and man are opposites. Men contended for the divineness of Jesus in terms which by definition shut out his true humanity. They asserted the identity of a real man, a true historic personage, with an abstract notion of God which had actually been framed by the denial of all human qualities. Their opponents with a like helplessness merely reversed the situation. To admit the deity of Jesus would have

been for them, in all candour and clear-sightedness, absolutely impossible, because the admission would have shut out his true humanity. On the old definitions we cannot wonder that the struggle was a bitter one. Each party was on its own terms right. If God is by definition other than man, and man the opposite of God, then it is not surprising that the attempt to say that Jesus of Nazareth was both, remained mysticism to the one and seemed folly to the other.

Now, within the area of the philosophy which begins with Kant this old antinomy has been resolved. An actual circle of clear relations joins the points of the old hopeless triangle. Men are men because of God indwelling in them, working through them. The phrase 'mere man' is seen to be a mere phrase. To say that the Nazarene, in some way not genetically to be explained, but which is hidden within the recesses of his own personality, shows forth in incomparable fulness that relation of God and man which is the ideal for us all, seems only to be saying over again what Jesus said when he proclaimed: 'I and My Father are one.' That Jesus actualised, not absolutely in the sense that he stood out of relation to history, but still perfectly within his relation to history, that which in us and for us is potential, the sonship of God — that seems a very simple and intelligible assertion. It certainly makes a large part of the debate of ages seem remote from us. It brings home to us that we live in a new world.

Interesting and fruitful is Hegel's expansion of the idea of redemption beyond that of the individual to that of the whole humanity, and in every aspect of its life. In my relation to the world are given my duties. The renunciation of outward duty makes the inward life barren. The principle which is to transform the world wears an aspect very different from that of stoicism, of asceticism or even of the individualism which has sought soul-salvation. In the midst of unworthiness and helplessness there springs up the consciousness of reconciliation. Man, with all his imperfections, becomes aware that he is the object of the loving purpose of God. Still this redemption of a man is something which is to be worked out, in the individual life and on the stage of universal history. The first step beyond the individual life is that of the Church. It is from within this community of believers that men, in the rule, receive the impulse to the good. The community is, in its idea, a society in which the conquest of evil is already being achieved, where the individual is spared much bitter conflict and loneliness. Nevertheless, so long as this unity of the life of man with God is realised in the Church alone there remains a false and harmful opposition between the Church and the world. Religion is faced by a hostile power to which its principles have no application. The world is denounced as unholy. With this stigma cast upon it, it may be unholy. Yet the retribution falls also upon the Church, in that it becomes artificial, clerical, pharisaical. The end is never that what have been called the standards of the Church shall prevail. The end is that the Church shall be the shrine and centre of an influence by virtue of which the standard of truth and goodness which naturally belongs to any relation of life shall prevail. The distinction between religion and secular life must be abandoned. Nothing is less sacred than a Church set on its own aggrandisement. The relations of family and of the State, of business and social life, are to be restored to the divineness which belongs to them, or rather, the divineness which is inalienable from them is to be recognised. In the laws and customs of a true State, Christianity first penetrates with its principles the real world. One sees how large a portion of these thoughts have been taken up into the programme of modern social movements. They are the basis of what men call a social theology. A book like Fremantle's *World as the Subject of Redemption* is their thorough-going exposition in the English tongue.

We have no cause to pursue the philosophical movement beyond this point. Its exponents are not without interest. Especially is this true of Schopenhauer. But the deposit from their work is for our particular purpose not great. The wonderful impulse had spent itself. These four brilliant men stand together, almost as much isolated from the generation which followed them as from that which went before. The historian of Christian thought in the nineteenth century cannot overestimate the significance of their personal interest in religion.

CHAPTER III. THEOLOGICAL RECONSTRUCTION

The outstanding trait of Kant's reflection upon religion is its supreme interest in morals and conduct. Metaphysician that he was, Kant saw the evil which intellectualism had done to religion. Religion was a profoundly real thing to him in his own life. Religion is a life. It is a system of thought only because life is a whole. It is a system of thought only in the way of deposit from a vivid and vigorous life. A man normally reflects on the conditions and aims of what he does. Religion is conduct. Ends in character are supreme. Religions and the many interpretations of Christianity have been good or bad, according as they ministered to character. So strong was this ethical trait in Kant that it dwarfed all else. He was not himself a man of great breadth or richness of feeling. He was not a man of imagination. His religion was austere, not to say arid. Hegel was before all things an intellectualist. Speculation was the breath of life to him. He had metaphysical genius. He tended to transform in this direction everything which he touched. Religion is thought. He criticised the rationalist movement from the height of vantage which idealism had reached. But as pure intellectualist he would put most rationalists to shame. We owe to this temperament his zeal for an interpretation of the universe 'all in one piece.' Its highest quality would be its abstract truth. His understanding of religion had the glory and the limitations which attend this view.

SCHLEIERMACHER

Between Kant and Hegel came another, Schleiermacher. He too was no mean philosopher. But he was essentially a theologian, the founder of modern theology. He served in the same faculty with Hegel and was overshadowed by him. His influence upon religious thought was less immediate. It has been more permanent. It was characteristically upon the side which Kant and Hegel had neglected. That was the side of feeling. His theology has been called the theology of feeling. He defined religion as feeling. Christianity is for him a specific feeling. Because he made so much of feeling, his name has been made a theological household word by many who appropriated little else of all he had to teach. His warmth and passion, his enthusiasm for Christ, the central place of Christ in his system, made him loved by many who, had they understood him better, might have loved him less. For his real greatness lay, not in the fact that he possessed these qualities alone, but that he possessed them in a singularly beautiful combination with other qualities. The emphasis is, however, correct. He was the prophet of feeling, as Kant had been of ethical religion and Hegel of the intellectuality of faith. The entire Protestant theology of the nineteenth century has felt his influence. The English-speaking race is almost as much his debtor as is his own. The French Huguenots of the revival felt him to be one of themselves. Even to Amiel and Scherer he was a kindred spirit.

It is a true remark of Dilthey that in unusual degree an understanding of the man's personality and career is necessary to the appreciation of his thought. Friedrich Ernst Daniel Schleiermacher was born in 1768 in Breslau, the son of a chaplain in the Reformed Church. He never connected himself officially with the Lutheran Church. We have alluded to an episode broadly characteristic of his youth. He was tutor in the house of one of the landed nobility of Prussia, curate in a country parish, preacher at the Charité in Berlin in 1795, professor extraordinarius at Halle in 1804, preacher at the Church of the Dreifaltigkeit in Berlin in 1807, professor of theology and organiser of that faculty in the newly-founded University of Berlin in 1810. He never gave up his position as pastor and preacher, maintaining this activity along with his unusual labours as teacher, executive and author. He died in 1834. In his earlier years in Berlin he belonged to the circle of brilliant men and women who made Berlin famous in those years. It was a fashionable society composed of persons more or less of the rationalistic school. Not a few of them, like the Schlegels, were deeply tinged with romanticism. There were also among them Jews of the house of

the elder Mendelssohn. Morally it was a society not altogether above reproach. Its opposition to religion was a by-word. An affection of the susceptible youth for a woman unhappily married brought him to the verge of despair. It was an affection which his passing pride as romanticist would have made him think it prudish to discard, while the deep, underlying elements of his nature made it inconceivable that he should indulge. Only in later years did he heal his wound in a happy married life.

The episode was typical of the experience he was passing through. He understood the public with which his first book dealt. That book bears the striking title, *Reden über die Religion, an die Gebildeten unter ihren Verächtern* (translated, Oman, Oxford, 1893). His public understood him. He could reach them as perhaps no other man could do. If he had ever concealed what religion was to him, he now paid the price. If they had made light of him, he now made war on them. This meed they could hardly withhold from him, that he understood most other things quite as well as they, and religion much better than they. The rhetorical form is a fiction. The addresses were never delivered. Their tension and straining after effect is palpable. They are a cry of pain on the part of one who sees that assailed which is sacred to him, of triumph as he feels himself able to repel the assault, of brooding persuasiveness lest any should fail to be won for his truth. He concedes everything. It is part of his art to go further than his detractors. He is so well versed in his subject that he can do that with consummate mastery, where they are clumsy or dilettante. It is but a pale ghost of religion that he has left. But he has attained his purpose. He has vindicated the place of religion in the life of culture. He has shown the relation of religion to every great thing in civilisation, its affinity with art, its common quality with poetry, its identity with all profound activities of the soul. These all are religion, though their votaries know it not. These are reverence for the highest, dependence on the highest, self-surrender to the highest. No great man ever lived, no great work was ever done, save in an attitude toward the universe, which is identical with that of the religious man toward God. The universe is God. God is the universe. That religionists have obscured this simple truth and denied this grand relation is true, and nothing to the point. The cultivated should be ashamed not to know this. Then, with a sympathy with institutional religion and a knowledge of history in which he stood almost alone, he retracts much that he has yielded, he rebuilds much that he has thrown down, proclaims much which they must now concede. The book was published in 1799. Twenty years later he said sadly that if he were rewriting it, its shafts would be directed against some very different persons, against glib and smug people who boasted the form of godliness, conventional, even fashionable religionists and loveless ecclesiastics. Vast and various influences in the Germany of the first two decades of the century had wrought for the revival of religion. Of those influences, not the least had been that of Schleiermacher's book. Among the greatest had been Schleiermacher himself.

The religion of feeling, as advocated in the *Reden*, had left much on the ethical side to be desired. This defect the author sought to remedy in his *Monologen*, published in 1800. The programme of theological studies for the new University of Berlin, *Kurze Darstellung des Theologischen Studiums*, 1811, shows his theological system already in large part matured. His *Der christliche Glaube*, published in 1821, revised three years before his death in 1834, is his monumental work. His *Ethik*, his lectures upon many subjects, numerous volumes of sermons, all published after his death, witness his versatility. His sermons have the rare note which one finds in Robertson and Brooks.

All of the immediacy of religion, its independence of rational argument, of historical tradition or institutional forms, which was characteristic of Schleiermacher to his latest day, is felt in the *Reden*. By it he thrilled the hearts of men as they have rarely been thrilled. It is not forms and traditions which create religion. It is religion which creates these. They cannot exist without it. It may exist without them, though not so well or so effectively. Religion is the sense of God. That sense we have, though many call it by another name. It would be more true to say that that sense has us. It is inescapable. All who have it are the religious. Those who hold to dogmas, rites, institutions in such a way as to obscure and overlay this sense of God, those who hold those as substitute for that sense, are the nearest to being irreligious. Any form,

the most *outré*, bizarre and unconventional, is good, so only that it helps a man to God. All forms are evil, the most accredited the most evil, if they come between a man and God. The pantheism of the thought of God in all of Schleiermacher's early work is undeniable. He never wholly put it aside. The personality of God seemed to him a limitation. Language is here only symbolical, a mere expression from an environment which we know, flung out into the depths of that we cannot see. If the language of personal relations helps men in living with their truth — well and good. It hinders also. For himself he felt that it hindered more than helped. His definition of religion as the feeling of dependence upon God, is cited as evidence of the effect upon him of his contention against the personalness of God. Religion is also, it is alleged, the sentiment of fellowship with God. Fellowship implies persons. But to no man was the fellowship with the soul of his own soul and of all the universe more real than was that fellowship to Schleiermacher. This was the more true in his maturer years, the years of the magnificent rounding out of his thought. God was to him indeed not 'a man in the next street.' What he says about the problem of the personalness of God is true. We see, perhaps, more clearly than did he that the debate is largely about words. Similarly, we may say that Schleiermacher's passing denial of the immortality of the soul was directed, in the first instance, against the crass, unsocial and immoral view which has disfigured much of the teaching of religion. His contention was directed toward that losing of oneself in God through ideals and service now, which in more modern phrase we call the entrance upon the immortal life here, the being in eternity now. For a soul so disposed, for a life thus inspired, death is but an episode. For himself he rejoices to declare it one to the issue of which he is indifferent. If he may thus live with God now, he cares little whether or not he shall live by and by.

In his *Monologues* Schleiermacher first sets forth his ethical thought. As it is religion that a man feels himself dependent upon God, so is it the beginning of morality that a man feels his dependence upon his fellows and their dependence on him. Slaves of their own time and circumstance, men live out their lives in superficiality and isolation. They are a prey to their own selfishness. They never come into those relations with their fellows in which the moral ideal can be realised. Man in his isolation from his fellows is nothing and accomplishes nothing. The interests of the whole humanity are his private interests. His own happiness and welfare are not possible to be secured save through his co-operation with others, his work and service for others. The happiness and welfare of others not merely react upon his own. They are in a large sense identical with his own. This oneness of a man with all men is the basis of morality, just as the oneness of man with God is the basis of religion. In both cases the oneness exists whether or not we know it. The contradictions and miseries into which immoral or unmoral conduct plunges us, are the witness of the fact that this inviolable unity of a man with humanity is operative, even if he ignores it. Often it is his ignoring of this relation which brings him through misery to consciousness of it. Man as moral being is but an individuation of humanity, just as, again, as religious being he is but an individuation of God. The goal of the moral life is the absorption of self, the elimination of self, which is at the same time the realisation of self, through the life and service for others. The goal of religion is the elimination of self, the swallowing up of self, in the service of God. In truth, the unity of man with man is at bottom only another form of his unity with God, and the service of humanity is the identical service of God. Other so-called services of God are a means to this, or else an illusion. This parallel of religion and morals is to be set over against other passages, easily to be cited, in which Schleiermacher speaks of passivity and contemplation as the means of the realisation of the unity of man and God, as if the elimination of self meant a sort of Nirvana. Schleiermacher was a pantheist and mystic. No philosopher save Kant ever influenced him half so much as did Spinoza. There is something almost oriental in his mood at times. An occasional fragment of description of religion might pass as a better delineation of Buddhism than of Christianity. This universality of his mind is interesting. These elements have not been unattractive to some portions of his following. One wearied with the Philistinism of the modern popular urgency upon practicality turns to Schleiermacher, as indeed sometimes to Spinoza, and says, here is a man who at least

knows what religion is. Yet nothing is further from the truth than to say that Schleiermacher had no sense for the meaning of religion in the outward life and present world.

In the *Reden* Schleiermacher had contended that religion is a condition of devout feeling, specifically the feeling of dependence upon God. This view dominates his treatment of Christianity. It gives him his point of departure. A Christian is possessed of the devout feeling of dependence upon God through Jesus Christ or, as again he phrases it, of dependence upon Christ. Christianity is a positive religion in the sense that it has direct relation to certain facts in the history of the race, most of all to the person of Jesus of Nazareth. But it does not consist in any positive propositions whatsoever. These have arisen in the process of interpretation of the faith. The substance of the faith is the experience of renewal in Christ, of redemption through Christ. This inward experience is neither produced by pure thought nor dependent upon it. Like all other experience it is simply an object to be described and reckoned with. Orthodox dogmatists had held that the content of the Christian faith is a doctrine given in revelation. Schleiermacher held that it is a consciousness inspired primarily by the personality of Jesus. It must be connected with the other data and acta of our consciousness under the general laws of the operation of the mind. Against rationalism and much so-called liberal Christianity, Schleiermacher contended that Christianity is not a new set of propositions periodically brought up to date and proclaimed as if these alone were true. New propositions can have only the same relativity of truth which belonged to the old ones in their day. They may stand between men and religion as seriously as the others had done.

The condition of the heart, which is religion, the experience through Jesus which is Christianity, is primarily an individual matter. But it is not solely such. It is a common experience also. Schleiermacher recognises the common element in the Christian consciousness, the element which shows itself in the Christian experience of all ages, of different races and of countless numbers of men. By this recognition of the Christian Church in its deep and spiritual sense, Schleiermacher hopes to escape the vagaries and eccentricities, and again the narrowness and bigotries of pure individualism. No liberal theologian until Schleiermacher had had any similar sense of the meaning of the Christian Church, and of the privilege and duty of Christian thought to contribute to the welfare of that body of men believing in God and following Christ which is meant by the Church. This is in marked contrast with the individualism of Kant. Of course, Schleiermacher would never have recognised as the Church that part of humanity which is held together by adherence to particular dogmas, since, for him, Christianity is not dogma. Still less could he recognise as the Church that part of mankind which is held together by a common tradition of worship, or by a given theory of organisation, since these also are historical and incidental. He meant by the Church that part of humanity, in all places and at all times, which has been held together by the common possession of the Christian consciousness and the Christian experience. The outline of this experience, the content of this consciousness, can never be so defined as to make it legislatively operative. If it were so defined we should have dogma and not Christianity. Nevertheless, it may be practically potent. The degree in which a given man may justly identify his own consciousness and experience with that of the Christian world is problematical. In Schleiermacher's own case, the identification of some of his contentions as, for example, the thought that God is not personal with the great Christian consciousness of the past, is more than problematical. To this Schleiermacher would reply that if these contentions were true, they would become the possession of spiritual Christendom with the lapse of time. Advance always originated with one or a few. If, however, in the end, a given portion found no place in the consciousness of generation truly evidencing their Christian life, that position would be adjudged an idiosyncrasy, a negligible quantity. This view of Schleiermacher's as to the Church is suggestive. It is the undertone of a view which widely prevails in our own time. It is somewhat difficult of practical combination with the traditional marks of the churches, as these have been inherited even in Protestantism from the Catholic age.

In a very real sense Jesus occupied the central place in Schleiermacher's system. The centralness of Jesus Christ he himself was never weary of emphasising. It became in the next generation a favorite

phrase of some who followed Schleiermacher's pure and bounteous spirit afar off. Too much of a mystic to assert that it is through Jesus alone that we know God, he yet accords to Jesus an absolutely unique place in revelation. It is through the character and personality of Jesus that the change in the character of man, which is redemption, is marshalled and sustained. Redemption is a man's being brought out of the condition in which all higher self consciousness was dimmed and enfeebled, into one in which this higher consciousness is vivid and strong and the power of self-determination toward the good has been restored. Salvation is thus moral and spiritual, present as well as future. It is possible in the future only because actual in the present. It is the reconstruction of a man's nature and life by the action of the spirit of God, conjointly with that of man's own free spirit.

It is intelligible in Schleiermacher's context that Jesus should be spoken of as the sole redeemer of men, their only hope, and that the Christian's dependence upon him should be described as absolute. As a matter of fact, however, the idea of dependence upon Christ alone has been often, indeed, one may say generally, associated with a conception of salvation widely different from that of Schleiermacher. It has been oftenest associated with the notion of something purely external, forensic, even magical. It is connected, even down to our own time, with reliance upon the blood of Christ, almost as if this were externally applied. It has postulated a propitiatory sacrifice, a vicarious atonement, a completed transaction, something which was laid up for all and waiting to be availed of by some. Now every external, forensic, magical notion of salvation, as something purchased for us, imputed to us, conferred upon us, would have been utterly impossible to Schleiermacher. It is within the soul of man that redemption takes place. Conferment from the side of God and Christ, or from God through Christ, can be nothing more, as also it can be nothing less, than the imparting of wisdom and grace and spiritual power from the personality of Jesus, which a man then freely takes up within himself and gives forth as from himself. The Christian consciousness contains, along with the sense of dependence upon Jesus, the sense of moral alliance and spiritual sympathy with him, of a free relation of the will of man to the will of God as revealed in Jesus. The will of man is set upon the reproduction within himself, so far as possible, of the consciousness, experience and character of Jesus.

The sin from which man is to be delivered is described by Schleiermacher thus: It is the dominance of the lower nature in us, of the sense-consciousness. It is the determination of our course of life by the senses. This preponderance of the senses over the consciousness of God is the secret of unhappiness, of the feeling of defeat and misery in men, of the need of salvation. One has to read Schleiermacher's phrase, 'the senses' here, as we read Paul's phrase, 'the flesh.' On the other hand, the preponderance of the consciousness of God, the willing obedience to it in every act of life, becomes to us the secret of strength and of blessedness in life. This is the special experience of the Christian. It is the effect of the impulse and influence of Christ. We receive this impulse in a manner wholly consistent with the laws of our psychological and moral being. We carry forward this impulse with varying fortunes and by free will. It comes to us, however, from without and from above, through one who was indeed true man, but who is also, in a manner not further explicable, to be identified with the moral ideal of humanity. This identification of Jesus with the moral ideal is complete and unquestioning with Schleiermacher. It is visible in the interchangeable use of the titles Jesus and Christ. Our saving consciousness of God could proceed from the person of Jesus only if that consciousness were actually present in Jesus in an absolute measure. Ideal and person in him perfectly coincide.

As typical and ideal man, according to Schleiermacher, Jesus was distinguished from all other founders of religions. These come before us as men chosen from the number of their fellows, receiving, quite as much for themselves as for others, that which they received from God. It is nowhere implied that Jesus himself was in need of redemption, but rather that he alone possessed from earliest years the fulness of redemptive power. He was distinguished from other men by his absolute moral perfection. This excluded not merely actual sin, but all possibility of sin and, accordingly, all real moral struggle. This perfection

was characterised also by his freedom from error. He never originated an erroneous notion nor adopted one from others as a conviction of his own. In this respect his person was a moral miracle in the midst of the common life of our humanity, of an order to be explained only by a new spiritually creative act of God. On the other hand, Schleiermacher says squarely that the absence of the natural paternal participation in the origin of the physical life of Jesus, according to the account in the first and third Gospels, would add nothing to the moral miracle if it could be proved and detract nothing if it should be taken away. Singular is this ability on the part of Schleiermacher to believe in the moral miracle, not upon its own terms, of which we shall speak later, but upon terms upon which the outward and physical miracle, commonly so-called, had become, we need not say incredible, but unnecessary to Schleiermacher himself. Singular is this whole part of Schleiermacher's construction, with its lapse into abstraction of the familiar sort, of which, in general, the working of his mind had been so free. For surely what we here have is abstraction. It is an undissolved fragment of metaphysical theology. It is impossible of combination with the historical. It is wholly unnecessary for the religious view of salvation which Schleiermacher had distinctly taken. It is surprising how slow men have been to learn that the absolute cannot be historic nor the historic absolute.

Surely the claim that Jesus was free from error in intellectual conception is unnecessary, from the point of view of the saving influence upon character which Schleiermacher had asserted. It is in contradiction with the view of revelation to which Schleiermacher had already advanced. It is to be accounted for only from the point of view of the mistaken assumption that the divine, even in manifestation, must be perfect, in the sense of that which is static and not of that which is dynamic. The assertion is not sustained from the Gospel itself. It reduces many aspects of the life of Jesus to mere semblance. That also which is claimed in regard to the abstract impossibility of sin upon the part of Jesus is in hopeless contradiction with that which Schleiermacher had said as to the normal and actual development of Jesus, in moral as also in all other ways. Such development is impossible without struggle. Struggle is not real when failure is impossible. So far as we know, it is in struggle only that character is made. Even as to the actual commission of sin on Jesus' part, the assertion of the abstract necessity of his sinlessness, for the work of moral redemption, goes beyond anything which we know. The question of the sinlessness of Jesus is not an *a priori* question. To say that he was by conception free from sin is to beg the question. We thus form a conception and then read the Gospels to find evidence to sustain it. To say that he did, though tempted in all points like as we are, yet so conduct himself in the mystery of life as to remain unstained, is indeed to allege that he achieved that which, so far us we know, is without parallel in the history of the race. But it is to leave him true man, and so the moral redeemer of men who would be true. To say that, if he were true man, he must have sinned, is again to beg the question. Let us repeat that the question is one of evidence. To say that he was, though true man, so far as we have any evidence in fact, free from sin, is only to say that his humanity was uniquely penetrated by the spirit of God for the purposes of the life which he had to live. That heart-broken recollection of his own sin which one hears in *The Scarlet Letter*, giving power to the preacher who would reach men in their sins, has not the remotest parallel in any reminiscence of Jesus which we possess. There is every evidence of the purity of Jesus' consciousness. There is no evidence of the consciousness of sin. There is a passage in the *Discourses*, in which Schleiermacher himself declared that the identification of the fundamental idea of religion with the historical fact in which that religion had its rise, was a mistake. Surely it is exactly this mistake which Schleiermacher has here made.

It will be evident from all that has been said that to Schleiermacher the Scripture was not the foundation of faith. As such it was almost universally regarded in his time. The New Testament, he declared, is itself but a product of the Christian consciousness. It is a record of the Christian experience of the men of the earlier time. To us it is a means of grace because it is the vivid and original register of that experience. The Scriptures can be regarded as the work of the Holy Spirit only in so far as this was

this common spirit of the early Church. This spirit has borne witness to Christ in these writings not essentially otherwise than in later writings, only more at first hand, more under the impression of intercourse with Jesus. Least of all may we base the authority of Scripture upon a theory of inspiration such as that generally current in Schleiermacher's time. It is the personality of Jesus which is the inspiration of the New Testament. Christian faith, including the faith in the Scriptures, can rest only upon the total impression of the character of Jesus.

In the same manner Schleiermacher speaks of miracles. These cannot be regarded in the conventional manner as supports of religion, for the simplest of all reasons. They presuppose religion and faith and must be understood by means of those. The accounts of external miracles contained in the Gospels are matters for unhesitating criticism. The Christian finds, for moral reasons and because of the response of his own heart, the highest revelation of God in Jesus Christ. Extraordinary events may be expected in Jesus' career. Yet these can be called miracles only relatively, as containing something extraordinary for contemporary knowledge. They may remain to us events wholly inexplicable, illustrating a law higher than any which we yet know. Therewith they are not taken out of the realm of the orderly phenomena of nature. In other words, the notion of the miraculous is purely subjective. What is a miracle for one age may be no miracle in the view of the next. Whatever the deeds of Jesus may have been, however inexplicable all ages may find them, we can but regard them as merely natural consequences of the personality of Jesus, unique because he was unique. 'In the interests of religion the necessity can never arise of regarding an event as taken out of its connection with nature, in consequence of its dependence upon God.'

It is not possible within the compass of this book to do more than deal with typical and representative persons. Schleiermacher was epoch-making. He gathered in himself the creative impulses of the preceding period. The characteristic theological tendencies of the two succeeding generations may be traced back to him. Many men worked in seriousness upon the theological problem. No one of them marks an era again until we come to Ritschl. The theologians of the interval between Schleiermacher and Ritschl have been divided into three groups. The first group is of distinctly philosophical tendency. The influence of Hegel was felt upon them all. To this group belong Schweitzer, Biedermann, Lipsius, and Pfleiderer. The influence of Hegel was greatest upon Biedermann, least upon Lipsius. An estimate of the influence of Schleiermacher would reverse that order. Especially did Lipsius seek to lay at the foundation of his work that exact psychological study of the phenomena of religion which Schleiermacher had declared requisite. It is possible that Lipsius will more nearly come to his own when the enthusiasm for Ritschl has waned. The second group of Schleiermacher's followers took the direction opposite to that which we have named. They were the confessional theologians. Hoffmann shows himself learned, acute and full of power. One does not see, however, why his method should not prove anything which any confession ever claimed. He sets out from Schleiermacher's declaration concerning the content of the Christian consciousness. In Hoffmann's own devout consciousness there had been response, since his childhood, to every item which the creed alleged. Therefore these items must have objective truth. One is reminded of an English parallel in Newman's *Grammar of Assent*. Yet another group, that of the so-called mediating theologians, contains some well-known names. Here belong Nitzsch, Rothe, Müller, Dorner. The name had originally described the effort to find, in the Union, common ground between Lutherans and Reformed. In the fact that it made the creeds of little importance and fell back on Schleiermacher's emphasis upon feeling, the movement came to have the character also of an attempt to find a middle way between confessionalists and rationalists. Its representatives had often the kind of breadth of sympathy which goes with lack of insight, rather than that breadth of sympathy which is due to the possession of insight. Yet Rothe rises to real distinction, especially in his forecast of the social interpretation of religion. With the men of this group arose a speculation concerning the person of Christ which for a time had some currency. It was called the theory of the kenosis. Jesus is spoken of in a famous passage of the

letter to the Philippians; as having emptied himself of divine qualities that he might be found in fashion as a man. In this speculation the divine attributes were divided into two classes. Of the one class it was held Christ had emptied himself in becoming flesh, or at least he had them in abeyance. He had them, but did not use them. What we have here is but a despairing effort to be just to Jesus' humanity and yet to assert his deity in the ancient metaphysical terms. It is but saying yes and no in the same breath. Biedermann said sadly of the speculation that it represented the kenosis, not of the divine nature, but of the human understanding.

RITSCHL AND THE RITSCHLIANS

If any man in the department of theology in the latter half of the nineteenth century attained a position such as to entitle him to be compared with Schleiermacher, it was Ritschl. He was long the most conspicuous figure in any chair of dogmatic theology in Germany. He established a school of theological thinkers in a sense in which Schleiermacher never desired to gain a following. He exerted ecclesiastical influence of a kind which Schleiermacher never sought. He was involved in controversy in a degree to which the life of Schleiermacher presents no parallel. He was not a preacher, he was no philosopher. He was not a man of Schleiermacher's breadth of interest. His intellectual history presents more than one breach within itself, as that of Schleiermacher presented none, despite the wide arc which he traversed. Of Ritschl, as of Schleiermacher, it may be said that he exerted a great influence over many who have only in part agreed with him.

Albrecht Ritschl was born in 1822 in Berlin, the son of a bishop in the Lutheran Church. He was educated at Bonn and at Tübingen. He established himself at Bonn, where, in 1853, he became professor extraordinarius and in 1860 ordinaries. In 1864 he was called to Göttingen. In 1874 he became consistorialrath in the new Prussian establishment for the Hanoverian Church. He died in 1888. These are the simple outward facts of a somewhat stormy professional career. There was pietistic influence in Ritschl's ancestry, as also in Schleiermacher's. Ritschl had, however, reacted violently against it. His attitude was that of repudiation of everything mystical. He had strong aversion to the type of piety which rested its assurance solely upon inward experience. This aversion is one root of the historic positivism which makes him, at the last, assert the worthlessness of all supposed revelations outside of the Bible and of all supposed Christian experience apart from the influence of the historical Christ. He began his career under the influence of Hegel. He came to the position in which he felt that the sole hope for theology was in the elimination from it of all metaphysical elements. He felt that none of his predecessors had carried out Schleiermacher's dictum, that religion is not thought, but religious thought only one of the functions of religion. Yet, of course, he was not able to discuss fundamental theological questions without philosophical basis, particularly an explicit theory of knowledge. His theory of knowledge he had derived eclectically and somewhat eccentrically, from Lotze and Kant. To this day not all, either of his friends or foes, are quite certain what it was. It is open to doubt whether Ritschl really arrived at his theory of cognition and then made it one of the bases of his theology. It is conceivable that he made his theology and then propounded his theory of cognition in its defence. In a word, the basis of distinction between religious and scientific knowledge is not to be sought in its object. It is to be found in the sphere of the subject, in the difference of attitude of the subject toward the object. Religion is concerned with what he calls *Werthurtheile*, judgments of value, considerations of our relation to the world, which are of moment solely in accordance with their value in awakening feelings of pleasure or of pain. The thought of God, for example, must be treated solely as a judgment of value. It is a conception which is of worth for the attainment of good, for our spiritual peace and victory over the world. What God is in himself we cannot know, an existential Judgment we cannot form without going over to the metaphysicians. What God is to us we can know simply as religious men and solely upon the basis of religious experience. God is holy

love. That is a religious value-judgment. But what sort of a being God must be in order that we may assign to him these attributes, we cannot say without leaving the basis of experience. This is pragmatism indeed. It opens up boundless possibilities of subjectivism in a man who was apparently only too matter-of-fact.

There was a time in his career when Ritschl was popular with both conservatives and liberals. There were long years in which he was bitterly denounced by both. Yet there was something in the man and in his teaching which went beyond all the antagonisms of the schools. There can be no doubt that it was the intention of Ritschl to build his theology solely upon the gospel of Jesus Christ. The joy and confidence with which this theology could be preached, Ritschl awakened in his pupils in a degree which had not been equalled by any theologian since Schleiermacher himself. Numbers who, in the time of philosophical and scientific uncertainty, had lost their courage, regained it in contact with his confident and deeply religious spirit. A wholesome nature, eminently objective in temper, concentrated with all his force upon his task, of rare dialectical gifts, he had a great sense of humour and occasionally also the faculty of bitterly sarcastic speech. His very figure radiated the delight of conflict as he walked the Göttingen wall.

A devoted pupil, writing immediately after Ritschl's death, used concerning Schleiermacher a phrase which we may transfer to Ritschl himself. 'One wonders whether such a theology ever existed as a connected whole, except in the mind of its originator. Neither by those about him, nor by those after him, has it been reproduced in its entirety or free from glaring contradictions.' It was not free from contradictions in Ritschl's own mind. His pupils divided his inheritance among them. Each appropriated that which accorded with his own way of looking at things and viewed the remainder as something which might be left out of the account. It is long since one could properly speak of a Ritschlian school. It will be long until we shall cease to reckon with a Ritschlian influence. He did yeoman service in breaking down the high Lutheran confessionalism which had been the order of the day. In his recognition of the excesses of the Tübingen school all would now agree. In his feeling against mere sentimentalities of piety many sympathise. In his emphasis upon the ethical and practical, in his urgency upon the actual problem of a man's vocation in the world, he meets in striking manner the temper of our age. In his emphasis upon the social factor in religion, he represents a popular phase of thought. With all of this, it is strange to find a man of so much learning who had so little sympathy with the comparative study of religions, who was such a dogmatist on behalf of his own inadequate notion of revelation, the logical effect of whose teaching concerning the Church would be the revival of an institutionalism and externalism such as Protestantism has hardly known.

Since Schleiermacher the German theologians had made the problem of the person of Christ the centre of discussion. In the same period the problem of the person of Christ had been the central point of debate in America. Here, as there, all the other points arranged themselves about this one. The new movement which went out from Ritschl took as its centre the work of Christ in redemption. This is obvious from the very title of Ritschl's great book, *Die Christliche Lehre von der Rechtfertigung und Versöhnung*. Of this work the first edition of the third and significant volume was published in 1874. Before that time the formal treatises on theology had followed a traditional order of topics. It had been assumed as self-evident that one should speak of a person before one talked of his work. It did not occur to the theologians that in the case of the divine person, at all events, we can securely say that we know something as to his work. Much concerning his person must remain a mystery to us, exactly because he is divine. Our safest course, therefore, would be to infer the unknown qualities of his person from the known traits of his work. Certainly this would be true as to the work of God in nature. This was not the way, however, in which the minds of theologians worked. The habit of dealing with conceptions as if they were facts had too deep hold upon them. So long as men believed in revelation as giving them, not primarily God and the transcendental world itself, but information about God and the transcendental, they naturally held that they knew as much of the persons of God and Christ as of their works.

Schleiermacher had opened men's eyes to the fact that the great work of Christ in redemption is an inward one, an ethical and spiritual work, the transformation of character. He had said, not merely that the transformation of man's character follows upon the work of redemption. It is the work of redemption. The primary witness to the work of Christ is, therefore, in the facts of consciousness and history. These are capable of empirical scrutiny. They demand psychological investigation. When thus investigated they yield our primary material for any assertion we may make concerning God. Above all, it is the nature of Jesus, as learned on the evidence of his work in the hearts of men, which is our great revelation and source of inference concerning the nature of God. Instead of saying in the famous phrase, that the Christians think of Christ as God, we say that we are able to think of God, as a religious magnitude, in no other terms than in those of his manifestation and redemptive activity in Jesus.

None since Kant, except extreme confessionalists, and those in diminishing degree, have held that the great effect of the work of Christ was upon the mind and attitude of God. Less and less have men thought of justification as forensic and judicial, a declaring sinners righteous in the eye of the divine law, the attribution of Christ's righteousness to men, so far at least as to relieve these last of penalty. This was the Anselmic scheme. Indeed, it had been Tertullian's. Less and less have men thought of reconciliation as that of an angry God to men, more and more as of alienated men with God. The phrases of the orthodoxy of the seventeenth century, Lutheran as well as Calvinistic, survive. More and more new meaning, not always consistent, is injected into them. No one would deny that the loftiest moral enthusiasm, the noblest sense of duty, animated the hearts of many who thought in the terms of Calvinism. The delineation of God as unreconciled, of the work and sufferings of Christ as a substitution, of salvation as a conferment, caused gratitude, tender devotion, heroic allegiance in some. It worked revulsion in others. It was protested against most radically by Kant, as indeed it had been condemned by many before him. For Kant the renovation of character was the essential salvation. Yet the development of his doctrine was deficient through the individualistic form which it took. Salvation was essentially a change in the individual mind, brought about through the practical reason, and having its ideal in Jesus. Yet for Kant our salvation had no closer relation to the historic revelation in Jesus. Furthermore, so much was this change an individual issue that we may say that the actualisation of redemption would be the same for a given man, were he the only man in the universe. To hold fast to the ethical idealism of Kant, and to overcome its subjectivity and individualism, was the problem.

The reference to experience which underlies all that was said above was particularly congruous with the mood of an age grown weary of Hegelianism and much impressed with the value of the empirical method in all the sciences. Another great contention of our age is for the recognition of the value of what is social. Its emphasis is upon that which binds men together. Salvation is not normally achieved except in the life of a man among and for his fellows. It is by doing one's duty that one becomes good. One is saved, not in order to become a citizen of heaven by and by, but in order to be an active citizen of a kingdom of real human goodness here and now. In reality no man is being saved, except as he does actively and devotedly belong to that kingdom. The individual would hardly be in God's eyes worth the saving, except in order that he might be the instrumentality of the realisation of the kingdom. Those are ideas which it is possible to exaggerate in statement or, at least, to set forth in all the isolation of their quality as half-truths. But it is hardly possible to exaggerate their significance as a reversal of the immemorial one-sidedness, inadequacy, and artificiality both of the official statement and of the popular apprehension of Christianity. These ideas appeal to men in our time. They are popular because men think them already. Men are pleased, even when somewhat incredulous, to learn that Christianity will bear this social interpretation. Most Christians are in our time overwhelmingly convinced that in this direction lies the interpretation which Christianity must bear, if it is to do the work and meet the needs of the age. Its consonance with some of the truths underlying socialism may account, in a measure, for the influence which the Ritschlian theology has had.

As was indicated, Ritschl's epoch-making book bears the title, *The Christian Doctrine of Justification and Reconciliation*. The book might be described in the language of the schools as a monograph upon one great dogma of the Christian faith, around which, as the author treats it, all the other doctrines are arranged. The familiar topic of justification, of which Luther made so much, was thus given again the central place. What the book really offered was something quite different from this. It was a complete system of theology, but it differed from the traditional systems of theology. These had followed helplessly a logical scheme which begins with God as he is in himself and apart from any knowledge which we have of him. They then slowly proceeded to man and sin and redemption, one empirical object and two concrete experiences which we may know something about. Ritschl reversed the process. He aimed to begin with certain facts of life. Such facts are sin and the consciousness of forgiveness, awareness of restoration to the will and power of goodness, the gift of love and of a spirit which can feel itself victorious even in the midst of ills in life, confidence that this life is not all. These phrases, taken together, would describe the consciousness of salvation. This consciousness of sin and salvation is a fact in individual men. It has evidently been a fact in the life of masses of men for many generations. The facts have thus a psychology and a history from which reflection on the phenomenon of faith must take its departure. There is no reason why, upon this basis, and until it departs from the scientific methods which are given with the nature of its object, theology should not be as truly a science as is any other known among men.

This science starts with man, who in the object of many other sciences. It confines itself to man in this one aspect of his relation to moral life and to the transcendent meaning of the universe. It notes the fact that men, when awakened, usually have the sense of not being in harmony with the life of the universe or on the way to realisation of its meaning. It notes the fact that many men have had the consciousness of progressive restoration to that harmony. It inquires as to the process of that restoration. It asks as to the power of it. It discovers that that power is a personal one. Men have believed that this power has been exerted over them, either in personal contact, or across the ages and through generations of believers, by one Jesus, whom they call Saviour. They have believed that it was God who through Jesus saved them. Jesus' consciousness thus became to them a revelation of God. The thought leads on to the consideration of that which a saved man does, or ought to do, in the life of the world and among his fellows, of the institution in which this attitude of mind is cherished and of the sum total of human institutions and relations of which the saved life should be the inward force. There is room even for a clause in which to compress the little that we know of anything beyond this life. We have written in unconventional words. There is no one place, either in Ritschl's work or elsewhere, where this grand and simple scheme stands together in one context. This is unfortunate. Were this the case, even wayfaring men might have understood somewhat better than they have what Ritschl was aiming at.

It is a still greater pity that the execution of the scheme should have left so much to be desired. That this execution would prove difficult needs hardly to be said. That it could never be the work of one man is certainly true. To have had so great an insight is title enough to fame. Ritschl falls off from his endeavour as often as did Schleiermacher — more often and with less excuse. The might of the past is great. The lumber which he meekly carries along with him is surprising, as one feels his lack of meekness in the handling of the lumber which he recognised as such. The putting of new wine into old bottles is so often reprobated by Ritschl that the reader is justly surprised when he nevertheless recognises the bottles. The system is not 'all of one piece' — distinctly not. There are places where the rent is certainly made worse by the old cloth on the new garment. The work taken as a whole is so bewildering that one finds himself asking, 'What is Ritschl's method?' If what is meant is not a question of detail, but of the total apprehension of the problem to be solved, the apprehension which we strove to outline above, then Ritschl's courageous and complete inversion of the ancient method, his demand that we proceed from the known to the unknown, is a contribution so great that all shortcomings in the execution of it are

insignificant. His first volume deals with the history of the doctrine of justification, beginning with Anselm and Abelard. In it Ritschl's eminent qualities as historian come out. In it also his prejudices have their play. The second volume deals with the Biblical foundations for the doctrine. Ritschl was bred in the Tübingen school. Yet here is much forced exegesis. Ritschl's positivistic view of the Scripture and of the whole question of revelation, was not congruous with his well-learned biblical criticism. The third volume is the constructive one. It is of immeasurably greater value than the other two. It is this third volume which has frequently been translated.

In respect of his contention against metaphysics it is hardly necessary that we should go into detail. With his empirical and psychological point of departure, given above, most men will find themselves in entire sympathy. The confusion of religion, which is an experience, with dogma which is reasoning about it, and the acceptance of statements in Scripture which are metaphysical in nature, as if they were religious truths — these two things have, in time past, prevented many earnest thinkers from following the true road. When it comes to the constructive portion of his work, it is, of course, impossible for Ritschl to build without the theoretical supports which philosophy gives, or to follow up certain of the characteristic magnitudes of religion without following them into the realm of metaphysics, to which, quite as truly as to that of religion, they belong. It would be unjust to Ritschl to suppose that these facts were hidden from him.

As to his attitude toward mysticism, there is a word to say. In the long history of religious thought those who have revolted against metaphysical interpretation, orthodox or unorthodox, have usually taken refuge in mysticism. Hither the prophet Augustine takes refuge when he would flee the ecclesiastic Augustine, himself. The Brethren of the Free Spirit, Tauler, à Kempis, Suso, the author of the *Theologia Germanica*, Molinos, Madame Gayon, illustrate the thing we mean. Ritschl had seen much of mysticism in pietist circles. He knew the history of the movement well. What impressed his sane mind was the fact that unhealthy minds have often claimed, as their revelation from God, an experience which might, with more truth, be assigned to almost any other source. He desired to cut off the possibility of what seemed to him often a tragic delusion. The margin of any mystical movement stretches out toward monstrosities and absurdities. For that matter, what prevents a Buddhist from declaring his thoughts and feelings to be Christianity? Indeed, Ritschl asks, why is not Buddhism as good as such Christianity? He is, therefore, suspicious of revelations which have nothing by which they can be measured and checked.

The claim of mystics that they came, in communion with God, to the point where they have no need of Christ, seemed to him impious. There is no way of knowing that we are in fellowship with God, except by comparing what we feel that this fellowship has given us, with that which we historically learn that the fellowship with God gave to Christ. This is the sense and this the connexion in which Ritschl says that we cannot come to God save in and through the historic Christ as he is given us in the Gospels. The inner life, at least, which is there depicted for us is, in this outward and authoritative sense, our norm and guide.

Large difficulties loom upon the horizon of this positivistic insistence upon history. Can we know the inner life of Christ well enough to use it thus as test in every, or even in any case? Does not the use of such a test, or of any test in this external way, take us out of the realm of the religion of the spirit? Men once said that the Church was their guide. Others said the Scripture was their guide. Now, in the sense of the outwardness of its authority, we repudiate even this. It rings devoutly if we say Christ is our guide. Yet, as Ritschl describes this guidance, in the exigency of his contention against mysticism, have we anything different? What becomes of Confucianists and Shintoists, who have never heard of the historic Christ? And all the while we have the sense of a query in our minds. Is it open to any man to repudiate mysticism absolutely and with contumely, and then leave us to discover that he does not mean mysticism as historians of every faith have understood it, but only the margin of evil which is apparently inseparable from it? That margin of evil others see and deplore. Against it other remedies have been suggested, as, for example, intelligence. Some would feel that in Ritschl's remedy the loss is greater than the gain.

This historical character of revelation is so truly one of the fountain heads of the theology which takes its rise in Ritschl, that it deserves to be considered somewhat more at length. The Ritschlian movement has engaged a generation of more or less notable thinkers in the period since Ritschl's death. These have dissented at many points from Ritschl's views, diverged from his path and marked out courses of their own. We shall do well in the remainder of this chapter to attempt the delineation in terms, not exclusively of Ritschl, but of that which may with some laxity be styled Ritschlianism. The value judgments of religion indicate only the subjective form of religious knowledge, as the Ritschlians understand it. Faith, however, does not invent its own contents. Historical facts, composing the revelation, actually exist, quite independent of the use which the believer makes of them. No group of thinkers have more truly sought to draw near to the person of the historic Jesus. The historical person, Jesus of Nazareth, is the divine revelation. That sums up this aspect of the Ritschlian position. Some negative consequences of this position we have already noted. Let us turn to its positive significance.

Herrmann is the one of the Ritschlians who has dealt with this matter not only with great clearness, but also with deep Christian feeling in his *Verkehr des Christen mit Gott*, 1886, and notably in his address, *Der Begriff der Offenbarung*, 1887. If the motive of religion were an intellectual curiosity, a verbal communication would suffice. As it is a practical necessity, this must be met by actual impulse in life. That passing out of the unhappiness of sin, into the peace and larger life which is salvation, does indeed imply the movement of God's spirit on our hearts, in conversion and thereafter. This is essentially mediated to us through the Scriptures, especially through those of the New Testament, because the New Testament contains the record of the personality of Jesus. In that our personality is filled with the spirit which breathes in him, our salvation is achieved. The image of Jesus which we receive acts upon us as something indubitably real. It vindicates itself as real, in that it takes hold upon our manhood. Of course, this assumes that the Church has been right in accepting the Gospels as historical. Herrmann candidly faces this question. Not every word or deed, he says, which is recorded concerning Jesus, belongs to this central and dynamic revelation of which we speak. We do not help men to see Jesus in a saving way if, on the strength of accounts in the New Testament, we insist concerning Jesus that he was born of a virgin, that he raised the dead, that he himself rose from the dead. We should not put these things before men with the declaration that they must assent to them. We must not try to persuade ourselves that that which acted upon the disciples as indubitably real must of necessity act similarly upon us. We are to allow ourselves to be seized and uplifted by that which, in our position, touches us as indubitably real. This is, in the first place, the moral character of Jesus. It is his inner life which, on the testimony of the disciples, meets us as something real and active in the world, as truly now as then. What are some facts of this inner life? The Jesus of the New Testament shows a firmness of religious conviction, a clearness of moral judgment, a purity and force of will, such as are not found united in any other figure in history. We have the image of a man who is conscious that he does not fall short of the ideal for which he offers himself. It is this consciousness which is yet united in him with the most perfect humility. He lives out his life and faces death in a confidence and independence which have never been approached. He has confidence that he can lift men to such a height that they also will partake with him in the highest good, through their full surrender to God and their life of love for their fellows.

It is clear that Herrmann aims to bring to the front only those elements in the life of Jesus which are likely to prove most effectual in meeting the need and winning the faith of the men of our age. He would cast into the background those elements which are likely to awaken doubt and to hinder the approach of men's souls to God. For Herrmann himself the virgin birth has the significance that the spiritual life of Jesus did not proceed from the sinful race. But Herrmann admits that a man could hold even that without needing to allege that the physical life of Jesus did not come into being in the ordinary way. The distinction between the inner and outward life of Jesus, and the declaration that belief in the former alone is necessary, has the result of thus ridding us of questions which can scarcely fail to be present to the mind

of every modern man. Yet it would be unjust to imply that this is the purpose. Quite the contrary, the distinction is logical for this theology. Redemption is an affair of the inner life of a man. It is the force of the inner life of the Redeemer which avails for it. It is from the belief that such an inner and spiritual life was once realised here on earth, that our own faith gathers strength, and gets guidance in the conflict for the salvation of our souls. The belief in the historicity of such an inner life is necessary. So Harnack also declares in his *Wesen des Christenthums*, 1900. It is noteworthy that in this connexion neither of these writers advances to a form of speculation concerning the exalted Christ, which in recent years has had some currency. According to this doctrine, there is ascribed to the risen and ascended Jesus an existence with God which is thought of in terms different from those which we associate with the idea of immortality. In other words, this continued existence of Christ as God is a counterpart of that existence before the incarnation, which the doctrine of the pre-existence alleged. But surely this speculation can have no better standing than that of the pre-existence.

Sin in the language of religion is defection from the law of God. It is the transgression of the divine command. In what measure, therefore, the life of man can be thought of as sinful, depends upon his knowledge of the will of God. In Scripture, as in the legends of the early history of the race, this knowledge stands in intimate connexion with the witness to a primitive revelation. This thought has had a curious history. The ideas of mankind concerning God and his will have grown and changed as much as have any other ideas. The rudimentary idea of the good is probably of social origin. It first emerges in the conflict of men one with another. As the personalised ideal of conduct, the god then reacts upon conduct, as the conduct reacts upon the notion of the god. Only slowly has the ideal of the good been clarified. Only slowly have the gods been ethicised. ‘An honest God is the noblest work of man.’ The moralising and spiritualising of the idea of Jahve lies right upon the face of the Old Testament. The ascent of man on his ethical and spiritual side is as certain as is that on his physical side. Long struggle upward through ignorance, weakness, sin, gradual elevating of the standard of what ought to he, growingly successful effort to conform to that standard — this is what the history of the race has seen.

Athwart this lies the traditional dogma. The dogma took up into itself a legend of the childhood of the world. It elaborated that which in Genesis is vague and poetic into a vast scheme which has passed as a sacred philosophy of history. It postulated an original revelation. It affirmed the created state of man as one of holiness before a fall. To the framers of the dogma, if sin is the transgression of God’s will, then it must be in light of a revelation of that will. In the Scriptures we have vague intimations concerning God’s will, growingly clearer knowledge of that will, evolving through history to Jesus. In the dogma we have this grand assumption of a paradisaic state of perfectness in which the will of God was from the beginning perfectly known.

In the Platonic, as in the rabbinic, speculation the idea must precede the fact. Every step of progress is a defection from that idea. The dogma suffers from an insoluble contradiction within itself. It aims to give us the point of departure by which we are to recognise the nature of sin. At the same moment it would describe the perfection of man at which God has willed that by age-long struggle he should arrive. Now, if we place this perfection at the beginning of human history, before all human self-determination, we divest it of ethical quality. Whatever else it may be, it is not character. On the other hand, if we would make this perfection really that of moral character, then we cannot place it at the beginning of human history, but far down the course of the evolution of the higher human traits, of the consciousness of sin and of the struggle for redemption. It is not revelation from God, but naïve imagination, later giving place to adventurous speculation concerning the origin of the universe, which we have in the doctrine of the primeval perfection of man. We do not really make earnest with our Christian claim that in Jesus we have our paramount revelation, until we admit this. It is through Jesus, and not from Adam that we know sin.

So we might go on to say that the dogma of inherited guilt is a contradiction in terms. Disadvantage may be inherited, weakness, proclivity to sin, but not guilt, not sin in the sense of that which entails guilt. What

entails guilt is action counter to the will of God which we know. That is always the act of the individual man myself. It cannot by any possibility be the act of another. It may be the consequence of the sins of my ancestors that I do moral evil without knowing it to be such. Even my fellows view this as a mitigation, if not as an exculpation. The very same act, however, which up to this point has been only an occasion for pity, becomes sin and entails guilt, when it passes through my own mind and will as a defection from a will of God in which I believe, and as a righteousness which I refuse. The confusion of guilt and sin in order to the inclusion of all under the need of salvation, as in the Augustinian scheme, ended in bewilderment and stultification of the moral sense. It caused men to despair of themselves and gravely to misrepresent God. It is no wonder if in the age of rationalism this dogma was largely done away with. The religious sense of sin was declared to be an hallucination. Nothing is more evident in the rationalist theology than its lack of the sense of sin. This alone is sufficient explanation of the impotency and inadequacy of that theology. Kant's doctrine of radical evil testifies to his deep sense that the rationalists were wrong. He could see also the impossibility of the ancient view. But he had no substitute. Hegel, much as he prided himself upon the restoration of dogma, viewed evil as only relative, good in the making. Schleiermacher made a beginning of construing the thought of sin from the point of view of the Christian consciousness. Ritschl was the first consistently to carry out Schleiermacher's idea, placing the Christian consciousness in the centre and claiming that the revelation of the righteousness of God and of the perfection of man is in Jesus. All men being sinners, there is a vast solidarity, which he describes as the Kingdom of Evil and sets over against the Kingdom of God, yet not so that the freedom or responsibility of man is impaired. God forgives all sin save that of wilful resistance to the spirit of the good. That is, Ritschl regards all sin, short of this last, as mainly ignorance and weakness. It is from Ritschl, and more particularly from Kaftan, that the phrases have been mainly taken which served as introduction to this paragraph.

For the work of God through Christ, in the salvation of men from the guilt and power of sin, various terms have been used. Different aspects of the work have been described by different names. Redemption, regeneration, justification, reconciliation and election or predestination — these are the familiar words. This is the order in which the conceptions stand, if we take them as they occur in consciousness. Election then means nothing more than the ultimate reference to God of the mystery of an experience in which the believer already rejoices. On the other hand, in the dogma the order is reversed. Election must come first, since it is the decree of God upon which all depends. Redemption and reconciliation have, in Christian doctrine, been traditionally regarded as completed transactions, waiting indeed to be applied to the individual or appropriated by him through faith, but of themselves without relation to faith. Reconciliation was long thought of as that of an angry God to man. Especially was this last the characteristic view of the West, where juristic notions prevailed. Origen talked of a right of the devil over the soul of man until bought off by the sacrifice of Christ. This is pure paganism, of course. The doctrine of Anselm marks a great advance. It runs somewhat thus: The divine honour is offended in the sin of man. Satisfaction corresponding to the greatness of the guilt must be rendered. Man is under obligation to render this satisfaction; yet he is unable so to do. A sin against God is an infinite offence. It demands an infinite satisfaction. Man can render no satisfaction which is not finite. The way out of this dilemma is the incarnation of the divine Logos. For the god-man, as man, is entitled to bring this satisfaction for men. On the other hand, as God he is able so to do. In his death this satisfaction is embodied. He gave his life freely. God having received satisfaction through him demands nothing more from us.

Abelard had, almost at the same time with Anselm, interpreted the death of Christ in far different fashion. It was a revelation of the love of God which wins men to love in turn. This notion of Abelard was far too subtle. The crass objective dogma of Anselm prevailed. The death of Christ was a sacrifice. The purpose was the propitiation of an angry God. The effect was that, on the side of God, a hindrance to man's salvation was removed. The doctrine accurately reflects the feudal ideas of the time which

produced it. In Grotius was done away the notion of private right, which lies at the basis of the theory of Anselm. That of public duty took its place. A sovereign need not stand upon his offended honour, as in Anselm's thought. Still, he cannot, like a private citizen, freely forgive. He must maintain the dignity of his office, in order not to demoralise the world. The sufferings of Christ did not effect a necessary private satisfaction. They were an example which satisfied the moral order of the world. Apart from this change, the conception remains the same.

As Kaftan argues, we can escape the dreadful externality and artificiality of this scheme, only as redemption and regeneration are brought back to their primary place in consciousness. These are the initial experiences in which we become aware of God's work through Christ in us and for us. The reconciliation is of us. The redemption is from our sins. The regeneration is to a new moral life. Through the influence of Jesus, reconciled on our part to God and believing in His unchanging love to us, we are translated into God's kingdom and live for the eternal in our present existence. Redemption is indeed the work of God through Christ, but it has intelligible parallel in the awakening of the life of the mind, or again of the spirit of self-sacrifice, through the personal influence of the wise and good. Salvation begins in such an awakening through the personal influence of the wisest and best. It is transformation of our personality through the personality of Jesus, by the personal God of truth, of goodness and of love. All that which God through Jesus has done for us is futile, save as we make the actualisation of our deliverance from sin our continuous and unceasing task. When this connexion of thought is broken through, we transfer the whole matter of salvation from the inner to the outer world and make of it a transaction independent of the moral life of man.

Justification and reconciliation also are primarily acts and gifts of God. Justification is a forensic act. The sense is not that in justification we are made just. We are, so to say, temporarily thus regarded, not that leniency may become the occasion of a new offence, but that in grateful love we may make it the starting point of a new life. We must justify our justification. It is easy to see the objections to such a course on the part of a civil judge. He must consider the rights of others. It was this which brought Grotius and the rest, with the New England theologians down to Park, to feel that forgiveness could not be quite free. If we acknowledge that this symbolism of God as judge or sovereign is all symbolism, mere figure of speech, not fact at all, then that objection — and much else — falls away. If we assert that another figure of speech, that of God as Father, more perfectly suggests the relation of God and man, then forgiveness may be free. Then justification and forgiveness are only two words for one and the same idea. Then the nightmare of a God who would forgive and cannot, of a God who will forgive but may not justify until something further happens, is all done away. Then the relation of the death of Jesus to the forgiveness of our sins cannot be other than the relation of his life to that forgiveness. Both the one and the other are a revelation of the forgiving love of God. We may say that in his death the whole meaning of his life was gathered. We may say that his death was the consummation of his life, that without it his life would not have been what it is. This is, however, very far from being the ordinary statement of the relation of Jesus' death, either to his own life or to the forgiveness of our sins.

The doctrinal tradition made much also of the deliverance from punishment which follows after the forgiveness of sin. In fact, in many forms of the dogma, it has been the escape from punishment which was chiefly had in mind. Along with the forensic notion of salvation we largely or wholly discard the notion of punishment. We retain only the sense that the consequence of continuing in sin is to become more sinful. God himself is powerless to prevent that. Punishment is immanent, vital, necessary. The penalty is gradually taken away if the sin itself is taken away — not otherwise. It returns with the sin, it continues in the sin, it is inseparable from the sin. Punishment is no longer the right word. Reward is not the true description of that growing better which is the consequence of being good. Reward or punishment as *quid pro quo*, as arbitrary assignments, as external equivalents, do not so much as belong to the world of ideas

in which we move. For this view the idea that God laid upon Jesus penalties due to us, fades into thin air. Jesus could by no possibility have met the punishment of sin, except he himself had been a sinner. Then he must have met the punishment of his own sin and not that of others. That portion which one may gladly bear of the consequences of another's sin may rightfully be called by almost any other name. It cannot be called punishment since punishment is immanent. Even eternal death is not a judicial assignment for our obstinate sinfulness. Eternal death is the obstinate sinfulness, and the sinfulness the death.

It must be evident that reconciliation can have, in this scheme, no meaning save that man's being reconciled to God. Jesus reveals a God who has no need to be reconciled to us. The alienation is not on the side of God. That, being alienated from God, man may imagine that God is hostile to him, is only the working of a familiar law of the human mind. The fiction of an angry God is the most awful survival among us of primitive paganism. That which Jesus by his revelation of God brought to pass was a true 'at-one-ment,' a causing of God and man to be at one again. To the word atonement, as currently pronounced, and as, until a half century ago, almost universally apprehended, the notion of that which is sacrificial attached. To the life and death of Jesus, as revelation of God and Saviour of men, we can no longer attach any sacrificial meaning whatsoever. There is indeed the perfectly general sense in which so beautiful a life and so heroic a death were, of course, a grand exemplification of self-sacrifice. Yet this is a sense so different from the other and in itself so obvious, that one hesitates to use the same word in the immediate context with that other, lest it should appear that the intention was to obscure rather than to make clear the meaning. For atonement in a sense different from that of reconciliation, we have no significance whatever. Reconciliation and atonement describe one and the same fact. In the dogma the words were as far as possible from being synonyms. They referred to two facts, the one of which was the means and essential prerequisite of the other. The vicarious sacrifice was the antecedent condition of the reconciling of God. In our thought it is not a reconciliation of God which is aimed at. No sacrifice is necessary. No sacrifice such as that postulated is possible. Of the reconciliation of man to God the only condition is the revelation of the love of God in the life and death of Jesus and the obedient acceptance of that revelation on the part of men.

CHAPTER IV. THE CRITICAL AND HISTORICAL MOVEMENT

It has been said that in Christian times the relation of philosophy and religion may be determined by the attitude of reason toward a single matter, namely, the churchly doctrine of revelation. There are three possible relations of reason to this doctrine. First, it may be affirmed that the content of religion and theology is matter communicated to man in extraordinary fashion, truth otherwise unattainable, on which it is beyond the competence of reason to sit in judgment. We have then the two spheres arbitrarily separated. As regards their relation, theology is at first supreme. Reason is the handmaiden of faith. It is occupied in applying the principles which it receives at the hands of theology. These are the so-called Ages of Faith. Notably was this the attitude of the Middle Age. But in the long run either authoritative revelation, thus conceived, must extinguish reason altogether, or else reason must claim the whole man. After all, it is in virtue of his having some reason that man is the subject of revelation. He is continually asked to exercise his reason upon certain parts of the revelation, even by those who maintain that he must do so only within limits. It is only because there in a certain reasonableness in the conceptions of revealed religion that man has ever been able to make them his own or to find in them meaning and edification. This external relation of reason to revelation cannot continue. Nor can the encroachments of reason be met by temporary distinctions such as that between the natural and the supernatural. The antithesis to the natural is not the supernatural, but the unnatural. The antithesis to reason is not faith, but irrationality. The antithesis to human truth is not the divine truth. It is falsehood.

Footnote 4:(return)

Seth Pringle-Pattison, *The Philosophical Radicals*, .

When men have made this discovery, a revulsion carries their minds to the second position of which we spoke. This is, namely, the position of extreme denial. It is an attitude of negation toward revelation, such as prevailed in the barren and trivial rationalism of the end of the eighteenth century. The reason having been long repressed revenges itself, usurping everything. The explanation of the rise of positive religion and of the claim of revelation is sought in the hypothesis of deceit, of ambitious priestcraft and incurable credulity. The religion of those who thus argue, in so far as they claim any religion, is merely the current morality. Their explanation of the religion of others is that it is merely the current morality plus certain unprovable assumptions. Indeed, they may think it to be but the obstinate adherence to these assumptions minus the current morality. It is impossible that this shallow view should prevail. To overcome it, however, there is need of a philosophy which shall give not less, but greater scope to reason and at the same time an inward meaning to revelation.

This brings us to the third possible position, to which the best thinkers of the nineteenth century have advanced. So long as deistic views of the relation of God to man and the world held the field, revelation meant something interjected *ab extra* into the established order of things. The popular theology which so abhorred deism was yet essentially deistic in its notion of God and of his separation from the world. Men did not perceive that by thus separating God from the world they set up alongside of him a sphere and an activity to which his relations were transient and accidental. No wonder that other men, finding their satisfying activity within the sphere which was thus separated from God, came to think of this absentee God as an appendage to the scheme of things. But if man himself be inexplicable, save as sharing in the wider life of universal reason, if the process of history be realised as but the working out of an inherent divine purpose, the manifestation of an indwelling divine force, then revelation denotes no longer an interference with that evolution. It is a factor in that evolution. It is but the normal relation of the immanent spirit of God to the children of men at the crises of their fate. Then revelation is an experience of men precisely in the line and according to the method of all their nobler experiences. It is itself reasonable and

moral. Inspiration is the normal and continuous effect of the contact of the God who is spirit with man who is spirit too. The relation is never broken. But there are times in which it has been more particularly felt. There have been personalities to whom in eminent degree this depth of communion with God has been vouchsafed. To such persons and eras the religious sense of mankind, by a true instinct, has tended to restrict the words 'revelation' and 'inspiration.' This restriction, however, signifies the separation of the grand experience from the ordinary, only in degree and not in kind. Such an experience was that of prophets and law-givers under the ancient covenant. Such an experience, in immeasurably greater degree, was that of Jesus himself. Such a turning-point in the life of the race was the advent of Christianity. The world has not been wrong in calling the documents of these revelations sacred books and in attributing to them divine authority. It has been largely wrong *in the manner in which it construed their authority*. It has been wholly wrong in imagining that the documents themselves were the revelation. They are merely the record *of a personal communion with the transcendent*. It was Lessing who first cast these fertile ideas into the soil of modern thought. They were never heartily taken up by Kant. One can think, however, with what enthusiasm men recurred to them after their postulates had been verified and the idea of God, of man and of the world which they implied, had been confirmed by Fichte and Schelling.

In the philosophical movement, the outline of which we have suggested, what one may call the *nidus* of a new faith in Scripture had been prepared. The quality had been forecast which the Scripture must be found to possess, if it were to retain its character as document of revelation. In those very same years the great movement of biblical criticism was gathering force which, in the course of the nineteenth century, was to prove by stringent literary and historical methods, what qualities the documents which we know as Scripture do possess. It was to prove in the most objective fashion that the Scripture does not possess those qualities which men had long assigned to it. It was to prove that, as a matter of fact, the literature does possess the qualities which the philosophic forecast, above hinted, required. It was thus actually to restore the Bible to an age in which many reasonable men had lost their faith in it. It was to give a genetic reconstruction of the literature and show the progress of the history which the Scripture enshrines. After a contest in which the very foundations of faith seemed to be removed, it was to afford a basis for a belief in Scripture and revelation as positive and secure as any which men ever enjoyed, with the advantage that it is a foundation upon which the modern man can and does securely build. The synchronism of the two endeavours is remarkable. The convergence upon one point, of studies starting, so to say, from opposite poles and having no apparent interest in common, is instructive. It is an illustration of that which Comte said, that all the great intellectual movements of a given time are but the manifestation of a common impulse, which pervades and possesses the minds of the men of that time.

The attempt to rationalise the narrative of Scripture was no new one. It grew in intensity in the early years of the nineteenth century. The conflict which was presently precipitated concerned primarily the Gospels. It was natural that it should do so. These contain the most important Scripture narrative, that of the life of Jesus. Strauss had in good faith turned his attention to the Gospels, precisely because he felt their central importance. His generation was to learn that they presented also the greatest difficulties. The old rationalistic interpretation had started from the assumption that what we have in the gospel narrative is fact. Yet, of course, for the rationalists, the facts must be natural. They had the appearance of being supernatural only through the erroneous judgment of the narrators. It was for the interpreter to reduce everything which is related to its simple, natural cause. The water at Cana was certainly not turned into wine. It must have been brought by Jesus as a present and opened thus in jest. Jesus was, of course, begotten in the natural manner. A simple maiden must have been deceived. The execution of this task of the rationalising of the narratives by one Dr. Paulus, was the *reductio ad absurdum* of the claim. The most spiritual of the narratives, the finest flower of religious poetry, was thus turned into the meanest and most trivial incident without any religious significance whatsoever. The obtuseness of the procedure was exceeded only by its vulgarity.

On the other hand, as Pfleiderer has said, we must remember the difficulty which beset the men of that age. Their general culture made it difficult for them to accept the miraculous element in the gospel narrative as it stood. Yet their theory of Scripture gave them no notion as to any other way in which the narratives might be understood. The men had never asked themselves how the narratives arose. In the preface to his *Leben Jesu*, Strauss said: ‘Orthodox and rationalists alike proceed from the false assumption that we have always in the Gospels testimony, sometimes even that of eye-witnesses, to fact. They are, therefore, reduced to asking themselves what can have been the real and natural fact which is here witnessed to in such extraordinary way. We have to realise,’ Strauss proceeds, ‘that the narrators testify sometimes, not to outward facts, but to ideas, often most poetical and beautiful ideas, constructions which even eye-witnesses had unconsciously put upon facts, imagination concerning them, reflexions upon them, reflexions and imaginings such as were natural to the time and at the author’s level of culture. What we have here is not falsehood, not misrepresentation of the truth. It is a plastic, naïve, and, at the same time, often most profound apprehension of truth, within the area of religious feeling and poetic insight. It results in narrative, legendary, mythical in nature, illustrative often of spiritual truth in a manner more perfect than any hard, prosaic statement could achieve.’ Before Strauss men had appreciated that particular episodes, like the virgin birth and the bodily resurrection, might have some such explanation as this. No one had ever undertaken to apply this method consistently, from one end to the other of the gospel narrative. What was of more significance, no one had clearly defined the conception of legend. Strauss was sure that in the application of this notion to certain portions of the Scripture no irreverence was shown. No moral taint was involved. Nothing which could detract from the reverence in which we hold the Scripture was implied. Rather, in his view, the history of Jesus is more wonderful than ever, when some, at least, of its elements are viewed in this way, when they are seen as the product of the poetic spirit, working all unconsciously at a certain level of culture and under the impulse of a great enthusiasm.

There is no doubt that Strauss, who was at that time an earnest Christian, felt the relief from certain difficulties in the biography of Jesus which this theory affords. He put it forth in all sincerity as affording to others like relief. He said that while rationalists and supernaturalists alike, by their methods, sacrificed the divine content of the story and clung only to its form, his hypothesis sacrificed the historicity of the narrative form, but kept the eternal and spiritual truth. In his opinion, the lapse of a single generation was enough to give room for this process of the growth of the legendary elements which have found place in the written Gospels which we have. Ideas entertained by primitive Christians relative to their lost Master, have been, all unwittingly, transformed into facts and woven into the tale of his career. The legends of a people are in their basal elements never the work of a single individual. They are never intentionally produced. The imperceptible growth of a joint creative work of this kind was possible, however, only on the supposition that oral tradition was, for a time, the means of transmission of the reminiscences of Jesus. Strauss’ explanation of his theory has been given above, to some extent in his own words. We may see how he understood himself. We may appreciate also the genuineness of the religious spirit of his work. At the same time the thorough-going way in which he applied his principle, the relentless march of his argument, the character of his results, must sometimes have been startling even to himself. They certainly startled others. The effect of his work was instantaneous and immense. It was not at all the effect which he anticipated. The issue of the furious controversy which broke out was disastrous both to Strauss’ professional career and to his whole temperament and character.

David Friedrich Strauss was born in 1808 in Ludwigsburg in Württemberg. He studied in Tübingen and in Berlin. He became an instructor in the theological faculty in Tübingen in 1832. He published his *Leben Jesu* in 1835. He was almost at once removed from his portion. In 1836 he withdrew altogether from the professorial career. His answer to his critics, written in 1837, was in bitter tone. More conciliatory was

his book, *Über Vergängliches und Bleibendes im Christenthum*, published in 1839. Indeed there were some concessions in the third edition of his *Leben Jesu* in 1838, but these were all repudiated in 1840. His *Leben Jesu für das deutsche Volk*, published in 1866 was the effort to popularise that which he had done. It is, however, in point of method, superior to his earlier work, Comments were met with even greater bitterness. Finally, not long before his death in 1874, he published *Der Alte und der Neue Glaube*, in which he definitely broke with Christianity altogether and went over to materialism and pessimism.

Pfleiderer, who had personal acquaintance with Strauss and held him in regard, once wrote: 'Strauss' error did not lie in his regarding some of the gospel stories as legends, and some of the narratives of the miraculous as symbols of ideal truths. So far Strauss was right. The contribution which he made is one which we have all appropriated and built upon. His error lay in his looking for those religious truths which are thus symbolised, outside of religion itself, in adventurous metaphysical speculations. He did not seek them in the facts of the devout heart and moral will, as these are illustrated in the actual life of Jesus.' If Strauss, after the disintegration in criticism of certain elements in the biography of Jesus, had given us a positive picture of Jesus as the ideal of religious character and ethical force, his work would indeed have been attacked. But it would have outlived the attack and conferred a very great benefit. It conferred a great benefit as it was, although not the benefit which Strauss supposed. The benefit which it really conferred was in its critical method, and not at all in its results.

Of the mass of polemic and apologetic literature which Strauss' *Leben Jesu* called forth, little is at this distance worth the mentioning. Ullmann, who was far more appreciative than most of his adversaries, points out the real weakness of Strauss' work. That weakness lay in the failure to draw any distinction between the historical and the mythical. He threatened to dissolve the whole history into myth. He had no sense for the ethical element in the personality and teaching of Jesus nor of the creative force which this must have exerted. Ullmann says with cogency that, according to Strauss, the Church created its Christ virtually out of pure imagination. But we are then left with the query: What created the Church? To this query Strauss has absolutely no answer to give. The answer is, says Ullmann, that the ethical personality of Jesus created the Church. This ethical personality is thus a supreme historic fact and a sublime historic cause, to which we must endeavour to penetrate, if need be through the veil of legend. The old rationalists had made themselves ridiculous by their effort to explain everything in some natural way. Strauss and his followers often appeared frivolous, since, according to them, there was little left to be explained. If a portion of the narrative presented a difficulty, it was declared mythical. What was needed was such a discrimination between the legendary and historical elements in the Gospels as could be reached only by patient, painstaking study of the actual historical quality and standing of the documents. No adequate study of this kind had ever been undertaken. Strauss did not undertake it, nor even perceive that it was to be undertaken. There had been many men of vast learning in textual and philological criticism. Here, however, a new sort of critique was applied to a problem which had but just now been revealed in all its length and breadth. The establishing of the principles of this historical criticism — the so-called Higher Criticism — was the herculean task of the generation following Strauss. To the development of that science another Tübingen professor, Baur, made permanent contribution. With Strauss himself, sadder than the ruin of his career, was the tragedy of the uprooting of his faith. This tragedy followed in many places in the wake of the recognition of Strauss' fatal half-truth.

BAUR

Baur, Strauss' own teacher in Tübingen, afterward famous as biblical critic and church-historian, said of Strauss' book, that through it was revealed in startling fashion to that generation of scholars, how little real knowledge they had of the problem which the Gospels present. To Baur it was clear that if advance was to be made beyond Strauss' negative results, the criticism of the gospel history must wait upon an

adequate criticism of the documents which are our sources for that history. Strauss' failure had brought home to the minds of men the fact that there were certain preliminary studies which must needs be taken up. Meantime the other work must wait. As one surveys the literature of the next thirty years this fact stands out. Many apologetic lives of Jesus had to be written in reply to Strauss. But they are almost completely negligible. No constructive work was done in this field until nearly a generation had passed.

Since all history, said Baur, before it reaches us must pass through the medium of a narrator, our first question as to the gospel history is not, what objective reality can be accorded to the narrative itself. There is a previous question. This concerns the relation of the narrative to the narrator. It might be very difficult for us to make up our minds as to what it was that, in a given case, the witness saw. We have not material for such a judgment. We have probably much evidence, up and down his writings, as to what sort of man the witness was, in what manner he would be likely to see anything and with what personal equation he would relate that which he saw. Baur would seem to have been the first vigorously and consistently to apply this principle to the gospel narratives. Before we can penetrate deeply into the meaning of an author we must know, if we may, his purpose in writing. Every author belongs to the time in which he lives. The greater the importance of his subject for the parties and struggles of his day, the safer is the assumption that both he and his work will bear the impress of these struggles. He will represent the interests of one or another of the parties. His work will have a tendency of some kind. This was one of Baur's oft-used words — the tendency of a writer and of his work. We must ascertain that tendency. The explanation of many things both in the form and substance of a writing would be given could we but know that. The letters of Paul, for example, are written in palpable advocacy of opinions which were bitterly opposed by other apostles. The biographies of Jesus suggest that they also represent, the one this tendency, the other that. We have no cause to assert that this trait of which we speak implies conscious distortion of the facts which the author would relate. The simple-minded are generally those least aware of the bias in the working of their own minds. It is obvious that until we have reckoned with such elements as these, we cannot truly judge of that which the Gospels say. To the elaboration of the principles of this historical criticism Baur gave the labour of his life. His biblical work alone would have been epoch-making.

Ferdinand Christian Baur was born in 1793 in Schmieden, near Stuttgart. He became a professor in Tübingen in 1826 and died there in 1860. He was an ardent disciple of Hegel. His greatest work was surely in the field of the history of dogma. His works, *Die Christliche Lehre von der Vereöhnung*, 1838, *Die Christliche Lehre von der Dreieinigkeit und Menschwerdung Gottes*, 1841-1843, his *Lehrbuch der Christlichen Dogmengeschichte*, 1847, together constitute a contribution to which Harnack's work in our own time alone furnishes a parallel. Baur had begun his thorough biblical studies before the publication of Strauss' book. The direction of those studies was more than ever confirmed by his insight of the shortcomings of Strauss' work. Very characteristically also he had begun his investigations, not at the most difficult point, that of the Gospels, as Strauss had done, but at the easiest point, the Epistles of Paul. As early as 1831 he had published a tractate, *Die Christus-Partei in der Corinthischen Gemeinde*. In that book he had delineated the bitter contest between Paul and the Judaising element in the Apostolic Church which opposed Paul whithersoever he went. In 1835 his disquisition, *Die sogenannten Pastoral-Briefe*, appeared. In the teachings of these letters he discovered the antithesis to the gnostic heresies of the second century. He thought also that the stage of organisation of the Church which they imply, accorded better with this supposition than with that of their apostolic authorship. The same general theme is treated in a much larger way in Baur's *Paulus, der Apostel Jesu Christi*, in 1845. Here the results of his study of the book of the Acts are combined with those of his inquiries as to the Pauline Epistles. In the history of the apostolic age men had been accustomed to see the evidence only of peace and harmony. Baur sought to show that the period had been one of fierce struggle, between the narrow Judaic and legalistic form of faith in the Messiah and that conception, introduced by Paul, of a world-religion free from the law. Out of

this conflict, which lasted a hundred and fifty years, went forth the Catholic Church. The monuments of this struggle and witnesses of this process of growth are the New Testament writings, most of which were produced in the second century. The only documents which we have which were written before A.D. 70, were the four great Epistles of Paul, those to the Galatians, to the Romans, and to the Corinthians, together with the Apocalypse.

Many details in Baur's view are now seen to have been overstated and others false. Yet this was the first time that a true historical method had been applied to the New Testament literature as a whole. Baur's contribution lay in the originality of his conception of Christianity, in his emphasis upon Paul, in his realisation of the magnitude of the struggle which Paul inaugurated against Jewish prejudices in the primitive Church. In his idea, the issue of that struggle was, on the one hand, the freeing of Christianity from Judaism and on the other, the developing of Christian thought into a system of dogma and of the scattered Christian communities into an organised Church. The Fourth Gospel contains, according to Baur, a Christian gnosis parallel to the gnosis which was more and more repudiated by the Church as heresy. The Logos, the divine principle of life and light, appears bodily in the phenomenal world in the person of Jesus. It enters into conflict with the darkness and evil of the world. This speculation is but thinly clothed in the form of a biography of Jesus. That an account completely dominated by speculative motives gives but slight guarantee of historical truth, was for Baur self-evident. The author remains unknown, the age uncertain. The book, however, can hardly have appeared before the time of the Montanist movement, that is, toward the end of the second century. Scholars now rate far more highly than did Baur the element of genuine Johannine tradition which may lie behind the Fourth Gospel and account for its name. They do not find traces of Montanism or of paschal controversies. But the main contention stands. The Fourth Gospel represents the beginning of elaborate reflexion upon the life and work of Jesus. It is what it is because of the fusion of the ethical and spiritual content of the revelation in the personality of Jesus, with metaphysical abstractions and philosophical interpretation.

Baur was by no means so fortunate in the solution which he offered of the problem which the synoptic Gospels present. His opinions are of no interest except as showing that he too worked diligently upon a question which for a long time seemed only to grow in complexity and which has busied scholars practically from Baur's day to our own. His zeal here also to discover dogmatic purposes led him astray. The *Tendenzkritik* had its own tendencies. The chief was to exaggeration and one-sidedness. Baur had the kind of ear which hears grass grow. There is much overstrained acumen. Many radically false conclusions are reached by prejudiced operation with an historical formula, which in the last analysis is that of Hegel. Everything is to be explained on the principle of antithesis. Again, the assumption of conscious purpose in everything which men do or write is a grave exaggeration. It is often in contradiction of that wonderful unconsciousness with which men and institutions move to the fulfilment of a purpose for the good, the purpose of God, into which their own life is grandly taken up. To make each phase of such a movement the contribution of some one man's scheme or endeavour is, as was once said, to make God act like a professor.

The method of this book is that it seeks to deal only with men who have inaugurated movements, or marked some turning-point in their course which has proved of more than usual significance. The compass of the book demands such a limitation. But by this method whole chapters in the life of learning are passed over, in which the substance of achievement has been the carrying out of a plan of which we have been able to note only the inception. There is a sense in which the carrying out of a plan is both more difficult and more worthy than the mere setting it in motion. When one thinks of the labour and patience which have been expended, for example, upon the problem of the Gospels in the past seventy years, those truths come home to us. When one reminds himself of the hypotheses which have been made but to be abandoned, which have yet had the value that they at least indicated the area within which solutions do not

lie, — when one thinks of the wellnigh immeasurable toil by which we have been led to large results which now seem secure, one is made to realise that the conditions of the advance of science are, for theologians, not different from those which obtain for scholars who, in any other field, would establish truth and lead men. In a general way, however, it may be said that the course of opinion in these two generations, in reference to such questions as those of the dates and authorship of the New Testament writings, has been one of rather noteworthy retrogression from many of the Tübingen positions. Harnack's *Geschichte der altchristlichen Literatur*, 1893, and his *Chronologie der altchristlichen Literatur*, 1897, present a marked contrast to Baur's scheme.

THE CANON

The minds of New Testament scholars in the last generation have been engaged with a question which, in its full significance, was hardly present to the attention of Baur's school. It is the question of the New Testament as a whole. It is the question as to the time and manner and motives of the gathering together of the separate writings into a canon of Scripture which, despite the diversity of its elements, exerted its influence as a unit and to which an authority was ascribed, which the particular writings cannot originally have had. When and how did the Christians come to have a sacred book which they placed on an equality with the Old Testament, which last they had taken over from the synagogue? How did they choose the writings which were to belong to this new collection? Why did they reject books which we know were read for edification in the early churches? Deeper even than the question of the growth of the collection is that of the growth of the apprehension concerning it. This apprehension of these twenty-seven different writings as constituting the sole document of Christian revelation, given by the Holy Spirit, the identical holy book of the Christian Church, gave to the book a significance altogether different from that which its constituent elements must have had for men to whom they had appeared as but the natural literary deposit of the religious movement of the apostolic age. This apprehension took possession of the mind of the Christian community. It was made the subject of deliverances by councils of the Church. How did this great transformation take place? Was it an isolated achievement, or was it part of a general movement? Did not this development of life in the Christian communities which gave them a New Testament belong to an evolution which gave them also the so-called Apostles' Creed and a monarchical organisation of the Church and the beginnings of a ritual of worship?

It is clear that we have here a question of greatest moment. With the rise of this idea of the canon, with the assigning to this body of literature the character of Scripture, we have the beginning of the larger mastery which the New Testament has exerted over the minds and life of men. Compared with this question, investigations as to the authorship and as to the time, place and circumstance of the production of particular books, came, for the time, to occupy a secondary rank. As they have emerged again, they wear a new aspect and are approached in a different spirit. The writings are revealed as belonging to a far larger context, that of the whole body of the Christian literature of the age. It in no way follows from that which we have said that the body of documents, which ultimately found themselves together in the New Testament, have not a unity other than the outward one which was by consensus of opinion or conciliar decree imposed upon them. They do represent, in the large and in varying degrees, an inward and spiritual unity. There was an inspiration of the main body of these writings, the outward condition of which, at all events, was the nearness of their writers to Jesus or to his eye-witnesses, and the consequence of which was the unique relation which the more important of these documents historically bore to the formation of the Christian Church. There was a heaven which lay about the infancy of Christianity which only slowly faded into the common light of day. That heaven was the spirit of the Master himself. The chief of these writings do centrally enshrine the first pure illumination of that spirit. But the churchmen who made the canon and the Fathers who argued about it very often gave mistaken

reasons for facts in respect of which they nevertheless were right. They gave what they considered sound external reasons. They alleged apostolic authorship. They should have been content with internal evidence and spiritual effectiveness. The apostles had come, in the mind of the early Church, to occupy a place of unique distinction. Writings long enshrined in affection for their potent influence, but whose origin had not been much considered, were now assigned to apostles, that they might have authority and distinction. The theory of the canon came after the fact. The theory was often wrong. The canon had been, in the main and in its inward principle, soundly constituted. Modern critics reversed the process. They began where the Church Fathers left off. They tore down first that which had been last built up. Modern criticism, too, passed through a period in which points like those of authorship and date of Gospels and Epistles seemed the only ones to be considered. The results being here often negative, complete disintegration of the canon seemed threatened, through discovery of errors in the processes by which the canon had been outwardly built up. Men realise now that that was a mistake.

Two things have been gained in this discussion. There is first the recognition that the canon is a growth. The holy book and the conception of its holiness, as well, were evolved. Christianity was not primarily a book-religion save in the sense that almost all Christians revered the Old Testament. Other writings than those which we esteem canonical were long used in churches. Some of those afterward canonical were not used in all the churches. In similar fashion we have learned that identical statements of faith were not current in the earliest churches. Nor was there one uniform system of organisation and government. There was a time concerning which we cannot accurately use the word Church. There were churches, very simple, worshipping communities. But the Church, as outward magnitude, as triumphant organisation, grew. So there were many creeds or, at least, informally accredited and current beginnings of doctrine. By and by there was a formally accepted creed. So there were first dearly loved memorials of Jesus and letters of apostolic men. Only by and by was there a New Testament. The first gain is the recognition of this state of things. The second follows. It is the recognition that, despite a sense in which this literature is unique, there is also a sense in which it is but a part of the whole body of early Christian literature. From the exact and exhaustive study of the early Christian literature as a whole, we are to expect a clearer understanding and a juster estimate of the canonical part of it. It is not easy to say to whom we have to ascribe the discovery and elaboration of these truths. The historians of dogma have done much for this body of opinion. The historians of Christian literature have perhaps done more. Students of institutions and of the canon law have had their share. Baur had more than an inkling of the true state of things. But by far the most conspicuous teacher of our generation, in two at least of these particular fields, has been Harnack. In his lifelong labour upon the sources of Christian history, he had come upon this question of the canon again and again. In his *Lehrbuch der Dogmengeschichte*, 1887-1890, 4te. Aufl., 1910, the view of the canon, which was given above, is absolutely fundamental. In his *Geschichte der altchristlichen Literatur bis Eusebius*, 1893, and *Chronologic der allchristlichen Literatur*, 1897-1904, the evidence is offered in rich detail. It was in his tractate, *Das Neue Testament um das Jahr* 200, 1889, that he contended for the later date against Zahn, who had urged that the outline of the New Testament was established and the conception of it as Scripture present, by the end of the first century. Harnack argues that the decision practically shaped itself between the time of Justin Martyr, c. A.D. 150, and that of Irenæus, c. A.D. 180. The studies of the last twenty years have more and more confirmed this view.

LIFE OF JESUS

We said that the work of Strauss revealed nothing so clearly as the ignorance of his time concerning the documents of the early Christian movement. The labours of Baur and of his followers were directed toward overcoming this difficulty. Suddenly the public interest was stirred, and the earlier excitement recalled by the publication of a new life of Jesus. The author was a Frenchman, Ernest Renan, at one time

a candidate for the priesthood in the Roman Church. He was a man of learning and literary skill, who made his *Vie de Jésus*, which appeared in 1863, the starting-point for a series of historical works under the general title, *Les Origines de Christianisme*. In the next year appeared Strauss' popular work, *Leben Jesu für das deutsche Volk*. In 1864 was published also Weizsäcker's contribution to the life of Christ, his *Untersuchungen über die evangelische Geschichte*. To the same year belonged Schenkel's *Charakterbild Jesu*. In the years from 1867-1872 appeared Keim's *Geschichte Jesu von Nazara*. There is something very striking in this recurrence to the topic. After ail, this was the point for the sake of which those laborious investigations had been undertaken. This was and is the theme of undying religious interest, the character and career of the Nazarene. Renan's philosophical studies had been mainly in English, studies of Locke and Hume. But Herder also had been his beloved guide. For his biblical and oriental studies he had turned almost exclusively to the Germans. There is a deep religious spirit in the work of the period of his conflict with the Church. The enthusiasm for Christ sustained him in his struggle. Of the days before he withdrew from the Church he wrote: 'For two months I was a Protestant like a professor in Halle or Tübingen.' French was at that time a language much better known in the world at large, particularly the English-speaking world, than was German. Renan's book had great art and charm. It took a place almost at once as a bit of world-literature. The number of editions in French and of translations into other languages is amazing. Beyond question, the critical position was made known through Renan to multitudes who would never have been reached by the German works which were really Renan's authorities. It is idle to say with Pfleiderer that it is a pity that, having possessed so much learning, Renan had not possessed more. That is not quite the point. The book has much breadth and solidity of learning. Yet Renan has scarcely the historian's quality. His work is a work of art. It has the halo of romance. Imagination and poetical feeling make it in a measure what it is.

Renan was born in 1823 in Treguier in Brittany. He set out for the priesthood, but turned aside to the study of oriental languages and history. He made long sojourn in the East. He spoke of Palestine as having been to him a fifth Gospel. He became Professor of Hebrew in the *College de France*. He was suspended from his office in 1863, and permitted to read again only in 1871. He had formally separated himself from the Roman Church in 1845. He was a member of the Academy. His diction is unsurpassed. He died in 1894. In his own phrase, he sought to bring Jesus forth from the darkness of dogma into the midst of the life of his people. He paints him first as an idyllic national leader, then as a struggling and erring hero, always aiming at the highest, but doomed to tragic failure through the resistance offered by reality to his ideal. He calls the traditional Christ an abstract being who never was alive. He would bring the marvellous human figure before our eyes. He heightens the brilliancy of his delineation by the deep shadows of mistakes and indiscretion upon Jesus' part. In some respects an epic or an historical romance, without teaching us history in detail, may yet enable us by means of the artist's intuition to realise an event or period, or make presentation to ourselves of a personality, better than the scant records acknowledged by the strict historian could ever do.

Our materials for a real biography of Jesus are inadequate. This was the fact which, by all these biographies of Jesus, was brought home to men's minds. Keim's book, the most learned of those mentioned, is hardly more than a vast collection of material for the history of Jesus' age, which has now been largely superseded by Schürer's *Geschichte des Judischen Volkes im Zeitalier Jesu Christi*, 2 Bde., 1886-1890. There have been again, since the decade of the sixties, periods of approach to the great problem. Weiss and Beyschlag published at the end of the eighties lives of Jesus which, especially the former, are noteworthy in their treatment of the critical material. They do not for a moment face the question of the person of Christ. The same remark might be made, almost without exception, as to those lives of Jesus which have appeared in numbers in England and America. The best books of recent years are Albert Reville's *Jesus de Nazareth*, 1897, and Oscar Holtzmann's *Leben Jesu*, 1901. So great are the difficulties and in such disheartening fashion are they urged from all sides, that one cannot withhold

enthusiastic recognition of the service which Holtzmann particularly has here rendered, in a calm, objective, and withal deeply devout handling of his theme. Meantime new questions have arisen, questions of the relation of Jesus to Messianism, like those touched upon by Wrede in his *Das Messias Geheimniss in den Evangelien*, 1901, and questions as to the eschatological trait in Jesus' own teaching. Schweitzer's book, *Von Reimarus zu Wrede: eine Geschichte der Leben Jesu-Forschung*, 1906, not merely sets forth this deeply interesting chapter in the history of the thought of modern men, but has also serious interpretative value in itself. For English readers Sanday's *Life of Christ in Recent Research*, 1907, follows the descriptive aspect, at least, of the same purpose with Schweitzer's book, covering, however, only the last twenty years.

It is characteristic that Ritschl, notwithstanding his emphasis upon the historical Jesus, asserted the impossibility of a biography of Jesus. The understanding of Jesus is through faith. For Wrede, on the other hand, such a biography is impossible because of the nature of our sources. Not alone are they scant, but they are not biographical. They are apologetic, propagandist, interested in everything except those problems which a biographer must raise. The last few years have even conjured up the question whether Jesus ever lived. One may say with all simplicity, that the question has, of course, as much rightfulness as has any other question any man could raise. The somewhat extended discussion has, however, done nothing to make evident how it could arise, save in minds unfamiliar with the materials and unskilled in historical research. The conditions which beset us when we ask for a biography of Jesus that shall answer scientific requirement are not essentially different from those which meet us in the case of any other personage equally remote in point of time, and equally woven about — if any such have been — by the love and devotion of men. Bousset's little book, *Was Wissen wir von Jesus?* 1904, convinces a quiet mind that we know a good deal. Qualities in the personality of Jesus obviously worked in transcendent measure to call out devotion. No understanding of history is adequate which has no place for the unfathomed in personality. Exactly because we ourselves share this devotion, we could earnestly wish that the situation as to the biography of Jesus were other than it is.

THE OLD TESTAMENT

We have spoken thus far as if the whole biblical-critical problem had been that of the New Testament. In reality the same impulses which had opened up that question to the minds of men had set them working upon the problem of the Old Testament as well. We have seen how the Christians made for themselves a canon of the New Testament. By the force of that conception of the canon, and through the belief that, almost in a literal sense, God was the author of the whole book, the obvious differences among the writings had been obscured. Men forgot the evolution through which the writings had passed. The same thing had happened for the Old Testament in the Jewish synagogues and for the rabbis before the Christian movement. When the Christians took over the Old Testament they took it over in this sense. It was a closed book wherein all appreciation of the long road which the religion of Israel had traversed in its evolution had been lost. The relation of the old covenant to the new was obscured. The Old Testament became a Christian book. Not merely were the Christian facts prophesied in the Old Testament, but its doctrines also were implied. Almost down to modern times texts have been drawn indifferently from either Testament to prove doctrine and sustain theology. Moses and Jesus, prophets and Paul, are cited to support an argument, without any sense of difference. What we have said is hardly more true of Augustine or Anselm than of the classic Puritan divines. This was the state of things which the critics faced.

The Old Testament critical movement is a parallel at all points of the one which we have described in reference to the New. Of course, elder scholars, even Spinoza, had raised the question as to the Mosaic authorship of certain portions of the Pentateuch. Roman Catholic scholars in the seventeenth century, for whom the stringent theory of inspiration had less significance than for Protestants, had set forth views

which showed an awakening to the real condition. Yet, at the beginning of the nineteenth century, no one would have forecast a revolution in opinion which would recognise the legendary quality of considerable portions of the Pentateuch and historical books, which would leave but little that is of undisputed Mosaic authorship, which would place the prophets before the law, which would concede the growth of the Jewish canon, which would perceive the relation of Judaism to the religions of the other Semite peoples and would seek to establish the true relation of Judaism to Christianity.

In the year 1835, the same year in which Strauss' *Leben Jesu* saw the light, Wilhelm Vatke published his *Religion des Alten Testaments*. Vatke was born in 1806, began to teach in Berlin in 1830, was professor extraordinarius there in 1837 and died in 1882, not yet holding a full professorship. His book was obscurely written and scholastic. Public attention was largely occupied by the conflict which Strauss' work had caused. Reuss in Strassburg was working on the same lines, but published the main body of his results much later.

The truth for which these scholars and others like them argued, worked its way slowly by force of its own merit. Perhaps it was due to this fact that the development of Old Testament critical views was subject to a fluctuation less marked than that which characterised the case of the New Testament. It is not necessary to describe the earlier stages of the discussion in Vatke's own terms. To his honour be it said that the views which he thus early enunciated were in no small degree identical with those which were in masterful fashion substantiated in Holland by Kuenen about 1870, in Germany by Wellhausen after 1878, and made known to English readers by Robertson Smith In 1881.

Budde has shown in his *Kanon des Alten Testaments*, 1900, that the Old Testament which lies before us finished and complete, assumed its present form only as the result of the growth of several centuries. At the beginning of this process of the canonisation stands that strange event, the sudden appearance of a holy book of the law under King Josiah, in 621 B.C. The end of the process, through the decisions of the scribes, falls after the destruction of Jerusalem, possibly even in the second century. Lagarde seems to have proved that the rabbis of the second century succeeded in destroying all copies of the Scripture which differed from the standard then set up. This state of things has enormously increased a difficulty which was already great enough, that of the detection and separation of the various elements of which many of the books in this ancient literature are made up. Certain books of the New Testament also present the problem of the discrimination of elements of different ages, which have been wrought together into the documents as we now have them, in a way that almost defies our skill to disengage. The synoptic Gospels are, of course, the great example. The book of the Acts presents a problem of the same kind. But the Pentateuch, or rather Hexateuch, the historical books in less degree, the writings even of some of the prophets, the codes which formulate the law and ritual, are composites which have been whole centuries in the making and remaking. There was no such thing as right of authorship in ancient Israel, little of it in the ancient world at all. What was once written was popular or priestly property. Histories were newly narrated, laws enlarged and rearranged, prophecies attributed to conspicuous persons. All this took place not in deliberate intention to pervert historic truth, but because there was no interest in historic truth and no conception of it. The rewriting of a nation's history from the point of view of its priesthood bore, to the ancient Israelite, beyond question, an aspect altogether different from that which the same transaction would bear to us. The difficulty of the separation of these materials, great in any case, is enhanced by the fact alluded to, that we have none but internal evidence. The success of the achievement, and the unanimity attained with reference to the most significant questions, is one of the marvels of the life of learning of our age.

In the Jewish tradition it had been assumed that the Mosaic law was written down in the wilderness. Then, in the times of the Judges and of the Kings, the historical books took shape, with David's Psalms and the wise words of Solomon. At the end of the period of the Kings we have the prophetic literature and finally Ezra and Nehemiah. De Wette had disputed this order, but Wellhausen in his *Prolegomena zur*

Geshichte Israels, 1883, may be said to have proved that this view was no longer tenable. Men ask, could the law, or even any greater part of it, have been given to nomads in the wilderness? Do not all parts of it assume a settled state of society and an agricultural life? Do the historical books from Judges to the II. Kings know anything about the law? Are the practices of worship which they imply consonant with the supposition that the law was in force? How is it that that law appears both under Josiah and again under Ezra, as something new, thus far unknown, and yet as ruling the religious life of the people from that day forth? It seems impossible to escape the conclusion that only after Josiah's reformation, more completely after the restoration under Ezra, did the religion of the law exist. The centralisation of worship at one point, such as the book of Deuteronomy demands, seems to have been the thing achieved by the reform under Josiah. The establishment of the priestly hierarchy such as the code ordains was the issue of the religious revolution wrought in Ezra's time. To put it differently, the so-called *Book of the Covenant, the nucleus of the law-giving*, itself implies the multiplicity of the places of worship. Deuteronomy demands the centralisation of the worship as something which is yet to take place. The priestly Code declares that the limitation of worship to one place was a fact already in the time of the journeys of Israel in the wilderness. It is assumed that the Hebrews in the time of Moses shared the almost universal worship of the stars. Moses may indeed have concluded a covenant between his people and Jahve, their God, hallowing the judicial and moral life of the people, bringing these into relation to the divine will. Jahve was a holy God whose will was to guide the people coming up out of the degradation of nature-worship. That part of the people held to the old nature-worship is evident in the time of Elijah. The history of Israel is not that of defection from a pure revelation. It is the history of a gradual attainment of purer revelation, of enlargement in the application of it, of discovery of new principles contained in it. It is the history also of the decline of spiritual religion. The zeal of the prophets against the ceremonial worship shows that. Their protest reveals at that early date the beginning of that antithesis which had become so sharp in Jesus' time.

This determination of the relative positions of law and prophets was the first step in the reconstruction of the history, both of the nation of Israel and of its literature. At the beginning, as in every literature, are songs of war and victory, of praise and grief, hymns, even riddles and phrases of magic. Everywhere poetry precedes prose. Then come myths relating to the worship and tales of the fathers and heroes. Elements of both these sorts are embedded in the simple chronicles which began now to be written, primitive historical works, such as those of the Jahvist and Elohist, of the narrators of the deeds of the judges and of David and of Saul. Perhaps at this point belong the earliest attempts at fixing the tradition of family and clan rights, and of the regulation of personal conduct, as in the Book of the Covenant. Then comes the great outburst of the prophetic spirit, the preaching of an age of great religious revival. Then follows the law, with its minute regulation of all details of life upon which would depend the favour of the God who had brought punishment upon the people in the exile. The prophecy runs on into apocalyptic like that of the book of Daniel. The contact with the outside world makes possible a phase of literature such as that to which the books of Job and Ecclesiastes belong. The deepening of the inner life gave the world the lyric of the Psalms, some of which are credibly assigned to a period so late as that of the Maccabees.

In this which has been said of the literature we have the clue also for the reconstruction of the nation's history. The naïve assumption in the writing of all history had once been that one must begin with the beginning. But to Wellhausen, Stade, Eduard Meyer and Kittel and Cornill, it has been clear that the history of the earliest times is the most uncertain. It is the least adapted to furnish a secure point of departure for historical inquiry. There exist for it usually no contemporary authorities, or only such as are of problematical worth. This earliest period constitutes a problem, the solution of which, so far as any solution is possible, can be hoped for only through approach from the side of ascertained facts. We must start from a period which is historically known. For the history of the Hebrews, this is the time of the first

prophets of whom we have written records, or from whom we have written prophecies. We get from these, as also from the earliest direct attempts at history writing, only that conception of Israel's pre-historic life which was entertained in prophetic circles in the eighth century. We learn the heroic legends in the interpretation which the prophets put upon them. We have still to seek to interpret them for ourselves. We must begin in the middle and work both backward and forward. Such a view of the history of Israel affords every opportunity for the connecting of the history and religion of Israel with those of the other Semite stocks. Some of these have in recent years been discovered to offer extraordinary parallels to that which the Old Testament relates.

THE HISTORY OF DOCTRINE

When speaking of Baur's contribution to New Testament criticism, we alluded to his historical works. He was in a distinct sense a reformer of the method of the writing of church history. To us the notions of the historical and of that which is genetic are identical. Of course, naïve religious chronicles do not meet that test. A glance at the histories produced by the age of rationalism will show that these also fall short of it. The perception of the relativity of institutions like the papacy is here wholly wanting. Men and things are brought summarily to the bar of the wisdom of the author's year of grace. They are approved or condemned by this criterion. For Baur, all things had come to pass in the process of the great life of the world. There must have been a rationale of their becoming. It is for the historian with sympathy and imagination to find out what their inherent reason was. One other thing distinguishes Baur as church historian from his predecessors. He realised that before one can delineate one must investigate. One must go to the sources. One must estimate the value of those sources. One must have ground in the sources for every judgment. Baur was himself a great investigator. Yet the movement for the investigation of the sources of biblical and ecclesiastical history which his generation initialed has gone on to such achievements that, in some respects, we can but view the foundations of Baur's own work as precarious, the results at which he arrived as unwarranted. New documents have come to light since his day. Forgeries have been proved to be such, The whole state of learning as to the literature of the Christian origins has been vastly changed. There is still another other thing to say concerning Baur. He was a Hegelian. He has the disposition always to interpret the movements of the religious spirit in the sense of philosophical ideas. He frankly says that without speculation every historical investigation remains but a play upon the surface of things. Baur's fault was that in his search for, or rather in his confident discovery of, the great connecting forces of history, the biographical element, the significance of personality, threatened altogether to disappear. The force in the history was the absolute, the immanent divine will. The method everywhere was that of advance by contrasts and antagonisms. One gets an impression, for example, that the Nicene dogma became what it did by the might of the idea, that it could not by any possibility have had any other issue.

The foil to much of this in Baur's own age was represented in the work of Neander, a converted Jew, professor of church history in Berlin, who exerted great influence upon a generation of English and American scholars. He was not an investigator of sources. He had no talent for the task. He was a delineator, one of the last of the great painters of history, if one may so describe the type. He had imagination, sympathy, a devout spirit. His great trait was his insight into personality. He wrote history with the biographical interest. He almost resolves history into a series of biographical types. He has too little sense for the connexion of things, for the laws of the evolution of the religious spirit. The great dramatic elements tend to disappear behind the emotions of individuals. The old delineators were before the age of investigation. Since that impulse became masterful, some historians have been completely absorbed in the effort to make contribution to this investigation. Others, with a sense of the impossibility of mastering the results of investigation in all fields, have lost the zeal for the writing of church history on

a great scale. They have contented themselves with producing monographs upon some particular subject, in which, at the most, they may hope to embody all that is known as to some specific question.

We spoke above of the new conception of the relation of the canonical literature of the New Testament to the extracanonical. We alluded to the new sense of the continuity of the history of the apostolic churches with that of the Church of the succeeding age. The influence of these ideas has been to set all problems here involved in a new light. Until 1886 it might have been said with truth that we had no good history of the apostolic age. In that year Weizsäcker's book, *Das Apostolische Zeitalter der Christlichen Kirche*, admirably filled the place. A part of the problem of the historian of the apostolic age is difficult for the same reason which was given when we were speaking of the biography of Jesus. Our materials are inadequate. First with the beginning of the activities of Paul have we sources of the first rank. The relation of statements in the Pauline letters to data in the book of the Acts was one of the earliest problems which the Tübingen school set itself. An attempt to write the biography of Paul reminds us sharply of our limitations. We know almost nothing of Paul prior to his conversion, or subsequent to the enigmatical breaking off of the account of the beginnings of his work at Rome. Harnack's *Mission und Ausbreitung des Christenthums*, 1902 (translated, Moffatt, 1908), takes up the work of Paul's successors in that cardinal activity. It offers, strange as it may seem, the first discussion of the dissemination of Christianity which has dealt adequately with the sources. It gives also a picture of the world into which the Christian movement went. It emphasises anew the truth which has for a generation past grown in men's apprehension that there is no possibility of understanding Christianity, except against the background of the religious life and thought of the world into which it came. Christianity had vital relation, at every step of its progress, to the religious movements and impulses of the ancient world, especially in those centres of civilisation which Paul singled out for his endeavour and which remained the centres of the Christian growth. It was an age which has often been summarily described as corrupt. Despite its corruption, or possibly because it was corrupt, it gives evidence, however, of religious stirring, of strong ethical reaction, of spiritual endeavour rarely paralleled. In the Roman Empire everything travelled. Religions travelled. In the centres of civilisation there was scarcely a faith of mankind which had not its votaries.

It was an age of religious syncretism, of hospitality to diverse religious ideas, of the commingling of those ideas. These things facilitated the progress of Christianity. They made certain that if the Christian movement had in it the divine vitality which men claimed, it would one day conquer the world. Equally, they made certain that, as the very condition of this conquest, Christianity would be itself transformed. This it is which has happened in the evolution of Christianity from its very earliest stages and in all phases of its life. Of any given rite, opinion or institution, of the many which have passed for almost two millenniums unchallenged under the Christian name, men about us are now asking: But how much of it is Christian? In what measure have we to think of it as derived from some other source, and representing the accommodation and assimilation of Christianity to its environment in process of its work? What is Christianity? Not unnaturally the ancient Church looked with satisfaction upon the great change which passed over Christianity when Constantine suddenly made that which had been the faith of a despised and persecuted sect, the religion of the world. The Fathers can have thought thus only because their minds rested upon that which was outward and spectacular. Not unnaturally the metamorphosis in the inward nature of Christianity which had taken place a century and a quarter earlier was hidden from their eyes. In truth, by that earlier and subtler transformation Christianity had passed permanently beyond the stage in which it had been preponderantly a moral and spiritual enthusiasm, with its centre and authority in the person of Jesus. It became a system and an institution, with a canon of New Testament Scripture, a monarchical organisation and a rule of faith which was formulated in the Apostles' Creed.

To Baur the truth as to the conflict of Paul with the Judaisers had meant much. He thought, therefore, with reference to the rise of priesthood and ritual among the Christians, to the emphasis on Scripture in the fashion of the scribes, to the insistence upon rules and dogmas after the manner of the Pharisees, that

they were but the evidence of the decline and defeat of Paul’s free spirit and of the resurgence of Judaism in Christianity. He sought to explain the rise of the episcopal organisation by the example of the synagogue. Ritschl in his *Entstehung der alt-catholischen Kirche*, 1857, had seen that Baur’s theory could not be true. Christianity did not fall back into Judaism. It went forward to embrace the Hellenic and Roman world. The institutions, dogmas, practices of that which, after A.D. 200, may with propriety be called the Catholic Church, are the fruit of that embrace. There was here a falling off from primitive and spiritual Christianity. But it was not a falling back into Judaism. There were priests and scribes and Pharisees with other names elsewhere. The phenomenon of the waning of the original enthusiasm of a period of religious revelation has been a frequent one. Christianity on a grand scale illustrated this phenomenon anew. Harnack has elaborated this thesis with unexampled brilliancy and power. He has supported it with a learning in which he has no rival and with a religious interest which not even hostile critics would deny. The phrase, ‘the Hellenisation of Christianity,’ might almost be taken as the motto of the work to which he owes his fame.

HARNACK

Adolf Harnack was born in 1851 in Dorpat, in one of the Baltic provinces of Russia. His father, Theodosius Harnack, was professor of pastoral theology in the University of Dorpat. Harnack studied in Leipzig and began to teach there in 1874. He was called to the chair of church history in Giessen in 1879. In 1886 he removed to Marburg and in 1889 to Berlin. Harnack’s earlier published work was almost entirely in the field of the study of the sources and materials of early church history. His first book, published in 1873, was an inquiry as to the sources for the history of Gnosticism. His *Patrum Apostolicorum Opera*, 1876, prepared by him jointly with von Gehhardt and Zahn, was in a way only a forecast of the great collection, *Texte und Untersuchungen zur Geschickte der alt-christlichen Literatur*, begun in 1882, upon which numbers of scholars have worked together with him. The collection has already more than thirty-five volumes. In his own two works, *Die Geschichte der alt-christlichen Literatur bis Eusebius*, 1893, and *Die Chronologie der alt-christlichen Literatur bis Eusebius*, 1897, are deposited the results of his reflexion on the mass of this material. His *Beitrage zur Einleitung in das Neue Testament*, 1906, etc., should not be overlooked. He has had the good fortune to be among those who have discovered manuscripts of importance. He has had to do with the Prussian Academy’s edition of the Greek Fathers. A list of his published works, which was prepared in connexion with the celebration of his sixtieth birthday in 1911, bears witness to his amazing diligence and fertility. He was for thirty-five years associated with Schurer in the publication of the *Theologische Literaturzeitung*. He has filled important posts in the Church and under the government. To this must be added an activity as a teacher which has placed a whole generation of students from every portion of the world under undying obligation. One speaks with reserve of the living, but surely no man of our generation has done more to make the history of which we write.

Harnack’s epoch-making work was his *Lehrbuch der Dogmengeschichte*, 1886-88, fourth edition, 1910. The book met, almost from the moment of its appearance, with the realisation of the magnitude of that which had been achieved. It rested upon a fresh and independent study of the sources. It departed from the mechanism which had made the old treatises upon the history of doctrine formal and lifeless. Harnack realised to the full how many influences other than theological had had part in the development of doctrine. He recognised the reaction of modes of life and practice, and of external circumstances on the history of thought. His history of doctrine has thus a breadth and human quality never before attained. Philosophy, worship, morals, the development of Church government and of the canon, the common interests and passions of the age and those of the individual participants, are all made tributary to his delineation.

Harnack cannot share Baur's view that the triumph of the Logos-Christology at Nicæa and Chalcedon was inevitable. A certain historic naturalness of the movement he would concede, the world on which Christianity entered being what it was. He is aware, however, that many elements other than Christian have entered into the development. He has phrased his apprehension thus. That Hellenisation of Christianity which Gnosticism represented, and against which, in this, its acute form, the Church contended was, after all, the same thing which, by slower process and more unconsciously, befell the Church itself. That pure moral enthusiasm and inspiration which had been the gist of the Christian movement, in its endeavour to appropriate the world, had been appropriated by the world in far greater measure than its adherents knew. It had taken up its mission to change the world. It had dreamed that while changing the world it had itself remained unchanged. The world was changed, the world of life, of feeling and of thought. But Christianity was also changed. It had conquered the world. It had no perception of the fact that it illustrated the old law that the conquered give laws to the conquerors. It had fused the ancient culture with the flame of its inspiration. It did not appreciate the degree in which the elements of that ancient culture now coloured its far-shining flame. It had been a maker of history. Meantime it had been unmade and remade by its own history. It confidently carried back its canon, dogma, organisation, to Christ and the apostles. It did not realise that the very fact that it could find these things natural and declare them ancient, proved with conclusiveness that it had itself departed from the standard of Christ and the apostles. It esteemed that these were its defences against the world. It little dreamed that they were, by their very existence, the evidence of the fact that the Church had not defended itself against the world. Its dogma was the Hellenisation of its thought. Its organisation was the Romanising of its life. Its canon and ritual were the externalising, and conventionalising of its spirit and enthusiasm. These are positive and constructive statements of Harnack's main position.

When, however, they are turned about and stated negatively, these statements all convey, more or less, the impression that the advance of Christianity had been its destruction, and the evolution of dogma had been a defection from Christ. This is the aspect of the contention which gave hostile critics opportunity to say that we have before us the history of the loss of Christianity. Harnack himself has many sentences which superficially will bear that construction. Hatch had said in his brilliant book, *The Influence of Greek Ideas and Usages upon the Christian Church*, 1891, that the domestication of Greek philosophy in the Church signified a defection from the Sermon on the Mount. The centre of gravity of the Gospel was changed from life to doctrine, from morals to metaphysics, from goodness to orthodoxy. The change was portentous. The aspect of pessimism is, however, removed when one recognises the inevitableness of some such process, if Christianity was ever to wield an influence in the world at all. Again, one must consider that the process of the recovery of pure Christianity must begin at exactly this point, namely, with the recognition of how much in current Christianity is extraneous. It must begin with the sloughing off of these extraneous elements, with the recovery of the sense for that which original Christianity was. Such a recovery would be the setting free again of the power of the religion itself.

The constant touchstone and point of reference for every stage of the history of the Church must be the gospel of Jesus. But what was the gospel of Jesus? In what way did the very earliest Christians apprehend that gospel? This question is far more difficult for us to answer than it was for those to whom the New Testament was a closed body of literature, externally differentiated from all other, and with a miraculous inspiration extending uniformly to every phrase in any book. These men would have said that they had but to find the proper combination of the sacred phrases. But we acknowledge that the central inspiration was the personality of Jesus. The books possess this inspiration in varying degree. Certain of the books have distinctly begun the fusion of Christian with other elements. They themselves represent the first stages of the history of doctrine. We acknowledge that those utterances of Jesus which have been preserved for us, shaped themselves by the antitheses in which Jesus stood. There is much about them that is palpably incidental, practically relevant and unquestionably only relative. In a large sense, much of the

meaning of the gospel has to be gathered out of the evidence of the operation of its spirit in subsequent ages of the Christian Church, and from remoter aspects of the influence of Jesus on the world. Thus the very conception of the gospel of Jesus becomes inevitably more or less subjective. It becomes an ideal construction. The identification of this ideal with the original gospel proclamation becomes precarious. We seem to move in a circle. We derive the ideal from the history, and then judge the history by the ideal.

Is there any escape from this situation, short of the return to the authority of Church or Scripture in the ancient sense? Furthermore, even the men to whom the gospel was in the strictest sense a letter, identified the gospel with their own private interpretation of this letter. Certainly the followers of Ritschl who will acknowledge no traits of the gospel save those of which they find direct witness in the Gospels, thus ignore that the Gospels are themselves interpretations. This undue stress upon the documents which we are fortunate enough to possess, makes us forget the limitations of these documents. We tend thus to exaggerate that which must be only incidental, as, for example, the Jewish element, in the teaching of Jesus. We thus underrate phases of Jesus' teaching which, no doubt, a man like Paul would have apprehended better than did the evangelists themselves. In truth, in Harnack's own delineation of the teaching of Jesus, those elements of it which found their way to expression in Paul, or again in the fourth Gospel, are rather underrated than overstated, in the author's anxiety to exclude elements which are acknowledged to be interpretative in their nature. We are driven, in some measure, to seek to find out what the gospel was from the way in which the earliest Christians took it up. We return ever afresh to questions nearly unanswerable from the materials at hand. What was the central principle in the shaping of the earliest stages of the new community, both as to its thought and life? Was it the longing for the coming of the Kingdom of God, the striving after the righteousness of the Sermon on the Mount? Or was it the faith of the Messiah, the reverence for the Messiah, directed to the person of Jesus? What word dominated the preaching? Was it that the Kingdom of God was near, that the Son of Man would come? Or was it that in Jesus Messiah has come? What was the demand upon the hearer? Was it, Repent, or was it, Believe on the Lord Jesus, or was it both, and which had the greater emphasis? Was the name of Jesus used in the formulas of worship before the time of Paul? What do we know about prayer in the name of Jesus, or baptism in that name, or miracles in the name of Jesus, or of the Lord's Supper and the conception of the Lord as present with his disciples in the rite? Was this revering of Jesus, which was fast moving toward a worship of him, the inner motive force of the whole construction of the dogma of his person and of the trinity?

In the second volume Harnack treats of the development primarily of the Christological and trinitarian dogma, from the fourth to the seventh centuries. The dramatic interest of the narrative exceeds anything which has been written on this theme. A debate which to most modern men is remote and abstruse almost to the point of unintelligibility, and of which many of the external aspects are disheartening in the extreme, is here brought before us in something of the reasonableness which it must have had for those who took part in it. Tertullian shaped the problem and established the nomenclature for the Christological solution which the Orient two hundred years later made its own. It was he who, from the point of view of the Jurist, rather than of the philosopher, gave the words 'person' and 'substance,' which continually occur in this discussion, the meaning which in the Nicene Creed they bear. Most brilliant is Harnack's characterisation of Arius and Athanasius. In Arius the notion of the Son of God is altogether done away. Only the name remains. The victory of Arianism would have resolved Christianity into cosmology and formal ethics. It would have destroyed it as religion. Yet the perverse situation into which the long and fierce controversy had drifted cannot be better illustrated than by one undisputed fact. Athanasius, who assured for Christianity its character as a religion of the living communion of God with man, is yet the theologian in whose Christology almost every possible trace of the recollection of the historic Jesus has disappeared. The purpose of the redemption is to bring men into community of life with God. But Athanasius apprehended this redemption as a conferment, from without and from above, of a divine

nature. He subordinated everything to this idea. The whole narrative concerning Jesus falls under the interpretation that the only quality requisite for the Redeemer in his work was the possession in all fulness of the divine nature. His incarnation, his manifestation in real human life, held fast to in word, is reduced to a mere semblance. Salvation is not an ethical process, but a miraculous endowment. The Christ, who was God, lifts men up to godhood. They become God. These phrases are of course capable of ethical and intelligible meaning. The development of the doctrine, however, threw the emphasis upon the metaphysical and miraculous aspects of the work. It gloried in the fact that the presence of divine and human, two natures in one person forever, was unintelligible. In the end it came to pass that the enthusiastic assent to that which defied explanation became the very mark of a humble and submissive faith. One reads the so-called Athanasian Creed, and hears the ring of its determination to exact assent. It had long since been clear to these Catholics and churchmen that, with the mere authority of Scripture, it was not possible to defend Christianity against the heretics. The heresies read their heresies out of the Bible. The orthodox read orthodoxy from the same page. Marcion had proved that, in the very days when the canon took its shape. There must be an authority to define the interpretation of the Scripture. Those who would share the benefits which the Church dispensed must assent unconditionally to the terms of membership.

All these questions were veiled for the early Christians behind the question of the kind of Christ in whom their hearts believed. With all that we have said about the reprehensible admixture of the metaphysical element in the dogma, with all the accusation which we bring concerning acute or gradual Hellenisation, secularisation and defection from the Christ, we ought not to hide from ourselves that in this gigantic struggle there were real religious interests at stake, and that for the men of both parties. Dimly, or perhaps vividly, the man of either party felt that the conception of the Christ which he was fighting for was congruous with the conception of religion which he had, or felt that he must have. It is this religious issue, everywhere present, which gives dignity to a struggle which otherwise does often sadly lack it. There are two religious views of the person of Christ which have stood, from the beginning, the one over against the other. The one saw in Jesus of Nazareth a man, distinguished by his special calling as the Messianic King, endued with special powers, lifted above all men ever known, yet a man, completely subject to God in faith, obedience and prayer. This view is surely sustained by many of Jesus' own words and deeds. It shines through the testimony of the men who followed him. Even the belief in his resurrection and his second coming did not altogether do away with it. The other view saw in him a new God who, descending from God, brought mysterious powers for the redemption of mankind into the world, and after short obscuring of his glory, returned to the abode of God, where he had been before. From this belief come all the hymns and prayers to Jesus as to God, all miracles and exorcisms in his name.

Footnote 5:(return)

Wernle, *Einfzhrung in das Theologische Studium*, 1908, v. 204.

In the long run, the simpler view did not maintain itself. If false gods and demons were expelled, it was the God Jesus who expelled them. The more modest faith believed that in the man Jesus, being such an one as he was, men had received the greatest gift which the love of God had to bestow. In turn the believer felt the assurance that he also was a child of God, and in the spirit of Jesus was to realise that sonship. Syncretist religions suggested other thoughts. We see that already even in the synoptic tradition the calling upon the name of Jesus had found place. One wonders whether that first apprehension ever stood alone in its purity. The Gentile Churches founded by Paul, at all events, had no such simple trust. Equally, the second form of faith seems never to have been able to stand alone in its peculiar quality. Some of the gnostic sects had it. Marcion again is our example. The new God Jesus had nothing to do with the cruel God of the Old Testament. He supplanted the old God and became the only God. In the Church the new God, come down from heaven, must be set in relation with the long-known God of Israel. No

less, must he stand in relation to the simple hero of the Gospels with his human traits. The problem of theological reflexion was to find the right middle course, to keep the divine Christ in harmony, on the one side, with monotheism, and on the other, with the picture which the Gospels gave. Belief knew nothing of these contradictions. The same simple soul thanked God for Jesus with his sorrows and his sympathy, as man's guide and helper, and again prayed to Jesus because he seemed too wonderful to be a man. The same kind of faith achieves the same wondering and touching combination to-day, after two thousand years. With thought comes trouble. Reflexion wears itself out upon the insoluble difficulty, the impossible combination, the flat contradiction, which the two views present, so soon as they are clearly seen.

In the earliest Christian writings the fruit of this reflexion lies before us in this form: — The Creator of worlds, the mediator, the lord of angels and demons, the Logos which was God and is our Saviour, was yet a humble son of man, undergoing suffering and death, having laid aside his divine glory. This picture is made with materials which the canonical writings themselves afford. Theological study had henceforth nothing to do but to avoid extremes and seek to make this image, which reflexion upon two polar opposites had yielded, as nearly thinkable as possible. It has been said that the trinitarian doctrine is not in the New Testament, that it was later elaborated by a different kind of mind. This is not true. But the inference is precisely the contrary of that which defenders of the dogma would formerly have drawn from this concession. The same kind of mind, or rather the same two kinds of mind, are at work in the New Testament. Both of the religious elements above suggested are in the Gospels and Epistles. The New Testament presents attempts at their combination. Either form may be found in the literature of the later age. If we ask ourselves, What is that in Jesus which gives us the sense of redemption, surely we should answer, It is his glad and confident resting in the love of God the Father. It is his courage, his faith in men, which becomes our faith in ourselves. It is his wonderful mingling of purity and love of righteousness with love of those who have sinned. You may find this in the ancient literature, as the Fathers describe that to which their souls cling. But this is not the point of view from which the dogma is organised. The Nicene Christology is not to be understood from this approach. The cry of a dying civilisation after power and light and life, the feeling that these might come to it, streaming down as it were, from above, as a physical, a mechanical, a magical deliverance, this is the frame within which is set what is here said of the help and redemption wrought by Christ. The resurrection and the incarnation are the points at which this streaming in of the divine light and power upon a darkened world is felt.

That religion seemed the highest, that interpretation of Christianity the truest, the absolute one, which could boast that it possessed the power of the Almighty through his physical union with men. He who contended that Jesus was God, contended therewith for a power which could come upon men and make them in some sense one with God. This is the view which has been almost exclusively held in the Greek Church. It is the view which has run under and through and around the other conception in the Roman and Protestant Churches. The sense that salvation is inward, moral, spiritual, has rarely indeed been absent from Christendom. It would be preposterous to allege that it had. Yet this sense has been overlaid and underrun and shot through with that other and disparate idea of salvation, as of a pure bestowment, something achieved apart from us, or, if one may so say, some alteration of ourselves upon other than moral and spiritual terms. The conception of the person Christ shows the same uncertainty. Or rather, with a given view of the nature of religion and salvation, the corresponding view of Christ is certain. In the age-long and world-wide contest over the trinitarian formula, with all that is saddening in the struggle and all that was misleading in the issue, it is because we see men struggling to come into the clear as to these two meanings of religion, that the contest has such absorbing interest. Men have been right in declining to call that religion in which a man saves himself. They have been wrong in esteeming that they were then only saved of God or Christ when they were saved by an obviously external process. Even this antinomy is softened when one no longer holds that God and men are mutually exclusive conceptions. It is God working within us who saves, the God who in Jesus worked such a wonder of righteousness and love as

else the world has never seen.

CHAPTER V. THE CONTRIBUTION OF THE NATURAL AND SOCIAL SCIENCES

By the middle of the nineteenth century the empirical sciences had undergone vast expansion in the study of detail and in the discovery of principles. Men felt the necessity of some adequate discussion of the relation of these sciences one to another and of their unity. There was need of the organisation of the mass of knowledge, largely new and ever increasing, which the sciences furnished. It lay in the logic of the case that some of these attempts should advance the bold claim to deal with all knowledge whatsoever and to offer a theory of the universe as a whole. Religion, both in its mythological and in its theological stages, had offered a theory of the universe as a whole. The great metaphysical systems had offered theories of the universe as a whole. Both had professed to include all facts. Notoriously both theology and metaphysics had dealt in most inadequate fashion with the material world, in the study of which the sciences were now achieving great results. Indeed, the methods current and authoritative with theologians and metaphysicians had actually prevented study of the physical universe. Both of these had invaded areas of fact to which their methods had no application and uttered dicta which had no relation to truth. The very life of the sciences depended upon deliverance from this bondage. The record of that deliverance is one of the most dramatic chapters in the history of thought. Could one be surprised if, in the resentment which long oppression had engendered and in the joy which overwhelming victory had brought, scientific men now invaded the fields of their opponents? They repaid their enemies in their own coin. There was with some a disposition to deny that there exists an area of knowledge to which the methods of metaphysicians and theologians might apply. This was Comte’s contention. Others conceded that there might be such an area, but claimed that we can have no knowledge of it. Even the theologians, after their first shock, were disposed to concede that, concerning the magnitudes in which they were most interested, as for example, God and soul, we have no knowledge of the sort which the method of the physical sciences would give. They fell back upon Kant’s distinction of the two reasons and two worlds. They exaggerated the sharpness of that distinction. They learned that the claim of agnosticism was capable of being viewed as a line of defence, behind which the transcendental magnitudes might be secure. Indeed, if one may take Spencer as an example, it is not certain that this was not the intent of some of the scientists in their strong assertion of agnosticism. Spencer’s later work reveals that he had no disposition to deny that there are foundations for belief in a world lying behind the phenomenal, and from which the latter gets its meaning.

Meantime, after positivism was buried and agnosticism dead, a thing was achieved for which Comte himself laid the foundation and in which Spencer as he grew older was ever more deeply interested. This was the great development of the social sciences. Every aspect of the life of man, including religion itself, has been drawn within the area of the social sciences. To all these subjects, including religion, there have been applied empirical methods which have the closest analogy with those which have reigned in the physical sciences. Psychology has been made a science of experiment, and the psychology of religion has been given a place within the area of its observations and generalizations. The ethical, and again the religious consciousness has been subjected to the same kind of investigation to which all other aspects of consciousness are subjected. Effort has been made to ascertain and classify the phenomena of the religious life of the race in all lands and in all ages. A science of religions is taking its place among the other sciences. It is as purely an inductive science as is any other. The history of religions and the philosophy of religion are being rewritten from this point of view.

In the first lines of this chapter we spoke of the empirical sciences, meaning the sciences of the material world. It is clear, however, that the sciences of mind, of morals and of religion have now become

empirical sciences. They have their basis in experience, the experience of individuals and the experience of masses of men, of ages of observable human life. They all proceed by the method of observation and inference, of hypothesis and verification. There is a unity of method as between the natural and social and psychical sciences, the reach of which is startling to reflect upon. Indeed, the physiological aspects of psychology, the investigations of the relation of adolescence to conversion, suggest that the distinction between the physical and the psychical is a vanishing distinction. Science comes nearer to offering an interpretation of the universe as a whole than the opening paragraphs of this chapter would imply. But it does so by including religion, not by excluding it. No one would any longer think of citing Kant's distinction of two reasons and two worlds in the sense of establishing a city of refuge into which the persecuted might flee. Kant rendered incomparable service by making clear two poles of thought. Yet we must realise how the space between is filled with the gradations of an absolute continuity of activity. Man has but one reason. This may conceivably operate upon appropriate material in one or the other of these polar fashions. It does operate in infinite variations of degree, in unity with itself, after both fashions, at all times and upon all materials.

Positivism was a system. Agnosticism was at least a phase of thought. The broadening of the conception of science and the invasion of every area of life by a science thus broadly conceived, has been an influence less tangible than those others but not, therefore, less effective. Positivism was bitterly hostile to Christianity, though, in the mind of Comte himself and of a few others, it produced a curious substitute, possessing many of the marks of Roman Catholicism. The name 'agnostic' was so loosely used that one must say that the contention was hostile to religion in the minds of some and not of others. The new movement for an inclusive science is not hostile to religion. Yet it will transform current conceptions of religion as those others never did. In proportion as it is scientific, it cannot be hostile. It may at most be indifferent. Nevertheless, in the long run, few will choose the theme of religion for the scientific labour of life who have not some interest in religion. Men of these three classes have accepted the doctrine of evolution. Comte thought he had discovered it. Spencer and those for whom we have taken him as type, did service in the elaboration of it. To the men of our third group, the truth of evolution seems no longer debatable. Here too, in the word 'evolution,' we have a term which has been used with laxity. It corresponds to a notion which has only gradually been evolved. Its implications were at first by no means understood. It was associated with a mechanical view of the universe which was diametrically opposed to its truth. Still, there could not be a doubt that the doctrine contravened those ideas as to the origin of the world, and more particularly of man, of the relations of species, and especially of the human species to other forms of animal life, which had immemorially prevailed in Christian circles and which had the witness of the Scriptures on their behalf. If we were to attempt, with acknowledged latitude, to name a book whose import might be said to be cardinal for the whole movement treated of in this chapter, that book would be Darwin's *Origin of Species*, which was published in 1859.

Long before Darwin the creation legend had been recognised as such. The astronomy of the seventeenth century had removed the earth from its central position. The geology of the eighteenth had shown how long must have been the ages of the laying down of the earth's strata. The question of the descent of man, however, brought home the significance of evolution for religion more forcibly than any other aspect of the debate had done. There were scientific men of distinction who were not convinced of the truth of the evolutionary hypothesis. To most Christian men the theory seemed to leave no unique distinction or spiritual quality for man. It seemed to render impossible faith in the Scriptures as revelation. To many it seemed that the whole issue as between a spiritual and a purely materialistic view of the universe was involved. Particularly was this true of the English-speaking peoples.

One other factor in the transformation of the Christian view needs to be dwelt upon. It is less theoretical than those upon which we have dwelt. It is the influence of socialism, taking that word in its largest sense. An industrial civilisation has developed both the good and the evil of individualism in

incredible degree. The unity of society which the feudal system and the Church gave to Europe in the Middle Age had been destroyed. The individualism and democracy which were essential to Protestantism notoriously aided the civil and social revolution, but the centrifugal forces were too great. Initiative has been wonderful, but cohesion is lacking. Democracy is yet far from being realised. The civil liberations which were the great crises of the western world from 1640 to 1830 appear now to many as deprived of their fruit. Governments undertake on behalf of subjects that which formerly no government would have dreamed of doing. The demand is that the Church, too, become a factor in the furtherance of the outward and present welfare of mankind. If that meant the call to love and charity it would be an old refrain. That is exactly what it does not mean. It means the attack upon evils which make charity necessary. It means the taking up into the idealisation of religion the endeavour to redress all wrongs, to do away with all evils, to confer all goods, to create a new world and not, as heretofore, mainly at least, a new soul in the midst of the old world. No one can deny either the magnitude of the evils which it is sought to remedy, or the greatness of the goal which is thus set before religion. The volume of religious and Christian literature devoted to these social questions is immense. It is revolutionary in its effect. For, after all, the very gist of religion has been held to be that it deals primarily with the inner life and the transcendent world. That it has dealt with the problem of the inner life and transcendent world in such a manner as to retard, or even only not to further, the other aspects of man's life is indeed a grave indictment. That it should, however, see ends in the outer life and present world as ends fully sufficient in themselves, that it should cease to set these in the light of the eternal, is that it should cease to be religion. The physical and social sciences have given to men an outward setting in the world, a basis of power and happiness such as men never have enjoyed. Yet the tragic failure of our civilisation to give to vast multitudes that power and happiness, is the proof that something more than the outward basis is needed. The success of our civilisation is its failure.

This is by no means a recurrence to the old antithesis of religion and civilisation, as if these were contradictory elements. On the contrary, it is but to show that the present world of religion and of economics are not two worlds, but merely different aspects of the same world. Therewith it is not alleged that religion has not a specific contribution to make.

POSITIVISM

The permanent influence of that phase of thought which called itself Positivism has not been great. But a school of thought which numbered among its adherents such men and women as John Stuart Mill, George Henry Lewes, George Eliot, Frederic Harrison, and Matthew Arnold, cannot be said to have been without significance. A book upon the translation of which Harriet Martinean worked with sustained enthusiasm cannot be dismissed as if it were merely a curiosity. Comte's work, *Coura de Philosophie Positive*, appeared between the years 1830 and 1842. Littré was his chief French interpreter. But the history of the positivist movement belongs to the history of English philosophical and religious thought, rather than to that of France.

Comte was born at Montpellier in 1798, of a family of intense Roman Catholic piety. He showed at school a precocity which might bear comparison with Mill's. Expelled from school, cast off by his parents, dismissed by the elder Casimir Perier, whose secretary he had been, he eked out a living by tutoring in mathematics. Friends of his philosophy rallied to his support. He never occupied a post comparable with his genius. He was unhappy in his marriage. He passed through a period of mental aberration, due, perhaps, to the strain under which he worked. He did not regain his liberty without an experience which embittered him against the Church. During the fourteen years of the production of his book he cut himself off from any reading save that of current scientific discovery. He came under the influence of Madame Vaux, whom, after her death, he idolised even more than before. For the problem

which, in the earlier portion of his work, he set himself, that namely, of the organising of the sciences into a compact body of doctrine, he possessed extraordinary gifts. Later, he took on rather the air of a high priest of humanity, legislating concerning a new religion. It is but fair to say that at this point Littré and many others parted company with Comte. He developed a habit and practice ascetic in its rigour and mystic in its devotion to the positivists' religion — the worship of humanity. He was the friend and counsellor of working-men and agitators, of little children, of the poor and miserable. He ended his rather pathetic and turbulent career in 1857, gathering a few disciples about his bed as he remembered that Socrates had done.

Comte begins with the natural sciences and postulates the doctrine of evolution. To the definition of this doctrine he makes some interesting approaches. The discussion of the order and arrangement of the various sciences and of their characteristic differences is wonderful in its insight and suggestiveness. He asserts that in the study of nature we are concerned solely with the facts before us and the relations which connect those facts. We have nothing to do with the supposed essence or hidden nature and meaning of those facts. Facts and the invariable laws which govern them are the only legitimate objects of pursuit. Comte infers that because we can know, in this sense, only phenomena and their relations, we should in consequence guard against illusions which creep in again if we so much as use the words principle, or cause, or will, or force. By phenomena must be understood objects of perception, to the exclusion, for example, of psychological changes reputed to be known in self-consciousness. That there is no knowledge but of the physical, that there is no knowing except by perception — this is ever reiterated as self-evident. Even psychology, resting as it does largely upon the observation of the self by the self, must be illusive. Physiology, or even phrenology, with the value of which Comte was much impressed, must take its place. Every object of knowledge is other than the knowing subject. Whatever else the mind knows, it can never know itself. By invincible necessity the human mind can observe all phenomena except its own. Commenting upon this, James Martineau observed: 'We have had in the history of thought numerous forms of idealism which construed all outward phenomena as mere appearances within the mind. We have hitherto had no strictly corresponding materialism, which claimed certainty for the outer world precisely because it was foreign to ourselves.' Man is the highest product of nature, the highest stage of nature's most mature and complex form. Man as individual is nothing more. Physiology gives us not merely his external constitution and one set of relations. It is the whole science of man. There is no study of mind in which its actions and states can be contemplated apart from the physical basis in conjunction with which mind exists.

Thus far man has been treated only biologically, as individual. We must advance to man in society. Almost one half of Comte's bulky work is devoted to this side of the inquiry. Social phenomena are a class complex beyond any which have yet been investigated. So much is this the case and so difficult is the problem presented, that Comte felt constrained in some degree to change his method. We proceed from experience, from data in fact, as before. But the facts are not mere illustrations of the so called laws of individual human nature. Social facts are the results also of situations which represent the accumulated influence of past generations. In this, as against Bentham, for example, with his endless recurrence to human nature, as he called it, Comte was right. Comte thus first gave the study of history its place in sociology. In this study of history and sociology, the collective phenomena are more accessible to us and better known by us, than are the parts of which they are composed. We therefore proceed here from the general to the particular, not from the particular to the general, as in research of the kinds previously named. The state of every part of the social organisation is ultimately connected with the contemporaneous state of all the other parts. Philosophy, science, the fine arts, commerce, navigation, government, are all in close mutual dependence. When any considerable change takes place in one, we may know that a parallel change has preceded or will follow in the others. The progress of society is not the aggregate of partial changes, but the product of a single impulse acting through all the partial agencies.

It can therefore be most easily traced by studying all together. These are the main principles of sociological investigation as set forth by Comte, some of them as they have been phrased by Mill.

The most sweeping exemplification of the axiom last alluded to, as to parallel changes, is Comte's so-called law of the three states of civilisation. Under this law, he asserts, the whole historical evolution can be summed up. It is as certain as the law of gravitation. Everything in human society has passed, as has the individual man, through the theological and then through the metaphysical stage, and so arrives at the positive stage. In this last stage of thought nothing either of superstition or of speculation will survive. Theology and metaphysics Comte repeatedly characterises as the two successive stages of nescience, unavoidable as preludes to science. Equally unavoidable is it that science shall ultimately prevail in their place. The advance of science having once begun, there is no possibility but that it will ultimately possess itself of all. One hears the echo of this confidence in Haeckel also. There is a persistence about the denial of any knowledge whatsoever that goes beyond external facts, which ill comports with the pretensions of positivism to be a philosophy. For its final claim is not that it is content to rest in experimental science. On the contrary, it would transform this science into a homogeneous doctrine which is able to explain everything in the universe. This is but a *tour de force*. The promise is fulfilled through the denial of the reality of everything which science cannot explain. Comte was never willing to face the fact that the very existence of knowledge has a noumenal as well as a phenomenal side. The reasonableness of the universe is certainly a conception which we bring to the observation of nature. If we did not thus bring it with us, no mere observation of nature would ever give it to us. It is impossible for science to get rid of the conception of force, and ultimately of cause. There can be no phenomenon which is not a manifestation of something. The very nomenclature falls into hopeless confusion without these conceptions. Yet the moment we touch them we transcend science and pass into the realm of philosophy. It is mere juggling with words to say that our science has now become a philosophy.

The adjective 'positive' contains the same fallacy. Apparently Comte meant by the choice of it to convey the sense that he would limit research to phenomena in their orders of resemblance, co-existence and succession. But to call the inquiry into phenomena positive, in the sense that it alone deals with reality, to imply that the inquiry into causes deals with that which has no reality, is to beg the question. This is not a premise with which he may set out in the evolution of his system.

Comte denied the accusation of materialism and atheism. He did the first only by changing the meaning of the term materialism. Materialism the world has supposed to be the view of man's condition and destiny which makes these to begin and end in nature. That certainly was Comte's view. The accusation of atheism also he avoids by a mere play on words. He is not without a God. Humanity is God. Mankind is the positivist's Supreme. Altruism takes the place of devotion. The devotion so long wasted upon a mere creature of the imagination, to whom it could do no good, he would now give to men who sorely need it and can obviously profit by it. Surely the antithesis between nature and the supernatural, in the form in which Comte argues against it, is now abandoned by thoughtful people. Equally the antithesis of altruism to the service of God is perverse. It arouses one's pity that Comte should not have seen how, in true religion these two things coalesce.

Moreover, this deification of mankind, in so far as it is not a sounding phrase, is an absurdity. When Comte says, for example, that the authority of humanity must take the place of that of God, he has recognised that religion must have authority. Indeed, the whole social order must have authority. However, this is not for him, as we are accustomed to say, the authority of the truth and of the right. There is no such abstraction as the truth, coming to various manifestations. There is no such thing as right, apart from relatively right concrete measures. There is no larger being indwelling in men. Society, humanity in its collective capacity, must, if need be, override the individual. Yet Comte despises the mere rule of majorities. The majority which he would have rule is that of those who have the scientific mind. We may admit that in this he aims at the supremacy of truth. But, in fact, he prepares the way for a doctrinaire

tyranny which, of all forms of government, might easily turn out to be the worst which a long-suffering humanity has yet endured.

In the end, we are told, love is to take the place of force. Humanity is present to us first in our mothers, wives and daughters. For these it is present in their fathers, husbands, sons. From this primary circle love widens and worship extends as hearts enlarge. It is the prayer to humanity which first rises above the mere selfishness of the sort to get something out of God. Remembrance in the hearts of those who loved us and owe something to us is the only worthy form of immortality. Clearly it is only the caricature of prayer or of the desire of immortality which rises before Comte's mind as the thing to be escaped. For this caricature religious men, both Catholic and Protestant, without doubt, gave him cause. There were to be seven sacraments, corresponding to seven significant epochs in a man's career. There were to be priests for the performance of these sacraments and for the inculcation of the doctrines of positivism. There were to be temples of humanity, affording opportunity for and reminder of this worship. In each temple there was to be set up the symbol of the positivist religion, a woman of thirty years with her little son in her arms. Littré spoke bitterly of the positivist religion as a lapse of the author into his old aberration. This religion was certainly regarded as negligible by many to whom his system as a whole meant a great deal. At least, it is an interesting example, as is also his transformation of science into a philosophy, of the resurgence of valid elements in life, even in the case of a man who has made it his boast to do away with them.

NATURALISM AND AGNOSTICISM

We may take Spencer as representative of a group of men who, after the middle of the nineteenth century, laboured enthusiastically to set forth evolutionary and naturalistic theories of the universe. These theories had also, for the most part, the common trait that they professed agnosticism as to all that lay beyond the reach of the natural-scientific methods, in which the authors were adept. Both Ward and Boutroux accept Spencer as such a type. Agnosticism for obvious reasons could be no system. Naturalism is a tendency in interpretation of the universe which has many ramifications. There is no intention of making the reference to one man's work do more than serve as introduction to the field.

Spencer was eager in denial that he had been influenced by Comte. Yet there is a certain reminder of Comte in Spencer's monumental endeavour to systematise the whole mass of modern scientific knowledge, under the general title of 'A Synthetic Philosophy.' He would show the unity of the sciences and their common principles or, rather, the one great common principle which they all illustrate, the doctrine of evolution, as this had taken shape since the time of Darwin. Since 1904 we have an autobiography of Herbert Spencer, which, to be sure, seems largely to have been written prior to 1889. The book is interesting, as well in the light which it throws upon the expansion of the sciences and the development of the doctrine of evolution in those years, as in the revelation of the personal traits of the man himself. Concerning these Tolstoi wrote to a friend, apropos of a gift of the book: 'In autobiographies the most important psychological phenomena are often revealed quite independently of the author's will.'

Spencer was born in 1820 in Derby, the son of a schoolmaster. He came of Nonconformist ancestry of most marked individuality. His early education was irregular and inadequate. Before he reached the age of seventeen his reading had been immense. He worked with an engineer in the period of the building of the railways in the Midlands. He always retained his interest in inventions. He wrote for the newspapers and magazines and definitely launched upon a literary career. At the age of thirty he published his first book, on *Social Statics*. He made friends among the most notable men and women of his age. So early as 1855 he was the victim of a disease of the heart which never left him. It was on his recovery from his first grave attack that he shaped the plan which henceforth held him, of organising the modern sciences and incorporating them into what he called a synthetic philosophy. There was immense increase in actual

knowledge and in the power of his reflection on that knowledge, as the years went by. A generation elapsed between the publication of his *First Principles* and the conclusion of his more formal literary labours. There is something captivating about a man's life, the energy of which remains so little impaired that he esteems it better to write a new book, covering some untouched portion of his scheme, than to give to an earlier volume the revision which in the light of his matured convictions it may need. His philosophical limitations he never transcended. He does not so naïvely offer a substitute for philosophy as does Comte. But he was no master in philosophy. There is a reflexion of the consciousness of this fact in his agnosticism.

That the effort of the agnostic contention has been great, and on the whole salutary, few would deny. Spencer's own later work shows that his declaration, that the absolute which lies behind the universe is unknowable, is to be taken with considerable qualification. It is only a relative unknowableness which he predicates. Moreover, before Spencer's death, the doctrine of evolution had made itself profoundly felt in the discussion of all aspects of life, including that of religion. There seemed no longer any reason for the barrier between science and religion which Spencer had once thought requisite.

The epithet agnostic, as applied to a certain attitude of scientific mind, is just, as over against excessive claims to valid knowledge made, now by theology and now by speculative philosophy. It is hardly descriptive in any absolute sense. Spencer had coined the rather fortunate illustration which describes science as a gradually increasing sphere, such that every addition to its surface does but bring us into more extensive contact with surrounding nescience. Even upon this illustration Ward has commented that the metaphor is misleading. The continent of our knowledge is not merely bounded by an ocean of ignorance. It is intersected and cut up by straits and seas of ignorance. The author of *Ecce Coelum* has declared: 'Things die out under the microscope into the same unfathomed and, so far as we can see, unfathomable mystery, into which they die off beyond the range of our most powerful telescope.' This sense of the circumambient unknown has become cardinal with the best spirits of the age. Men have a more rigorous sense of what constitutes knowledge.

They have reckoned more strictly with the methods by which alone secure and solid knowledge may be attained. They have undisguised scepticism as to alleged knowledge not arrived at in those ways. It was the working of these motives which gave to the labours of the middle of the nineteenth century so prevailingly the aspect of denial, the character which Carlyle described as an everlasting No. This was but a preparatory stage, a retrogression for a new and firmer advance.

In the sense of the recognition of our ignorance and of a becoming modesty of affirmation, over against the mystery into which all our thought runs out, we cannot reject the correction which agnosticism has administered. It is a fact which has had disastrous consequences, that precisely the department of thought, namely the religious, which one might suppose would most have reminded men of the outlying mystery, that phase of life whose very atmosphere is mystery, has most often been guilty of arrant dogmatism. It has been thus guilty upon the basis of the claim that it possessed a revelation. It has allowed itself unlimited licence of affirmation concerning the most remote and difficult matters. It has alleged miraculously communicated information concerning those matters. It has clothed with a divine authoritativeness, overriding the mature reflexion and laborious investigation of learned men, that which was, after all, nothing but the innocent imaginings of the childhood of the race. In this good sense of a parallel to that agnosticism which scientists profess for themselves within their own appointed realm, there is a religious agnosticism which is one of the best fruits of the labour of the age. It is not that religious men have abandoned the thought of revelation. They apprehended more justly the nature of revelation. They confess that there is much ignorance which revelation does not mitigate. *Exeunt omnia in mysterium*. They are prepared to say concerning many of the dicta of religiosity, that they cannot affirm their truth. They are prepared to say concerning the experience of God and the soul, that they know these with an indefeasible certitude. This just and wholesome attitude toward religious truth is only a corollary of the attitude which

science has taught us toward all truth whatsoever.

The strictly philosophic term phenomenon, to which science has taken so kindly, is in itself an explicit avowal of something beyond the phenomenal. Spencer is careful to insist upon this relation of the phenomenal to the noumenal. His *Synthetic Philosophy* opens with an exposition of this non-relative or absolute, without which the relative itself becomes contradictory. It is an essential part of Spencer's doctrine to maintain that our consciousness of the absolute, indefinite as it is, is positive and not negative. 'Though the absolute cannot in any manner or degree be known, in the strict sense of knowing, yet we find that its positive existence is a necessary datum of consciousness. The belief which this datum of consciousness constitutes has a higher warrant than any other belief whatsoever.' In short, the absolute or noumenal, according to Spencer, though not known as the phenomenal or relative is known, is so far from being for knowledge a pure blank, that the phenomenal, which is said to be known, is in the strict sense inconceivable without it. This actuality behind appearances, without which appearances are unthinkable, is by Spencer identified with that ultimate verity upon which religion ever insists. Religion itself is a phenomenon, and the source and secret of most complex and interesting phenomena. It has always been of the greatest importance in the history of mankind. It has been able to hold its own in face of the attacks of science. It must contain an element of truth. All religions, however, assert that their God is for us not altogether cognisable, that God is a great mystery. The higher their rank, the more do they acknowledge this. It is by the flippant invasion of this mystery that the popular religiosity offends. It talks of God as if he were a man in the next street. It does not distinguish between merely imaginative fetches into the truth, and presumably accurate definition of that truth. Equally, the attempts which are logically possible at metaphysical solutions of the problem, namely, theism, pantheism, and atheism, if they are consistently carried out, assert, each of them, more than we know and are involved in contradiction with themselves. But the results of modern physics and chemistry reveal, as the constant element in all phenomena, force. This manifests itself in various forms which are interchangeable, while amid all these changes the force remains the same. This latter must be regarded as the reality, and basis of all that is relative and phenomenal. The entire universe is to be explained from the movements of this absolute force. The phenomena of nature and of mental life come under the same general laws of matter, motion, and force.

Spencer's doctrine, as here stated, is not adequate to account for the world of mental life or adapted to serve as the basis of a reconciliation of science and religion. It does not carry us beyond materialism. Spencer's real intention was directed to something higher than that. If the absolute is to be conceived at all, it is as a necessary correlative of our self-consciousness. If we get the idea of force from the experience of our own power of volition, is it not natural to think of mind-force as the prius of physical force, and not the reverse? Accordingly, the absolute force, basis of all specific forces, would be mind and will. The doctrine of evolution would harmonise perfectly with these inferences. But it would have to become idealistic evolution, as in Schelling, instead of materialistic, as in Comte. We are obliged, Spencer owns, to refer the phenomenal world of law and order to a first cause. He says that this first cause is incomprehensible. Yet he further says, when the question of attributing personality to this first cause is raised, that the choice is not between personality and something lower. It is between personality and something higher. To this may belong a mode of being as much transcending intelligence and will as these transcend mechanical motion. It is strange, he says, that men should suppose the highest worship to lie in assimilating the object of worship to themselves. And yet, again, in one of the latest of his works he writes: 'Unexpected as it will be to most of my readers, I must assert that the power which manifests itself in consciousness is but a differently conditioned form of the power which manifests itself beyond consciousness. The conception to which the exploration of nature everywhere tends is much less that of a universe of dead matter than that of a universe everywhere alive.'

Similar is the issue in the reflexion of Huxley. Agnosticism had at first been asserted in relation to the spiritual and the teleological. It ended in fastening upon the material and mechanical. After all, says

Huxley, in one of his essays:— ‘What do we know of this terrible matter, except as a name for an unknown and hypothetical cause of states of our own consciousness? Again, what do we know of that spirit over whose threatened extinction by matter so great lamentation has now arisen, except that it is also a name for an unknown and hypothetical cause of states of our consciousness?’ He concedes that matter is inconceivable apart from mind, but that mind is not inconceivable apart from matter. He concedes that the conception of universal and necessary law is an ideal. It is an invention of the mind’s own devising. It is not a physical fact. In brief, taking agnostic naturalism just as it seemed disposed a generation ago to present itself, it now appears as if it had been turned exactly inside out. Instead of the physical world being primary and fundamental and the mental world secondary, if not altogether problematical, the precise converse is true.

Nature, as science regards it, may be described as a system whose parts, be they simple or complex, are wholly governed by universal laws. Knowledge of these laws is an indispensable condition of that control of nature upon which human welfare in so large degree depends. But this reign of law is an hypothesis. It is not an axiom which it would be absurd to deny. It is not an obvious fact, thrust upon us whether we will or no. Experiences are possible without the conception of law and order. The fruit of experience in knowledge is not possible without it. That is only to say that the reason why we assume that nature is a connected system of uniform laws, lies in the fact that we ourselves are self-conscious personalities. When the naturalists say that the notion of cause is a fetish, an anthropomorphic superstition which we must eliminate, we have to answer: ‘from the realm of empirical science perhaps, but not from experience as a whole.’ Indeed, a glance at the history, and particularly at the popular literature, of science affords the interesting spectacle of the rise of an hallucination, the growth of a habit of mythological speech, which is truly surprising. We begin to hear of self-existent laws which reign supreme and bind nature fast in fact. By this learned substitution for God, it was once confidently assumed that the race was to emerge from mythical dawn and metaphysical shadows into the noon-day of positive knowledge. Rather, it would appear that at this point a part of the human race plunged into a new era of myth-making and fetish worship — the homage to the fetish of law. Even the great minds do not altogether escape. ‘Fact I know and law I know,’ says Huxley, with a faint suggestion of sacred rhetoric. But surely we do not know law in the same sense in which we know fact. If there are no causes among our facts, then we do not know anything about the laws. If we do know laws it is because we assume causes. If, in the language of rational beings, laws of nature are to be spoken of as self-existent and independent of the phenomena which they are said to govern, such language must be merely analogous to the manner in which we often speak of the civil law. We say the law does that which we know the executive does. But the thorough-going naturalist cast off these implications as the last rags of a creed outworn. Physicists were fond of talking of the movement of molecules, just as the ancient astrologers imagined that the planets had souls and guided their own courses. We had supposed that this was anthropomorphism. In truth, this would-be scientific mode of speech is as anthropomorphic as is the cosmogony of Hesiod, only on a smaller scale. Primitive religion ascribed life to everything of which it talked. Polytheism in religion and independent forces and self-existent laws in science are thus upon a par. The gods many and lords many, so amenable to concrete presentation in poetry and art, have given place to one Supreme Being. So also light, heat, and other natural agencies, palpable and ready to hand for the explanation of everything, in the myth-making period of science which living men can still remember, have by this time paled. They have become simply various manifestations of one underlying spiritual energy, which is indeed beyond our perception. When Comte said that the universe could not rest upon will, because then it would be arbitrary, incalculable, subject to caprice, one feels the humour and pathos of it. Comte’s experience with will, his own and that of others, had evidently been too largely of that sad sort. Real freedom consists in conformity to what ought to be. In God, whom we conceive as perfect, this conformity is complete. With us it remains an ideal. Were we the creatures of a blind mechanical necessity there could be no talk of

ideal standards and no meaning in reason at all.

Footnote 6:(return)

Ward, *Naturalism and Agnosticism*, vol. ii. .

EVOLUTION

In the progress of the thought of the generation, say, from 1870 to the present day, the conception of evolution has been much changed. The doctrine of evolution has itself been largely evolved within that period. The application of it has become familiar in fields of which there was at first no thought. The bearing of the acceptance of it upon religion has been seen to be quite different from that which was at first supposed. The advocacy of the doctrine was at first associated with the claims of naturalism or positivism. Wider applications of the doctrine and deeper insight into its meaning have done away with this misunderstanding. Evolution, as originally understood, was as far as possible from suggesting anything mechanical. By the term was meant primarily the gradual unfolding of a living germ from its embryonic beginning to its mature and final stage. This adult form was regarded not merely as the goal actually reached through successive stages of growth. It was conceived as the end aimed at, and achieved through the force of some vital or ideal principle shaping the plastic material and directing the process of growth. In short, evolution implied ideal ends controlling physical means. Yet we find with Spencer, as prevailingly also with others in the study of the natural sciences, the ideas of end and of cause looked at askance. They are regarded an outside the pale of the natural sciences. In a very definite sense that is true. The logical consequence of this admission should be merely the recognition that the idea of evolution as developed in the natural sciences cannot be the whole idea.

The entire history of anything, Spencer tells us, must include its appearance out of the imperceptible, and its disappearance again into the imperceptible. Be it a single object, or the whole universe, an account which begins with it in a concrete form, or leaves off with its concrete form, is incomplete. He uses a familiar instance, that of a cloud appearing when vapour drifts over a cold mountain top, and again disappearing when it emerges into warmer air. The cloud emerges from the imperceptible as heat is dissipated. It is dissolved again as heat is absorbed and the watery particles evaporate. Spencer esteems this an analogue of the appearance of the universe itself, according to the nebular hypothesis. Yet assuredly, as the cloud presupposes vapours which had previously condensed, and the vapour clouds that had previously evaporated, and as clouds dissolve in one place even at the moment that they are forming in another, so we are told of nebulæ which are in every phase of advance or of decline. To ask which was first, solid masses or nebulous haze, is much like recurring to the riddle of the hen and the egg. Still, we are told, we have but to extend our thought beyond this emergence and subsidence of sidereal systems, of continents, nations, men, to find a permanent totality made up of transient individuals in every stage of change. The physical assumption with which Spencer sets out is that the mass of the universe and its energy are fixed in quantity. All the phenomena of evolution are included in the conservation of this matter and force.

Besides the criticism which was offered above, that the mere law of the persistence of force does not initiate our series, there is a further objection. Even within the series, once it has been started, this law of the persistence of force is solely a quantitative law. When energy is transformed there is an equivalence between the new form and the old. Of the reasons for the direction evolution takes, for the permanence of that direction once it has been taken, so that the sequence of forms is a progression, the explication of a latent nature — of all this, the mere law of the persistence of force gives us no explanation whatever. The change at random from one form of manifestation to another might be a striking illustration of the law of the persistence of force, but it would be the contradiction of evolution. The very notion of evolution is that

of the sequence of forms, so that something is expressed or achieved. That achievement implies more than the mere force. Or rather, it involves a quality of the force with which the language of mechanism does not reckon. It assumes the idea which gives direction to the force, an ideal quality of the force.

Unquestionably that which men sought to be rid of was the idea of purpose in nature, in the old sense of design in the mind of God, external to the material universe, of force exerted upon nature from without, so as to cause nature to conform to the design of its 'Great Original,' in Addison's high phrase. In this effort, however, the reducing of all to mere force and permutation of force, not merely explains nothing, but contradicts facts which stare us in the face. It deprives evolution of the quality which makes it evolution. To put in this incongruous quality at the beginning, because we find it necessary at the end, is, to say the least, naïve. To deny that we have put it in, to insist that in the marvellous sequence we have only an illustration of mechanism and of conservation of force, is perverse. We passed through an era in which some said that they did not believe in God; everything was accounted for by evolution. In so far as they meant that they did not believe in the God of deism and of much traditional theology, they did not stand alone in this claim. In so far as they meant by evolution mere mechanism, they explained nothing and destroyed the notion of evolution besides. In so far as they meant more than mere mechanism, they lapsed into the company of the scientific myth-makers to whom we alluded above. They attributed to their abstraction, evolution, qualities which other people found in the forms of the universe viewed as the manifestation of an immanent God. Only by so doing were they able to ascribe to evolution that which other people describe as the work of God. At this level the controversy becomes one simply about words.

Of course, the great illumination as to the meaning of evolution has come with its application to many fields besides the physical. Darwin was certainly the great inaugurator of the evolutionary movement in England. Still, Darwin's problem was strictly limited. The impression is widespread that the biological evolutionary theories were first developed, and furnished the basis for the others. Yet both Hegel and Comte, not to speak of Schelling, were far more interested in the intellectual and historical, the ethical and social aspects of the question. Both Hegel and Comte were, whether rightly or wrongly, rather contemptuous of the appeal to biology and organic life. Both had the sense that they used a great figure of speech when they spoke of society as an organism, and compared the working of institutions to biological functions. This is indeed the question. It is a question over which Spencer sets himself lightly. He passes back and forth between organic evolution and the ethical, economic, and social movements which are described by the same term, as if we were in possession of a perfectly safe analogy, or rather as if we were assured of an identical principle. Much that is already archaic in Spencer's economic and social, his historical and ethical, not to say his religious, chapters is due to the influence of this fact. Of his own mind it was true that he had come to the doctrine of evolution from the physical side. He brought to his other subjects a more or less developed method of operating with the conception. He never fully realised how new subjects would alter the method and transform the conception. Spencerian evolution is an assertion of the all-sufficiency of natural law. The authority of conscience is but the experience of law-abiding and dutiful generations flowing in our veins. The public weal has hold over us, because the happiness and misery of past ages are inherited by us.

It marked a great departure when Huxley began vigorously to dissent from these views. According to him evolutionary science has done nothing for ethics. Men become ethical only as they set themselves against the principles embodied in the evolutionary process of the world. Evolution is the struggle for existence. It is preposterous to say that man became good by succeeding in the struggle for existence. Instead of the old single movement, as in Spencer, straight from the nebula to the saint, Huxley has place for suffering. Suffering is most intense in man precisely under conditions most essential to the evolution of his nobler powers. The loss of ease or money may be gain in character. The cosmical process is not only full of pain. It is full of mercilessness and of wickedness. Good has been evolved, but so has evil. The

fittest may have survived. There is no guarantee that they are the best. The continual struggle against our fellows poisons our higher life. It will hardly do to say with Huxley that the ethical struggle is the reverse of the cosmical process. Nevertheless, we have here a most interesting transformation in thought.

These ideas and principles, as is well known, were elaborated and advanced upon in a very popular book, Drummond's *Ascent of Man*, 1894. Even the title was a happy and suggestive one. Struggle for life is a fact, but it is not the whole fact. It is balanced by the struggle for the life of others. This latter reaches far down into the levels of what we call brute life. Its divinest reach is only the fulfilment of the real nature of humanity. It is the living with men which develops the moral in man. The prolongation of infancy in the higher species has had to do with the development of moral nature. So only that we hold a sufficiently deep view of reason, provided we see clearly that reason transforms, perfects, makes new what we inherit from the beast, we need not fear for morality, though it should universally be taught that morality came into being by the slow and gradual fashioning of brute impulse.

Benjamin Kidd in his *Social Evolution*, 1895, has reverted again to extreme Darwinism in morals and sociology. The law is that of unceasing struggle. Reason does not teach us to moderate the struggle. It but sharpens the conflict. All religions are præter-rational, Christianity most of all, in being the most altruistic. Kidd, not without reason, comments bitterly upon Spencer's Utopia, the passage of militarism into industrialism. The struggle in industrialism is fiercer than ever. Reason affects the animal nature of man for the worse. Clearly conscious of what he is doing, man objects to sacrificing himself for his family or tribe. Instinct might lead an ape to do that. Intelligence warns a man against it. Reason is cruel beyond anything dreamed of in the beast. That portion of the community which loves to hear the abuse of reason, rejoiced to hear this phrase. They rejoiced when they heard that religion was the only remedy, and that religion was ultra-rational, contra-rational, supernatural, in this new sense. How one comes by it, or how one can rationally justify the yielding of allegiance to it, is not clear. One must indeed have the will to believe if one believes on these terms.

These again are but examples. They convey but a superficial impression of the effort to apply the conception of evolution to the moral and religious life of man. All this has taken place, of course, in a far larger setting that of the endeavour to elaborate the evolutionary view of politics and of the state, of economics and of trade, of social life and institutions, of culture and civilisation in every aspect. This elaboration and reiteration of the doctrine of evolution sometimes wearies us. It is but the unwearied following of the main clue to the riddle of the universe which the age has given us. It is nothing more and nothing less than the endeavour to apprehend the ideal life, no longer as something held out to us, set up before us, but also as something working within us, realising itself through us and among us. To deny the affinity of this with religion would be fatuous and also futile. Temporarily, at least, and to many interests of religion, it would be fatal.

MIRACLES

It must be evident that the total view of the universe which the acceptance of the doctrine of evolution implies, has had effect in the diminution of the acuteness of the question concerning miracles. It certainly gives to that question a new form. A philosophy which asserts the constant presence of God in nature and the whole life of the world, a criticism which has given us a truer notion of the documents which record the biblical miracles, the reverent sense of ignorance which our increasing knowledge affords, have tended to diminish the dogmatism of men on either side of the debate. The contention on behalf of the miracle, in the traditional sense of the word, once seemed the bulwark of positive religion, the distinction between the man who was satisfied with a naturalistic explanation of the universe and one whose devout soul asked for something more. On the other hand, the contention against the miracle appeared to be a necessary corollary of the notion of a law and order which are inviolable throughout the universe.

Furthermore, many men have come of themselves to the conclusion for which Schleiermacher long ago contended. Whatever may be theoretically determined concerning miracles, yet the miracle can never again be regarded as among the foundations of faith. This is for the simplest of reasons. The belief in a miracle presupposes faith. It is the faith which sustains the miracle, and not the miracle the faith. Jesus is to men the incomparable moral and spiritual magnitude which he is, not on the evidence of some unparalleled things physical which it is alleged he did. Quite the contrary, it is the immediate impression of the moral and spiritual wonder which Jesus is, that prepares what credence we can gather for the wonders which it is declared he did. This is a transfer of emphasis, a redistribution of weight in the structure of our thought, the relief of which many appreciate who have not reasoned the matter through for themselves.

Schleiermacher had said, and Herrmann and others repeat the thought, that, as the Christian faith finds in Christ the highest revelation, miracles may reasonably be expected of him. Nevertheless, he adds, these deeds can be called miracles or esteemed extraordinary, only as containing something which was beyond contemporary knowledge of the regular and orderly connexion between physical and spiritual life. Therewith, it must be evident, that the notion of the miraculous is fundamentally changed. So it comes to pass that we have a book like Mackintosh's *Natural History of the Christian Religion*, 1894, whose avowed purpose is to do away with the miraculous altogether. Of course, the author means the traditional notion of the miraculous, according to which it is the essence of arbitrariness and the negation of law. It is not that he has less sense for the divine life of the world, or for the quality of Christianity as revelation. On the other hand, we have a book like Percy Gardner's *Exploratio Evangelica*, 1899. With the most searching criticism of the narratives of some miracles, there is reverent confession, on the author's part, that he is baffled by the reports of others. There is recognition of unknown possibilities in the case of a character like that of Jesus. It is not that Gardner has a less stringent sense of fact and of the inexorableness of law than has Mackintosh or an ardent physicist. The problem is reduced to that of the choice of expression. We are not able to withhold a justification of the scholar who declares: We must not say that we believe in the miraculous. This language is sure to be appropriated by those who still take their departure from the old dualism, now hopelessly obsolete, for which a breach of the law of nature was the crowning evidence of the love of God. On the other hand, the assertion that we do not believe in the miraculous will easily be taken by some to mean the denial of the whole sense of the nearness and power and love of God, and of the unimagined possibilities of such a moral nature as was that of Christ. It is to be repeated that we have here a mere difference as to terms. The debate is no longer about ideas.

The traditional notion of the miracle arose out of the confusion of two series of ideas which, in the last analysis, have nothing to do with each other. On the one hand, there is the conception of law and order, of cause and effect, of the unbroken connexion of nature. On the other hand is the thought of the divine purpose in the life of the world and of the individual. By the aid of that first sequence of thoughts we find ourselves in the universe and interpret the world of fact to ourselves. Yet in the other sequence lies the essence of religion. The two sequences may perfectly well coexist in the same mind. Out of the attempt to combine them nothing clear or satisfying can issue. If one should be, to-day, brought face to face with a fact which was alleged to be a miracle, his instinctive effort would be, nevertheless, to seek to find its cause, to establish for it a connexion in the natural order. In the ancient world men did not argue thus, nor in the modern world until less than two hundred years ago. The presumption of the order of nature had not assumed for them the proportions which it has for us. For us it is overwhelming, self-evident. Therewith is not involved that we lack belief in a divine purpose for the world and for the individual life.

We do not deny that there are laws of nature of which we have no experience, facts which we do not understand, events which, if they should occur, would stand before us as unique. Still, the decisive thing is, that in face of such an event, instead of viewing it quite simply as a divine intervention, as men used to do, we, with equal simplicity and no less devoutness, conceive that same event as only an illustration of a

connexion in nature which we do not understand. There is no inherent reason why we may not understand it. When we do understand it, there will be nothing more about it that is conceivably miraculous. There will be then no longer a unique quality attaching to the event. Therewith ends the possible significance of such an event as proof of divine intervention for our especial help. We have but a connexion in nature such that, whether understood or not, if it were to recur, the event would recur.

The miracles which are related in the Scripture may be divided for our consideration into three classes. To the first class belong most of those which are related in the Old Testament, but some also which are conspicuous in the New Testament. They are, in some cases, the poetical and imaginative representation of the profoundest religious ideas. So soon as one openly concedes this, when there is no longer any necessity either to attack or to defend the miracle in question, one is in a position to acknowledge how deep and wonderful the thoughts often are and how beautiful the form in which they are conveyed. It is through imagination and symbolism that we are able to convey the subtlest meanings which we have. Still more was this the case with men of an earlier age. In the second place, the narratives of miracles are, some of them, of such a sort that we may say that an event or circumstance in nature has been obviously apprehended in naïve fashion. This by no means forbids us to interpret that same event in quite a different way. The men of former time, exactly in proportion as they had less sense of the order of nature than have we, so were they also far readier to assume the immediate forthputting of the power of God. This was true not merely of the uneducated. It is difficult, or even impossible, for us to find out what the event was. Fact and apprehension are inextricably interwoven. That which really happened is concealed from us by the tale which had intended to reveal it. In the third place, there are many cases in the history of Jesus, and some in that of the apostles and prophets, in which that which is related moves in the borderland between body and soul, spirit and matter, the region of the influence of will, one’s own or that of another, over physical conditions. Concerning such cases we are disposed, far more than were men even a few years ago, to concede that there is much that is by no means yet investigated, and the soundest judgment we can form is far from being sure. Even if we recognise to the full the lamentable resurgence of outworn superstitions and stupidities, which again pass current among us for an unhappy moment, if we detect the questionable or manifestly evil consequences of certain uses made or alleged of psychic influence, yet still we are not always in a position to say, with certainty, what is true in tales of healing which we hear in our own day. There are certain of the statements concerning Jesus’ healing power and action which are absolutely baffling. They can be eliminated from the narrative only by a procedure which might just as well eliminate the narrative. In many of the narratives there may be much that is true. In some all may be as related. In Jesus’ time, on the witness of the Scripture itself, it was assumed as something no one questioned, that miraculous deeds were performed, not alone by Jesus and the apostles, but by many others, and not always even by the good. Such deeds were performed through the power of evil spirits as well as by the power of God. To imagine that the working of miracles proved that Jesus came from God, is the most patent importation of a modern apologetic notion into the area of ancient thought. We must remember that Jesus himself laid no great weight upon the miracles which we assume that he believed he wrought, and some of which we may believe that he did work. Many he performed with hesitation and desired so far as possible to conceal.

Even if we were in a position at one point or another in the life of Jesus to defend the traditional assumptions concerning the miraculous, yet it must be evident how opposed it is to right reason, to lay stress on the abstract necessity of belief in the miraculous. The traditional conception of the miraculous is done away for us. This is not at all by the fact that we are in a position to say with Matthew Arnold: ‘The trouble with miracles is that they never happen.’ We do not know enough to say that. To stake all on the assertion of the impossibility of so-called miracles is as foolish as to stake much on the affirmation of their actuality. The connexion of nature is only an induction. This can never be complete. The real question is both more complex and also more simple. The question is whether, even if an event, the most

unparalleled of those related in the Gospels or outside of them, should be proved before our very eyes to have taken place, the question is whether we should believe it to have been a miracle in the traditional sense, an event in which the actual — not the known, but the possible — order of nature had been broken through, and in the old sense, God had arbitrarily supervened.

Allowed that the event were, in our own experience and in the known experience of the race, unparalleled, yet it would never occur to us to suppose but that there was a law of this case, also, a connexion in nature in which, as work of God, it occurred, and in which, if the conditions were repeated, it would recur. We should unceasingly endeavour through observation, reflexion, and new knowledge, to show how we might subordinate this event in the connexion of nature which we assume. We should feel that we knew more, and not less, of God, if we should succeed. And if our effort should prove altogether futile, we should be no less sure that such natural connexion exists. This is because nature is for us the revelation of the divine. The divine, we assume, has a natural order of working. Its inviolability is the divinest thing about it. It is through this sequence of ideas that we are in a position to deny, not facts which may be inexplicable, but the traditional conception of the miracle. For surely no one needs to be told that this is not the conception of the miracle which has existed in the minds of the devout, and equally of the undevout, from the beginning of thought until the present day.

However, there is nothing in all of this which hinders us from believing with a full heart in the love and grace and care of God, in his holy and redeeming purpose for mankind and for the individual. It is true that this belief cannot any longer retain its naïve and childish form. It is true that it demands of a man far more of moral force, of ethical and spiritual mastery, of insight and firm will, to sustain the belief in the purpose of God for himself and for all men, when a man believes that he sees and feels God only in and through nature and history, through personal consciousness and the personal consciousness of Jesus. It is true that it has, apparently, been easier for men to think of God as outside and above his world, and of themselves as separated from their fellows by his special providence. It is more difficult, through glad and intelligent subjection to all laws of nature and of history, to achieve the education of one's spirit, to make good one's inner deliverance from the world, to aid others in the same struggle and to set them on their way to God. Men grow uncertain within themselves, because they say that traditional religion has apprehended the matter in a different way. This is true. It is also misleading. Whatever miracles Jesus may have performed, no one can say that he performed them to make life easier for himself, to escape the common lot, to avoid struggle, to evade suffering and disgraceful death. On the contrary, in genuine human self-distrust, but also in genuine heroism, he gave himself to his vocation, accepting all that went therewith, and finished the work of God which he had made his own. This is the more wonderful because it lay so much nearer to him than it can lie to us, to pray for special evidence of the love of God and to set his faith on the receiving of it. He had not the conception of the relation of God to nature and history which we have.

We may well view the modern tendency to belief in healings through prayer, suggestion and faith, as an intelligible, an interesting, and in part, a touching manifestation. Of course there is mingled with it much dense ignorance, some superstition and even deception. Yet behind such a phenomenon there is meaning. Men of this mind make earnest with the thought that God cares for them. Without that thought there is no religion. They have been taught to find the evidence of God's love and care in the unusual. They are quite logical. It has been a weak point of the traditional belief that men have said that in the time of Christ there were miracles, but since that time, no more. Why not, if we can only in spirit come near to Christ and God? They are quite logical also in that they have repudiated modern science. To be sure, no inconsiderable part of them use the word science continually.

But the very esoteric quality of their science is that it means something which no one else ever understood that it meant. In reality their breach with science is more radical than their breach with Christianity. They feel the contradiction in which most men are bound fast, who will let science have its

way, up to a certain point, but who beyond that, would retain the miracle. Dimly the former appreciate that this position is impossible. They leave it to other men to become altogether scientific if they wish. For themselves they prefer to remain religious. What a revival of ancient superstitions they have brought to pass, is obvious. Still we shall never get beyond such adventurous and preposterous endeavours to rescue that which is inestimably precious in religion, until the false antithesis between reason and faith, the lying contradiction between the providence of God and the order of nature, is overcome. Some science mankind apparently must have. Altogether without religion the majority, it would seem, will never be. How these are related, the one to the other, not every one sees. Many attempt their admixture in unhappy ways. They might try letting them stand in peace as complement and supplement the one to the other. Still better, they may perhaps some day see how each penetrates, permeates and glorifies the other.

THE SOCIAL SCIENCES

We said that the last generation had been characterised by an unexampled concentration of intellectual interest upon problems presented by the social sciences. With this has gone an unrivalled earnestness in the interpretation of religion as a social force. The great religious enthusiasm has been that of the application of Christianity to the social aspects of life. This effort has furnished most of the watchwords of religious teaching. It has laid vigorous, not to say violent, hands on religious institutions. It has given a new perspective to effort and a new impulse to devotion. The revival of religion in our age has taken this direction, with an exclusiveness which has had both good and evil consequences. Yet, before all, it should be made clear that it constitutes a religious revival. Some are deploring the prostrate condition of spiritual interests. If one judged only by conventional standards, they have much evidence upon their side. Some are seeking to galvanise religious life by recurrence to evangelistic methods successfully operative half a century ago. The outstanding fact is that the age shows immense religious vitality, so soon as one concedes that it must be allowed to show its vitality in its own way. It is the age of the social question. One must be ignorant indeed of the activity of the churches and of the productivity of religious thinkers, if he does not own that in Christian circles also no questions are so rife as these. Whether the panaceas have been all wise or profitable may be questioned. Whether the interest has not been even excessive and one-sided, whether the accusation has not been occasionally unjust and the self-accusation morbid, these are questions which it might be possible in some quarters to ask. This is, however, only another form of proof of what we say. The religious interest in social questions has not been aroused primarily by intellectual and scientific impulses, nor fostered mainly by doctrinaire discussion. On the contrary, the initiative has been from the practical side. It has been a question of life and service. If anything, one often misses the scientific note in the flood of semi-religious literature relating to this theme, the realisation that, to do well, it is often profitable to think. Yet there is effort to mediate the best results of social-scientific thinking, through clerical education and directly to the laity. On the other hand, a deep sense of ethical and spiritual responsibility is prevalent among thinkers upon social topics.

Often indeed has the quality of Christianity been observed which is here exemplified. Each succeeding age has read into Christ’s teachings, or drawn out from his example, the special meaning which that generation, or that social level, or that individual man had need to draw. To them in their enthusiasm it has often seemed as if this were the only lesson reasonable men could draw. Nothing could be more enlightening than is reflexion upon this reading of the ever-changing ideals of man’s life into Christianity, or of Christianity into the ever-advancing ideals of man’s life. This chameleonlike quality of Christianity is the farthest possible remove from the changelessness which men love to attribute to religion. It is the most wonderful quality which Christianity possesses. It is precisely because of the recognition of this capacity for change that one may safely argue the continuance of Christianity in the world. Yet also because of this recognition, one is put upon his guard against joining too easily in the clamour that a past

apprehension of religion was altogether wrong, or that a new and urgent one, in its exclusive emphasis and its entirety, is right. Our age is haunted by the sense of terrific social and economic inequalities which prevail. It has set its heart upon the elimination of those inequalities. It is an age whose disrespect for religion is in some part due to the fact that religion has not done away with these inequalities. It is an age which is immediately interested in an interpretation of religion which will make central the contention that, before all things else, these inequalities must be done away. If religion can be made a means of every man's getting his share of the blessings of this world, well and good. If not, there are many men and women to whom religion seems utterly meaningless.

This sentence hardly overstates the case. It is the challenge of the age to religion to do something which the age profoundly needs, and which religion under its age-long dominant apprehension has not conspicuously done, nor even on a great scale attempted. It is the challenge to religion to undertake a work of surpassing grandeur — nothing less than the actualisation of the whole ideal of the life of man. Religious men respond with the quickened and conscientious conviction, not indeed that they have laid too great an emphasis upon the spiritual, but that under a dualistic conception of God and man and world, they have never sufficiently realised that the spiritual is to be realised in the material, the ideal in and not apart from the actual, the eternal in and not after the temporal. Yet with that oscillatory quality which belongs to human movements, especially where old wrongs and errors have come deeply to be felt, a part of the literature of the contention shows marked tendency to extremes. A religion in the body must become a religion of the body. A Christianity of the social state runs risk of being apprehended as merely one more means for compassing outward and material ends. Religion does stand for the inner life and the transcendent world, only not an inner life through the neglect of the outer, or a transcendent world in some far-off star or after an æon or two. There might be meaning in the argument that, exactly because so many other forces in our age do make for the realisation of the outer life and present world with an effectiveness and success which no previous age has ever dreamed, there is the more reason, and not the less, why religion should still be religion. Exactly this is the contention of Eueken in one of the most significant contributions of recent years to the philosophy of religion, his *Wahrheitsgehalt der Religion*, 1901, transl. Jones, 1911. The very source and cause of the sure recovery of religion in our age will be the experience of the futility, the bankruptcy, of a civilisation without faith. No nobler argument has been heard in our time for the spiritual meaning of religion, with the fullest recognition of all its other meanings.

The modern emphasis on the social aspects of religion may be said to have been first clearly expressed in Seeley's *Ecce Homo*, 1867. The pith of the book is in this phrase: 'To reorganise society and to bind the members of it together by the closest ties was the business of Jesus' life.' Allusion has been made to Fremantle's *The World as the Subject of Redemption*, 1885. Worthy of note is also Fairbairn's *Religion in History and Modern Life*, 1894; pre-eminently so is Bosanquet's *The Civilisation of Christendom*, 1893. Westcott's *Incarnation and Common Life*, 1893, contains utterances of weight. Peabody, in his book, *Jesus Christ and the Social Question*, 1905, has given, on the whole, the best résumé of the discussion. He conveys incidentally an impression of the body of literature produced in recent years, in which it is assumed, sometimes with embitterment, that the centre of gravity of Christianity is outside the Church. Sell, in the very title of his illuminating little book, *Christenthum und Weltgeschichte seit der Reformation: das Christenthum in seiner Entwickelung über die Kirche hinaus*, 1910, records an impression, which is widespread and true, that the characteristic mark of modern Christianity is that it has transcended the organs and agencies officially created for it. It has become non-ecclesiastical, if not actually hostile to the Church. It has permeated the world in unexpected fashion and does the deeds of Christianity, though rather eager to avoid the name. The anti-clericalism of the Latin countries is not unintelligible, the anti-ecclesiasticism of the Teutonic not without a cause. German socialism, ever since Karl Marx, has been fundamentally antagonistic to any religion whatsoever. It is purely secularist in tone.

This is also a strained situation, liable to become perverse. That part of the Christian Church which understands itself, rejoices in nothing so much as in the fact that the spirit of Christ is so widely disseminated, his influence felt by many who do not know what influence it is which they feel, his work done by vast numbers who would never call themselves his workers. That part of the Church is not therewith convinced but that there is need of the Church as institution, and of those who are consciously disciples of Jesus in the world.

By far the largest question, however, which is raised in this connexion, is one different from any thus far intimated. It is, perhaps, the last question one would have expected the literature of the social movement to raise. It is, namely, the question of the individual. Ever since the middle of the eighteenth century a sort of universalistic optimism, to which the individual is sacrificed, has obtained. Within the period of which this book treats the world has won an enlargement of horizon of which it never dreamed. It has gained a forecast of the future of culture and civilisation which is beyond imagination. The access of comfort makes men at home in the world as they never were at home. There has been set a value on this life which life never had before. The succession of discoveries and applications of discovery makes it seem as if there were to be no end in this direction. From Rousseau to Spencer men have elaborated the view that the historical process cannot really issue in anything else than in ever higher stages of perfection and of happiness. They postulate a continuous enhancement of energy and a steady perfecting of intellectual and moral quality. As the goal of evolution appears an ideal condition which is either indefinitely remote, that is, which gives room for the bliss of infinite progress in its direction, or else a definitely attainable condition, which would have within itself the conditions of perpetuity.

The resistlessness with which this new view of the life of civilisation has won acknowledgment from men of all classes is amazing. It rests upon a belief in the self-sufficiency and the all-sufficiency of the life of this world, of the bearings of which it may be assumed that few of its votaries are aware. In reality this view cannot by any possibility be described as the result of knowledge. On the contrary, it is a venture of faith. It is the peculiar, the very characteristic and suggestive form which the faith of our age takes. Men believe in this indefinite progress of the world and of mankind, because without postulating such progress they do not see how they can assume the absolute worth of an activity which is yet the only thing which has any interest to most of them. Under this view one can assign to the individual life a definite significance, only upon the supposition that the individual is the organ of realisation of a part of this progress of mankind. All happiness and suffering, all changes in knowledge and manner of conduct, are supposed to have no worth each for itself or for the sake of the individual, but only for their relation to the movement as a whole. Surely this is an illusion. Exactly that in which the characteristic quality of the world and of life is found, the individual personalities, the single generations, the concrete events — these lose, in this view, their own particular worth. What can possibly be the worth of a whole of which the parts have no worth? We have here but a parallel on a huge scale of that deadly trait in our own private lives, according to which it makes no difference what we are doing, so only that we are doing, or whither we are going, so only that we cease not to go, or what our noise is all about, so only that there be no end of the noise. Certainly no one can establish the value of the evolutionary process in and of itself.

If the movement as a whole has no definite end that has absolute worth, then it has no worth except as the stages, the individual factors included in it, attain to something within themselves which is of increasing worth. If the movement achieves this, then it has worth, not otherwise. We may illustrate this question by asking ourselves concerning the existence and significance of suffering and of the evil and of the bad which are in the world, in their relation to this tendency to indefinite progress which is supposed to be inherent in civilisation. On this theory we have to say that the suffering of the individual is necessary for the development and perfecting of the whole. As over against the whole the individual has no right to make demands as to welfare or happiness. The bad also becomes only relative. In the movement taken as a whole, it is probably unavoidable. In any case it is negligible, since the movement is irresistible. All

ethical values are absorbed in the dynamic ones, all personal values in the collective ones. Surely the sole intelligent question about any civilisation is, what sort of men does it produce. If it produces worthless individuals, it is so far forth a worthless civilisation. If it has sacrificed many worthy men in order to produce this ignoble result, then it is more obviously ignoble than ever.

Furthermore, this notion of an inherent necessity and an irresistible tendency to progress is a chimera. The progress of mankind is a task. It is something to which the worthy human spirit is called upon to make contribution. The unworthy never hear the call. Progress is not a natural necessity. It is an ethical obligation. It is a task which has been fulfilled by previous generations in varying degrees of perfectness. It will be participated in by succeeding generations with varying degrees of wisdom and success. But as to there being anything autonomous about it, this is sheer hallucination, myth-making again, on the part of those who boast that they despise the myth, miracle-mongering on the part of those who have abjured the miracle, nonsense on the part of those who boast that they alone are sane. There is no ultimate source of civilisation but the individual, as there is also no issue of civilisation but in individuals. Men, characters, personalities, are the makers of it. Men are the product which is made. The higher stages and achievements of the life of society have come to pass always and only upon condition that single personalities have recognised the problem, seen their individual duty and known how to inspire others with enthusiasm. Periods of decline are always those in which this personal element cannot make itself felt. Democracies and periods of the intensity of emphasis upon the social movement, tend directly to the depression and suppression of personality. Such reflexions will have served their purpose if they give us some clear sense of what we have to understand as the effect of the social movement on religion. They may give also some forecast of the effect of real religion on the social movement. For religion is the relation of God and personality. It can be social only in the sense that society, in all its normal relations, is the sphere within which that relation of God and personality is to be wrought out.

Footnote 7:(return)

Siebeck, *Religionsphilosophie*, 1893, s. 407.

CHAPTER VI. THE ENGLISH-SPEAKING PEOPLES: ACTION AND REACTION

In those aspects of our subject with which we have thus far dealt, leadership has been largely with the Germans. Effort was indeed made in the chapter on the sciences to illustrate the progress of thought by reference to British writers. In this department the original and creative contribution of British authors was great. There were, however, also in the earlier portion of the nineteenth century movements of religious thought in Great Britain and America related to some of those which we have previously considered. Moreover, one of the most influential movements of English religious thought, the so-called Oxford Movement, with the Anglo-Catholic revival which it introduced, was of a reactionary tendency. It has seemed, therefore, feasible to append to this chapter that which we must briefly say concerning the general movement of reaction which marked the century. This reactionary movement has indeed everywhere run parallel to the one which we have endeavoured to record. It has often with vigour run counter to our movement. It has revealed the working of earnest and sometimes anxious minds in directions opposed to those which we have been studying. No one can fail to be aware that there has been a great Catholic revival in the nineteenth century. That revival has had place in the Roman Catholic countries of the Continent as well. It was in order to include the privilege of reference to these aspects of our subject that this chapter was given a double title. Yet in no country has the nineteenth century so favourably altered the position of the Roman Catholic Church as in England. In no country has a Church which has been esteemed to be Protestant been so much influenced by Catholic ideas. This again is a reason for including our reference to the reaction here.

According to Pfleiderer, a new movement in philosophy may be said to have begun in Great Britain in the year 1825, with the publication of Coleridge's *Aids to Reflection*. In Coleridge's *Confessions of an Enquiring Spirit*, published six years after his death in 1834, we have a suggestion of the biblical-critical movement which was beginning to shape itself in Germany. In the same years we have evidence in the works of Erskine and the early writings of Campbell, that in Scotland theologians were thinking on Schleiermacher's lines. In those same years books of more or less marked rationalistic tendency were put forth by the Oriel School. Finally, with Pusey's *Assize Sermon*, in 1833, Newman felt that the movement later to be called Tractarian had begun. We shall not be wrong, therefore, in saying that the decade following 1825 saw the beginnings in Britain of more formal reflexion upon all the aspects of the theme with which we are concerned.

What went before that, however, in the way of liberal religious thinking, though informal in its nature, should not be ignored. It was the work of the poets of the end of the eighteenth and of the beginning of the nineteenth centuries. The culmination of the great revolt against the traditional in state and society and against the conventional in religion, had been voiced in Britain largely by the poets. So vigorous was this utterance and so effective, that some have spoken of the contribution of the English poets to the theological reconstruction. It is certain that the utterances of the poets tended greatly to the dissemination of the new ideas. There was in Great Britain no such unity as we have observed among the Germans, either of the movement as a whole or in its various parts. There was a consecution nothing less than marvellous in the work of the philosophers from Kant to Hegel. There was a theological sequence from Schleiermacher to Ritschl. There was an unceasing critical advance from the days of Strauss. There was nothing resembling this in the work of the English-speaking people. The contributions were for a long time only sporadic. The movement had no inclusiveness. There was no aspect of a solid front in the advance. In the department of the sciences only was the situation different. In a way, therefore, it will be necessary in this chapter merely to single out individuals, to note points of conflict, one and another, all

along the great line of advance. Or, to put it differently, it will be possible to pursue a chronological arrangement which would have been bewildering in our study heretofore. With the one great division between the progressive spirits and the men of the reaction, it will be possible to speak of philosophers, critics and theologians together, among their own contemporaries, and so to follow the century as it advances.

In the closing years of the eighteenth century in England what claimed to be a rational supernaturalism prevailed. Men sought to combine faith in revealed religion with the empirical philosophy of Locke. They conceived God and his relation to the world under deistical forms. The educated often lacked in singular degree all deeper religious feeling. They were averse to mysticism and spurned enthusiasm. Utilitarian considerations, which formed the practical side of the empirical philosophy, played a prominent part also in orthodox belief. The theory of the universe which obtained among the religious is seen at its worst in some of the volumes of the Warburton Lectures, and at its best perhaps in Butler's *Analogy of Natural and Revealed Religion*. The character and views of the clergy and of the ruling class among the laity of the Church of England, early in the nineteenth century, are pictured with love and humour in Trollope's novels. They form the background in many of George Eliot's books, where, in more mordant manner, both their strength and weaknesses are shown. Even the remarks which introduce Dean Church's *Oxford Movement*, 1891, in which the churchly element is dealt with in deep affection, give anything but an inspiring view.

The contrast with this would-be rational and unemotional religious respectability of the upper classes was furnished, for masses of the people, in the quickening of the consciousness of sin and grace after the manner of the Methodists. But the Methodism of the earlier age had as good as no intellectual relations whatsoever. The Wesleys and Whitefield had indeed influenced a considerable portion of the Anglican communion. Their pietistic trait, combined, for the most part, with a Calvinism which Wesley abhorred and an old-fashioned low church feeling with which also Wesley had no sympathy, shows itself in the so-called evangelical party which was strong before 1830. This evangelical movement in the Church of England manifested deep religious feeling, it put forth zealous philanthropic effort, it had among its representatives men and women of great beauty of personal character and piety. Yet it was completely cut off from any living relation to the thought of the age. There was among its representatives no spirit of theological inquiry. There was, if anything, less probability of theological reconstruction, from this quarter, than from the circles of the older German pietism, with which this English evangelicalism of the time of the later Georges had not a little in common. There had been a great enthusiasm for humanity at the opening of the period of the French Revolution, but the excesses and atrocities of the Revolution had profoundly shocked the English mind. There was abroad something of the same sense for the return to nature, and of the greatness of man, which moved Schiller and Goethe. The exponents of it were, however, almost exclusively the poets, Wordsworth, Shelley, Keats and Byron. There was nothing which combined these various elements as parts of a great whole. Britain had stood outside the area of the Revolution, and yet had put forth stupendous efforts, ultimately successful, to make an end of the revolutionary era and of the Napoleonic despotism. This tended perhaps to give to Britons some natural satisfaction in the British Constitution and the established Church which flourished under it. Finally, while men on the Continent were devising holy alliances and other chimeras of the sort, England was precipitated into the earlier acute stages of the industrial revolution in which she has led the European nations and still leads. This fact explains a certain preoccupation of the British mind with questions remote from theological reconstruction or religious speculation.

THE POETS

It may now sound like a contradiction if we assert that the years from 1780 to 1830 constitute the era of

the noblest English poetry since the times of great Elizabeth. The social direction of the new theology of the present day, with its cry against every kind of injustice, with its claim of an equal opportunity for a happy life for every man — this was the forecast of Cowper, as it had been of Blake. To Blake all outward infallible authority of books or churches was iniquitous. He was at daggers drawn with every doctrine which set limit to the freedom of all men to love God, or which could doubt that God had loved all men. Jesus alone had seen the true thing. God was a father, every man his child. Long before 1789, Burns was filled with the new ideas of the freedom and brotherhood of man, with zeal for the overthrow of unjust privilege. He had spoken in imperishable words of the holiness of the common life. He had come into contact with the most dreadful consequences of Calvinism. He has pilloried these mercilessly in his 'Holy Tulzie' and in his 'Holy Willie's Prayer.' Such poems must have shaken Calvinism more than a thousand liberal sermons could have done. What Coleridge might have done in this field, had he not so early turned to prose, it is not easy to say. The verse of his early days rests upon the conviction, fundamental to his later philosophy, that all the new ideas concerning men and the world are a revelation of God. Wordsworth seems never consciously to have broken with the current theology. His view of the natural glory and goodness of humanity, especially among the poor and simple, has not much relation to that theology. His view of nature, not as created of God. in the conventional sense, but as itself filled with God, of God as conscious of himself at every point of nature's being, has still less. Man and nature are but different manifestations of the one soul of all. Byron's contribution to Christian thought, we need hardly say, was of a negative sort. It was destructive rather than constructive. Among the conventions and hypocrisies of society there were none which he more utterly despised than those of religion and the Church as he saw these. There is something volcanic, Voltairean in his outbreaks. But there is a difference. Both Voltaire and Byron knew that they had not the current religion. Voltaire thought, nevertheless, that he had a religion. Posterity has esteemed that he had little. Byron thought he had none. Posterity has felt that he had much. His attack was made in a reckless bitterness which lessened its effect. Yet the truth of many things which he said is now overwhelmingly obvious. Shelley began with being what he called an atheist. He ended with being what we call an agnostic, whose pure poetic spirit carried him far into the realm of the highest idealism. The existence of a conscious will within the universe is not quite thinkable. Yet immortal love pervades the whole. Immortality is improbable, but his highest flights continually imply it. He is sure that when any theology violates the primary human affections, it tramples into the dust all thoughts and feelings by which men may become good. The men who, about 1840, stood paralysed between what Strauss later called 'the old faith and the new,' or, as Arnold phrased it, were 'between two worlds, one dead, the other powerless to be born,' found their inmost thoughts written broad for them in Arthur Clough. From the time of the opening of Tennyson's work, the poets, not by destruction but by construction, not in opposition to religion but in harmony with it, have built up new doctrines of God and man and aided incalculably in preparing the way for a new and nobler theology. In the latter part of the nineteenth century there was perhaps no one man in England who did more to read all of the vast advance of knowledge in the light of higher faith, and to fill such a faith with the spirit of the glad advance of knowledge, than did Browning. Even Arnold has voiced in his poetry not a little of the noblest conviction of the age. And what shall one say of Mrs. Browning, of the Rossettis and William Morris, of Emerson and Lowell, of Lanier and Whitman, who have spoken, often with consummate power and beauty, that which one never says at all without faith and rarely says well without art?

COLERIDGE

Samuel Taylor Coleridge was born in 1772 at his father's vicarage, Ottery St. Mary's, Devonshire. He was the tenth child of his parents, weak in frame, always suffering much. He was a student at Christ's Hospital, London, where he was properly bullied, then at Jesus College, Cambridge, where he did not

take his degree. For some happy years he lived in the Lake region and was the friend of Wordsworth and Southey. He studied in Göttingen, a thing almost unheard of in his time. The years 1798 to 1813 were indeed spent in utter misery, through the opium habit which he had contracted while seeking relief from rheumatic pain. He wrote and taught and talked in Highgate from 1814 to 1834. He had planned great works which never took shape. For a brief period he severed his connexion with the English Church, coming under Unitarian influence. He then reverted to the relation in which his ecclesiastical instincts were satisfied. We read his *Aids to Reflection* and his *Confessions of an Enquiring Spirit*, and wonder how they can ever have exerted a great influence. Nevertheless, they were fresh and stimulating in their time. That Coleridge was a power, we have testimony from men differing among themselves so widely as do Hare, Sterling, Newman and John Stuart Mill. He was a master of style. He had insight and breadth. Tulloch says of the *Aids*, that it is a book which none but a thinker upon divine things will ever like. Not all even of these have liked it. Inexcusably fragmentary it sometimes seems. One is fain to ask: What right has any man to publish a scrap-book of his musings? Coleridge had the ambition to lay anew the foundations of spiritual philosophy. The *Aids* were but of the nature of prolegomena. For substance his philosophy went back to Locke and Hume and to the Cambridge Platonists. He had learned of Kant and Schleiermacher as well. He was no metaphysician, but a keen interpreter of spiritual facts, who himself had been quickened by a particularly painful experience. He saw in Christianity, rightly conceived, at once the true explanation of our spiritual being and the remedy for its disorder. The evangelical tradition brought religion to a man from without. It took no account of man’s spiritual constitution, beyond the fact that he was a sinner and in danger of hell. Coleridge set out, not from sin alone, but from the whole deep basis of spiritual capacity and responsibility upon which sin rests. He asserts experience. We are as sure of the capacity for the good and of the experience of the good as we can be of the evil. The case is similar as to the truth. There are aspects of truth which transcend our powers. We use words without meaning when we talk of the plans of a being who is neither an object for our senses nor a part of our self-consciousness. All truth must be capable of being rendered into words conformable to reason. Theologians had declared their doctrines true or false without reference to the subjective standard of judgment. Coleridge contended that faith must rest not merely upon objective data, but upon inward experience. The authority of Scripture is in its truthfulness, its answer to the highest aspirations of the human reason and the most urgent necessities of the moral life. The doctrine of an atonement is intelligible only in so far as it too comes within the range of spiritual experience. The apostolic language took colour from the traditions concerning sacrifice. Much has been taken by the Church as literal dogmatic statement which should be taken as more figure of speech, borrowed from Jewish sources.

Coleridge feared that his thoughts concerning Scripture might, if published, do more harm than good. They were printed first in 1840. Their writing goes back into the period long before the conflict raised by Strauss. There is not much here that one might not have learned from Herder and Lessing. Utterances of Whately and Arnold showed that minds in England were waking. But Coleridge’s utterances rest consistently upon the philosophy of religion and theory of dogma which have been above implied. They are more significant than are mere flashes of generous insight, like those of the men named. The notion of verbal inspiration or infallible dictation of the Holy Scriptures could not possibly survive after the modern spirit of historical inquiry had made itself felt. The rabbinical idea was bound to disappear. A truer sense of the conditions attending the origins and progress of civilisation and of the immaturities through which religious as well as moral and social ideas advance, brought of necessity a changed idea of the nature of Scripture and revelation. Its literature must be read as literature, its history as history. For the answer in our hearts to the spirit in the Book, Coleridge used the phrase: ‘It finds me.’ ‘Whatever finds me bears witness to itself that it has proceeded from the Holy Ghost. In the Bible there is more that finds me than in all the other books which I have read.’ Still, there is much in the Bible that does not find me. It is full of contradictions, both moral and historical. Are we to regard these as all equally inspired?

The Scripture itself does not claim that. Besides, what good would it do us to claim that the original documents were inerrant, unless we could claim also that they had been inerrantly transmitted? Apparently Coleridge thought that no one would ever claim that. Coleridge wrote also concerning the Church. His volume on *The Constitution of Church and State* appeared in 1830. It is the least satisfactory of his works. The vacillation of Coleridge's own course showed that upon this point his mind was never clear. Arnold also, though in a somewhat different way, was zealous for the theory that Church and State are really identical, the Church being merely the State in its educational and religious aspect and organisation. If Thomas Arnold's moral earnestness and his generous spirit could not save this theory from being chimerical, no better result was to be expected from Coleridge.

THE ORIEL SCHOOL

It has often happened in the history of the English universities that a given college has become, through its body of tutors and students, through its common-room talk and literary work, the centre, for the time, of a movement of thought which gives leadership to the college. In this manner it has been customary to speak of the group of men who, before the rise of the Oxford Movement, gathered at Oriel College, as the Oriel School. Newman and Keble were both Oriel tutors. The Oriel men were of distinctly liberal tendency. There were men of note among them. There was Whately, Archbishop of Dublin after 1831, and Copleston, from whom both Keble and Newman owned that they learned much. There was Arnold, subsequently Headmaster of Rugby. There was Hampden, Professor of Divinity after 1836. The school was called from its liberalism the Noetic school. Whether this epithet contained more of satire or of complacency it is difficult to say. These men arrested attention and filled some of the older academic and ecclesiastical heads with alarm. Without disrespect one may say that it is difficult now to understand the commotion which they made. Arnold had a truly beautiful character. What he might have done as Professor of Ecclesiastical History in Oxford was never revealed, for he died in 1842. Whately, viewed as a noetic, appears commonplace.

Perhaps the only one of the group upon whom we need dwell was Hampden. In his Bampton Lectures of 1832, under the title of *The Scholastic Philosophy considered in its Relation to Christian Theology*, he assailed what had long been the very bulwark of traditionalism. His idea was to show how the vast fabric of scholastic theology had grown up, particularly what contributions had been made to it in the Middle Age. The traditional dogma is a structure reared upon the logical terminology of the patristic and mediæval schools. It has little foundation in Scripture and no response in the religious consciousness. We have here the application, within set limits, of the thesis which Harnack in our own time has applied in a universal way. Hampden's opponents were not wrong in saying that his method would dissolve, not merely that particular system of theology, but all creeds and theologies whatsoever. Patristic, mediæval Catholic theology and scholastic Protestantism, no less, would go down before it. A pamphlet attributed to Newman, published in 1836, precipitated a discussion which, for bitterness, has rarely been surpassed in the melancholy history of theological dispute. The excitement went to almost unheard of lengths. In the controversy the Archbishop, Dr. Howley, made but a poor figure. The Duke of Wellington did not add to his fame. Wilberforce and Newman never cleared themselves of the suspicion of indirectness. This was, however, after the opening of the Oxford Movement.

ERSKINE AND CAMPBELL

The period from 1820 to 1850 was one of religious and intellectual activity in Scotland as well. Tulloch depicts with a Scotsman's patriotism the movement which centres about the names of Erskine and Campbell. Pfleiderer also judges that their contribution was as significant as any made to dogmatic

theology in Great Britain in the nineteenth century. They achieved the same reconstruction of the doctrine of salvation which had been effected by Kant and Schleiermacher. At their hands the doctrine was rescued from that forensic externality into which Calvinism had degenerated. It was given again its quality of ethical inwardness, and based directly upon religious experience. High Lutheranism had issued in the same externality in Germany before Kant and Schleiermacher, and the New England theology before Channing and Bushnell. The merits of Christ achieved an external salvation, of which a man became participant practically upon condition of assent to certain propositions. Similarly, in the Catholic revival, salvation was conceived as an external and future good, of which a man became participant through the sacraments applied to him by priests in apostolical succession. In point of externality there was not much to choose between views which were felt to be radically opposed the one to the other.

Erskine was not a man theologically educated. He led a peculiarly secluded life. He was an advocate by profession, but, withdrawing from that career, virtually gave himself up to meditation. Campbell was a minister of the Established Church of Scotland in a remote village, Row, upon the Gare Loch. When he was convicted of heresy and driven from the ministry, he also devoted himself to study and authorship. Both men seem to have come to their results largely from the application of their own sound religious sense to the Scriptures. That the Scottish Church should have rejected the truth for which these men contended was the heaviest blow which it could have inflicted on itself. Thereby it arrested its own healthy development. It perpetuated its traditional view, somewhat as New England orthodoxy was given a new lease of life through the partisanship which the Unitarian schism engendered. The matter was not mended at the time of the great rupture of the Scottish Church in 1843. That body which broke away from the Establishment, and achieved a purely ecclesiastical control of its own clergy, won, indeed, by this means the name of the Free Church, though, in point of theological opinion, it was far from representing the more free and progressive element. Tulloch pays a beautiful tribute to the character of Erskine, whom he knew. Quiet, brooding, introspective, he read his Bible and his own soul, and with singular purity of intuition generalised from his own experience. Therewith is described, however, both the power and the limitation of his work. His first book was entitled *Remarks on the Internal Evidence for the Truth of Revealed Religion*, 1820. The title itself is suggestive of the revolution through which the mind both of Erskine and of his age was passing. His book, *The Unconditional Freeness of the Gospel*, appeared in 1828; *The Brazen Serpent* in 1831. Men have confounded forgiveness and pardon. They have made pardon equivalent to salvation. But salvation is character. Forgiveness is only one of the means of it. Salvation is not a future good. It is a present fellowship with God. It is sanctification of character by means of our labour and God's love. The fall was the rise of the spirit of freedom. Fallen man can never be saved except through glad surrender of his childish independence to the truth and goodness of God. Yet that surrender is the preservation and enlargement of our independence. It is the secret of true self-realisation. The sufferings of Christ reveal God's holy love. It is not as if God's love had been purchased by the sufferings of his Son. On the contrary, it is man who needs to believe in God's love, and so be reconciled to the God whom he has feared and hated. Christ overcomes sin by obediently enduring the suffering which sin naturally entails. He endures it in pure love of his brethren. Man must overcome sin in the same way.

Campbell published, so late as 1856, his great work *The Nature of the Atonement and its Relation to the Remission of Sins and Eternal Life*. It was the matured result of the reflections of a quarter of a century, spent partly in enforced retirement after 1831. Campbell maintains unequivocally that the sacrifice of Christ cannot be understood as a punishment due to man's sin, meted out to Christ in man's stead. Viewed retrospectively, Christ's work in the atonement is but the highest example of a law otherwise universally operative. No man can work redemption for his fellows except by entering into their condition, as if everything in that condition were his own, though much of it may be in no sense his due. It is freely borne by him because of his identification of himself with them. Campbell lingers in the

myth of Christ's being the federal head of the humanity. There is something pathetic in the struggle of his mind to save phrases and the paraphernalia of an ancient view which, however, his fundamental principle rendered obsolete, He struggles to save the word satisfaction, though it means nothing in his system save that God is satisfied as he contemplates the character of Christ. Prospectively considered, the sacrifice of Christ effects salvation by its moral power over men in example and inspiration. Vicarious sacrifice, the result of which was merely imputed, would leave the sinner just where he was before. It is an empty fiction. But the spectacle of suffering freely undertaken for our sakes discovers the treasures of the divine image in man. The love of God and a man's own resolve make him in the end, in fact, that which he has always been in capacity and destiny, a child of God, possessed of the secret of a growing righteousness, which is itself salvation.

MAURICE

Scottish books seem to have been but little read in England in that day. It was Maurice who first made the substance of Campbell's teaching known in England. Frederick Denison Maurice was the son of a Unitarian minister, educated at Trinity College, Cambridge, at a time when it was impossible for a Nonconformist to obtain a degree. He was ordained a priest of the Church of England in 1834, even suffering himself to be baptised again. He was chaplain of Lincoln's Inn and Professor of Theology in King's College, London. After 1866 he was Professor of Moral Philosophy in Cambridge, though his life-work was over. At the heart of Maurice's theology lies the contention to which he gave the name of universal redemption. Christ's work is for every man. Every man is indeed in Christ. Man's unhappiness lies only in the fact that he will not own this fact and live accordingly. Man as man is the child of God. He cannot undo that fact or alter that relation if he would. He does not need to become a child of God, as the phrase has been. He needs only to recognise that he already is such a child. He can never cease to bear this relationship. He can only refuse to fulfil it. With other words Erskine and Coleridge and Schleiermacher had said this same thing.

For the rest, one may speak briefly of Maurice. He was animated by the strongest desire for Church unity, but at the back of his mind lay a conception of the Church and an insistence upon uniformity which made unity impossible. In the light of his own inheritance his ecclesiastical positivism seems strange. Perhaps it was the course of his experience which made this irrational positivism natural. Few men in his generation suffered greater persecutions under the unwarranted supposition on the part of contemporaries that he had a liberal mind. In reality, few men in his generation had less of a quality which, had he possessed it, would have given him peace and joy even in the midst of his persecutions. The casual remark above made concerning Campbell is true in enhanced degree of Maurice. A large part of the industry of a very industrious life was devoted to the effort to convince others and himself that those few really wonderful glimpses of spiritual truth which he had, had no disastrous consequences for an inherited system of thought in which they certainly did not take their rise. His name was connected with the social enthusiasm that inaugurated a new movement in England which will claim attention in another paragraph.

CHANNING

Allusion has been made to a revision of traditional theology which took place in America also, upon the same general lines which we have seen in Schleiermacher and in Campbell. The typical figure here, the protagonist of the movement, is William Ellery Channing. It may be doubted whether there has ever been a civilisation more completely controlled by its Church and ministers, or a culture more entirely dominated by theology, than were those of New England until the middle of the eighteenth century. There had been indeed a marked decline in religious life. The history of the Great Awakening shows that. Remonstrances

against the Great Awakening show also how men's minds were moving away from the theory of the universe which the theology of that movement implied. One cannot say that in the preaching of Hopkins there is an appreciable relaxation of the Edwardsian scheme. Interestingly enough, it was in Newport that Channing was born and with Hopkins that he associated until the time of his licensure to preach in 1802. Many thought that Channing would stand with the most stringent of the orthodox. Deism and rationalism had made themselves felt in America after the Revolution. Channing, during his years in Harvard College, can hardly have failed to come into contact with the criticism of religion from this side. There is no such clear influence of current rationalism upon Channing as, for example, upon Schleiermacher. Yet here in the West, which most Europeans thought of as a wilderness, circumstances brought about the launching of this man upon the career of a liberal religious thinker, when as yet Schleiermacher had hardly advanced beyond the position of the *Discourses*, when Erskine had not yet written a line and Campbell was still a child. Channing became minister of the Federal Street Church in Boston in 1803. The appointment of Ware as Hollis Professor of Divinity in Harvard College took place in 1805. That appointment was the first clear indication of the liberal party's strength. Channing's Baltimore Address was delivered in 1819. He died in 1847.

In the schism among the Congregational Churches in New England, which before 1819 apparently had come to be regarded by both parties as remediless, Channing took the side of the opposition to Calvinistic orthodoxy. He developed qualities as controversialist and leader which the gentler aspect of his early years had hardly led men to suspect. This American liberal movement had been referred to by Belsham as related to English Unitarianism. After 1815, in this country, by its opponents at least, the movement was consistently called Unitarian. Channing did with zeal contend against the traditional doctrine of the atonement and of the trinity. On the other hand, he saw in Christ the perfect revelation of God to humanity and at the same time the ideal of humanity. He believed in Jesus' sinlessness and in his miracles, especially in his resurrection. The keynote of Channing's character and convictions is found in his sense of the inherent greatness of man. Of this feeling his entire system is but the unfolding. It was early and deliberately adopted by him as a fundamental faith. It remained the immovable centre of his reverence and trust amid all the inroads of doubt and sorrow. Political interest was as natural to Channing's earlier manhood as it had been to Fichte in the emergency of the Fatherland. Similarly, in the later years of his life, when evils connected with slavery had made themselves felt, his participation in the abolitionist agitation showed the same enthusiasm and practical bent. He had his dream of communism, his perception of the evils of our industrial system, his contempt for charity in place of economic remedy. All was for man, all rested upon supreme faith in man. That man is endowed with knowledge of the right and with the power to realise it, was a fundamental maxim. Hence arose Channing's assertion of free-will. The denial of free-will renders the sentiment of duty but illusory. In the conscience there is both a revelation and a type of God. Its suggestions, by the very authority they carry with them, declare themselves to be God's law. God, concurring with our highest nature, present in its action, can be thought of only after the pattern which he gives us in ourselves. Whatever revelation God makes of himself, he must deal with us as with free beings living under natural laws. Revelation must be merely supplementary to those laws. Everything arbitrary and magical, everything which despairs of us or insults us as moral agents, everything which does not address itself to us through reason and conscience, must be excluded from the intercourse between God and man. What the doctrines of salvation and atonement, of the person of Christ and of the influence of the Holy Spirit, as construed from this centre would be, may without difficulty be surmised. The whole of Channing's teaching is bathed in an atmosphere of the reverent love of God which is the very source of his enthusiasm for man.

BUSHNELL

A very different man was Horace Bushnell, born in the year of Channing's licensure, 1802. He was not bred under the influence of the strict Calvinism of his day. His father was an Arminian. Edwards had made Arminians detested in New England. His mother had been reared in the Episcopal Church. She was of Huguenot origin. When about seventeen, while tending a carding-machine, he wrote a paper in which he endeavoured to bring Calvinism into logical coherence and, in the interest of sound reason, to correct St. Paul's willingness to be accursed for the sake of his brethren. He graduated from Yale College in 1827. He taught there while studying law after 1829. He describes himself at this period as sound in ethics and sceptical in religion, the soundness of his morals being due to nature and training, the scepticism, to the theology in which he was involved. His law studies were complete, yet he turned to the ministry. He had been born on the orthodox side of the great contention in which Channing was a leader of the liberals in the days of which we speak. He never saw any reason to change this relation. His clerical colleagues, for half a life-time, sought to change it for him. In 1833 he was ordained and installed as minister of the North Church in Hartford, a pastorate which he never left. The process of disintegration of the orthodox body was continuing. There was almost as much rancour between the old and the new orthodoxy as between orthodox and Unitarians themselves. Almost before his career was well begun an incurable disease fastened itself upon him. Not much later, all the severity of theological strife befell him. Between these two we have to think of him doing his work and keeping his sense of humour.

His earliest book of consequence was on *Christian Nurture*, published in 1846. Consistent Calvinism presupposes in its converts mature years. Even an adult must pass through waters deep for him. He is not a sinful child of the Father. He is a being totally depraved and damned to everlasting punishment. God becomes his Father only after he is redeemed. The revivalists' theory Bushnell bitterly opposed. It made of religion a transcendental matter which belonged on the outside of life, a kind of miraculous epidemic. He repudiated the prevailing individualism. He anticipated much that is now being said concerning heredity, environment and subconsciousness. He revived the sense of the Church in which Puritanism had been so sadly lacking. The book is a classic, one of the rich treasures which the nineteenth century offers to the twentieth.

Bushnell, so far as one can judge, had no knowledge of Kant. He is, nevertheless, dealing with Kant's own problem, of the theory of knowledge, in his rather diffuse 'Dissertation on Language,' which is prefixed to the volume which bears the title *God in Christ*, 1849. He was following his living principle, the reference of doctrine to conscience. God must be a 'right God.' Dogma must make no assertion concerning God which will not stand this test. Not alone does the dogma make such assertions. The Scripture makes them as well. How can this be? What is the relation of language to thought and of thought to fact? How can the language of Scripture be explained, and yet the reality of the revelation not be explained away? There is a touching interest which attaches to this Hartford minister, working out, alone and clumsily, a problem the solution of which the greatest minds of the age had been gradually bringing to perfection for three-quarters of a century.

In the year 1848 Bushnell was invited to give addresses at the Commencements of three divinity schools: that at Harvard, then unqualifiedly Unitarian; that at Andover, where the battle with Unitarianism had been fought; and that at Yale, where Bushnell had been trained. The address at Cambridge was on the subject of *the Atonement*; the one at New Haven on *the Divinity of Christ*, including Bushnell's doctrine of the trinity; the one at Andover on *Dogma and Spirit*, a plea for the cessation of strife. He says squarely of the old school theories of the atonement, which represent Christ as suffering the penalty of the law in our stead: 'They are capable, one and all of them, of no light in which they do not offend some right sentiment of our moral being. If the great Redeemer, in the excess of his goodness, consents to receive the penal woes of the world in his person, and if that offer is accepted, what does it signify, save that God will have his modicum of suffering somehow; and if he lets the guilty go he will yet satisfy himself out of the innocent?' The vicariousness of love, the identification of the sufferer with the sinner, in the sense that

the Saviour is involved by his desire to help us in the woes which naturally follow sin, this Bushnell mightily affirmed. Yet there is no pretence that he used vicariousness or satisfaction in the same sense in which his adversaries did. He is magnificently free from all such indirection. In the New Haven address there is this same combination of fire and light. The chief theological value of the doctrine of the trinity, as maintained by the New England Calvinistic teachers, had been to furnish the *dramatis personæ* for the doctrine of the atonement. In the speculation as to the negotiation of this substitutionary transaction, the language of the theologians had degenerated into stark tritheism. Edwards, describing the councils of the trinity, spoke of the three persons as 'they.' Bushnell saw that any proper view of the unity of God made the forensic idea of the atonement incredible. He sought to replace the ontological notion of the trinity by that of a trinity of revelation, which held for him the practical truths by which his faith was nourished, and yet avoided the contradictions which the other doctrine presented both to reason and faith. Bushnell would have been far from claiming that he was the first to make this fight. The American Unitarians had been making it for more than a generation. The Unitarian protest was wholesome. It was magnificent. It was providential, but it paused in negation. It never advanced to construction. Bushnell's significance is not that he fought this battle, but that he fought it from the ranks of the orthodox Church. He fought it with a personal equipment which Channing had not had. He was decades later in his work. He took up the central religious problem when Channing's successors were following either Emerson or Parker.

The Andover address consisted in the statement of Bushnell's views of the causes which had led to the schism in the New England Church. A single quotation may give the key-note of the discourse:— 'We had on our side an article of the creed which asserted a metaphysical trinity. That made the assertion of the metaphysical unity inevitable and desirable. We had theories of atonement, of depravity, of original sin, which required the appearance of antagonistic theories. On our side, theological culture was so limited that we took what was really only our own opinion for the unalterable truth of God. On the other side, it was so limited that men, perceiving the insufficiency of dogma, took the opposite contention with the same seriousness and totality of conviction. They asserted liberty, as indeed they must, to vindicate their revolt. They produced, meantime, the most intensely human and, in that sense, the most intensely opinionated religion ever invented.'

THE CATHOLIC REVIVAL

The Oxford Movement has been spoken of as a reaction against the so-called Oriel Movement, a conservative tendency over against an intellectualist and progressive one. In a measure the personal animosities within the Oxford circle may be accounted for in this way. The Tractarian Movement, however, which issued, on the one hand, in the going over of Newman to the Church of Rome and, on the other, in a great revival of Catholic principles within the Anglican Church itself, stands in a far larger setting. It was not merely an English or insular movement. It was a wave from a continental flood. On its own showing it was not merely an ecclesiastical movement. It had political and social aims as well. There was a universal European reaction against the Enlightenment and the Revolution. That reaction was not simple, but complex. It was a revolt of the conservative spirit from the new ideals which had been suddenly translated into portentous realities. It was marked everywhere by hatred of the eighteenth century with all its ways and works. On the one side we have the revolutionary thesis, the rights of man, the authority of reason, the watchwords liberty, equality, fraternity. On the other side stood forth those who were prepared to assert the meaning of community, the continuity of history, spiritual as well as civil authority as the basis of order, and order as the condition of the highest good. In literature the tendency appears as romanticism, in politics as legitimism, in religion as ultramontanism. Le Maistre with his *L'Eglise gallicane du Pape*; Chateaubriand with his *Génie du Christianisme*; Lamennais with his *Essai sur l'Indifference en Matière, de Religion*, were, from 1820 to 1860, the exponents of a view which has

had prodigious consequences for France and Italy. The romantic movement arose outside of Catholicism. It was impersonated in Herder. Friedrich Schlegel, Werner and others went over to the Roman Church. The political reaction was specifically Latin and Catholic. In the lurid light of anarchy Rome seemed to have a mission again. Divine right in the State must be restored through the Church. The Catholic apologetic saw the Revolution as only the logical conclusion of the premises of the Reformation. The religious revolt of the sixteenth century, the philosophical revolt of the seventeenth, the political revolt of the eighteenth, the social revolt of the nineteenth, are all parts of one dreadful sequence. As the Church lifted up the world after the first flood of the barbarians, so must she again lift up the world after the devastations made by the more terrible barbarians of the eighteenth century. England had indeed stood a little outside of the cyclone which had devastated the world from Coronna to Moscow and from the Channel to the Pyramids, but she had been exhausted in putting down the revolution. Only God's goodness had preserved England. The logic of Puritanism would have been the same. Indeed, in England the State was weaker and worse than were the states upon the Continent. For since 1688 it had been a popular and constitutional monarchy. In Frederick William's phrase, its sovereign took his crown from the gutter. The Church was through and through Erastian, a creature of the State. Bishops were made by party representatives. Acts like the Reform Bills, the course of the Government in the matter of the Irish Church, were steps which would surely bring England to the pass which France had reached in 1789. The source of such acts was wrong. It was with the people. It was in men, not in God. It was in reason, not in authority. It would be difficult to overstate the strength of this reactionary sentiment in important circles in England at the end of the third decade of the nineteenth century.

THE OXFORD MOVEMENT

In so far as that complex of causes just alluded to made of the Oxford Movement or the Catholic revival a movement of life, ecclesiastical, social and political as well, its history falls outside the purpose of this book. We proposed to deal with the history of thought. Reactionary movements have frequently got on without much thought. They have left little deposit of their own in the realm of ideas. Their avowed principle has been that of recurrence to that which has already been thought, of fidelity to ideas which have long prevailed. This is the reason why the conservatives have not a large place in such a sketch as this. It is not that their writings have not often been full of high learning and of the subtlest of reasoning. It is only that the ideas about which they reason do not belong to the history of the nineteenth century. They belong, on the earnest contention of the conservatives themselves — those of Protestants, to the history of the Reformation — and of Catholics, both Anglican and Roman, to the history of the early or mediæval Church.

Nevertheless, when with passionate conviction a great man, taking the reactionary course, thinks the problem through again from his own point of view, then we have a real phenomenon in the history of contemporary thought. When such an one wrestles before God to give reason to himself and to his fellows for the faith that is in him, then the reactionary's reasoning is as imposing and suggestive as is any other. He leaves in his work an intellectual deposit which must be considered. He makes a contribution which must be reckoned with, even more seriously, perhaps, by those who dissent from it than by those who may agree with it. Such deposit Newman and the Tractarian movement certainly did make. They offered a rationale of the reaction. They gave to the Catholic revival a standing in the world of ideas, not merely in the world of action. Whether their reasoning has weight to-day, is a question upon which opinion is divided. Yet Newman and his compeers, by their character and standing, by their distinctively English qualities and by the road of reason which they took in the defence of Catholic principles, made Catholicism English again, in a sense in which it had not been English for three hundred years. Yet though Newman brought to the Roman Church in England, on his conversion to it, a prestige and qualities which

in that communion were unequalled, he was never *persona grata* in that Church. Outwardly the Roman Catholic revival in England was not in large measure due to Newman and his arguments. It was due far more to men like Wiseman and Manning, who were not men of argument but of deeds.

NEWMAN

John Henry Newman was born in 1801, the son of a London banker. His mother was of Huguenot descent. He came under Calvinistic influence. Through study especially, of Romaine *On Faith* he became the subject of an inward conversion, of which in 1864 he wrote: 'I am still more certain of it than that I have hands and feet.' Thomas Scott, the evangelical, moved him. Before he was sixteen he made a collection of Scripture texts in proof of the doctrine of the trinity. From Newton *On the Prophecies* he learned to identify the Pope with anti-Christ — a doctrine by which, he adds, his imagination was stained up to the year 1843. In his *Apologia*, 1865, he declares: 'From the age of fifteen, dogma has been a fundamental principle of my religion. I cannot enter into the idea of any other sort of religion.' At the age of twenty-one, two years after he had taken his degree, he came under very different influences. He passed from Trinity College to a fellowship in Oriel. To use his own phrase, he drifted in the direction of liberalism. He was touched by Whately. He was too logical, and also too dogmatic, to be satisfied with Whately's position. Of the years from 1823 to 1827 Mozley says: 'Probably no one who then knew Newman could have told which way he would go. It is not certain that he himself knew.' Francis W. Newman, Newman's brother, who later became a Unitarian, remembering his own years of stress, speaks with embitterment of his elder brother, who was profoundly uncongenial to him.

The year 1827, in which Keble's *Christian Year* was published, saw another change in Newman's views. Illness and bereavement came to him with awakening effect. He made the acquaintance of Hurrell Froude. Froude brought Newman and Keble together. Henceforth Newman bore no more traces either of evangelicalism or of liberalism. Of Froude it is difficult to speak with confidence. His brother, James Anthony Froude, the historian, author of the *Nemesis of Faith*, 1848, says that he was gifted, brilliant, enthusiastic. Newman speaks of him with almost boundless praise. Two volumes of his sermons, published after his death in 1836, make the impression neither of learning nor judgment. Clearly he had charm. Possibly he talked himself into a common-room reputation. Newman says: 'Froude made me look with admiration toward the Church of Rome.' Keble never had felt the liberalism through which Newman had passed. Cradled as the Church of England had been in Puritanism, the latter was to him simply evil. Opinions differing from his own were not simply mistaken, they were sinful. He conceived no religious truth outside the Church of England. In the *Christian Year* one perceives an influence which Newman strongly felt. It was that of the idea of the sacramental significance of all natural objects or events. Pusey became professor of Hebrew in 1830. He lent the movement academic standing, which the others could not give. He had been in Germany, and had published an *Inquiry into the Rationalist Character of German Theology*, 1825. He hardly did more than expose the ignorance of Rose. He was himself denounced as a German rationalist who dared to speak of a new era in theology. Pusey, mourning the defection of Newman, whom he deeply loved, gathered in 1846 the forces of the Anglo-Catholics and continued in some sense a leader to the end of his long life in 1882.

The course of political events was fretting the Conservatives intolerably. The agitation for the Reform Bill was taking shape. Sir Robert Peel, the member for Oxford, had introduced a Bill for the emancipation of the Roman Catholics. There was violent commotion in Oxford. Keble and Newman strenuously opposed the measure. In 1830 there was revolution in France. In England the Whigs had come into power. Newman's mind was excited in the last degree. 'The vital question,' he says, 'is this, how are we to keep the Church of England from being liberalised?' At the end of 1832 Newman and Froude went abroad together. On this journey, as he lay becalmed in the straits of Bonifacio, he wrote his immortal

hymn, ‘Lead, Kindly Light.’ He came home assured that he had a work to do. Keble’s Assize Sermon on the *National Apostasy*, preached in July 1833, on the Sunday after Newman’s return to Oxford, kindled the conflagration which had been long preparing. Newman conceived the idea of the *Tracts for the Times* as a means of expressing the feelings and propagating the opinions which deeply moved him. ‘From the first,’ he says, ‘my battle was with liberalism. By liberalism I mean the anti-dogmatic principle. Secondly, my aim was the assertion of the visible Church with sacraments and rites and definite religious teaching on the foundation of dogma; and thirdly, the assertion of the Anglican Church as opposed to the Church of Rome.’ Newman grew greatly in personal influence. His afternoon sermons at St. Mary’s exerted spiritual power. They deserved so to do. Here he was at his best. All of his strength and little of his weakness shows. His insight, his subtility, his pathos, his love of souls, his marvellous play of dramatic as well as of spiritual faculty, are in evidence. Keble and Pusey were busying themselves with the historical aspects of the question. Pusey began the *Library of the Fathers*, the most elaborate literary monument of the movement. Nothing could be more amazing than the uncritical quality of the whole performance. The first check to the movement came in 1838, when the Bishop of Oxford animadverted upon the *Tracts*. Newman professed his willingness to stop them. The Bishop did not insist. Newman’s own thought moved rapidly onward in the only course which was still open to it.

Newman had been bred in the deepest reverence for Scripture. In a sense that reverence never left him, though it changed its form. He saw that it was absurd to appeal to the Bible in the old way as an infallible source of doctrine. How could truth be infallibly conveyed in defective and fallible expressions? Newman’s own studies in criticism, by no means profound, led him to this correct conclusion. This was the end for him of evangelical Protestantism. The recourse was then to the infallible Church. Infallible guide and authority one must have. Without these there can be no religion. To trust to reason and conscience as conveying something of the light of God is impossible. To wait in patience and to labour in fortitude for the increase of that light is unendurable. One must have certainty. There can be no certainty by the processes of the mind from within. This can come only by miraculous certification from without.

According to Newman the authority of the Church should never have been impaired in the Reformation. Or rather, in his view of that movement, this authority, for truly Christian men, had never been impaired. The intellect is aggressive, capricious, untrustworthy. Its action in religious matters is corrosive, dissolving, sceptical. ‘Man’s energy of intellect must be smitten hard and thrown back by infallible authority, if religion is to be saved at all.’ Newman’s philosophy was utterly sceptical, although, unlike most absolute philosophical sceptics, he had a deep religious experience. The most complete secularist, in his negation of religion, does not differ from Newman in his low opinion of the value of the surmises of the mind as to the transcendental meaning of life and the world. He differs from Newman only in lacking that which to Newman was the most indefeasible thing which he had at all, namely, religious experience. Newman was the child of his age, though no one ever abused more fiercely the age of which he was the child. He supposed that he believed in religion on the basis of authority. Quite the contrary, he believed in religion because he had religion or, as he says, in a magnificent passage in one of his parochial sermons, because religion had him. His scepticism forbade him to recognise that this was the basis of his belief. His diremption of human nature was absolute. The soul was of God. The mind was of the devil. He dare not trust his own intellect concerning this inestimable treasure of his experience. He dare not trust intellect at all. He knew not whither it might lead him. The mind cannot be broken to the belief of a power above it. It must have its stiff neck bent to recognise its Creator.

His whole book, *The Grammar of Assent*, 1870, is pervaded by the intensest philosophical scepticism. Scepticism supplies its motives, determines its problems, necessitates its distinctions, rules over the succession and gradation of its arguments. The whole aim of the work is to withdraw religion and the proofs of it, from the region of reason into the realm of conscience and imagination, where the arguments which reign may satisfy personal experience without alleging objective validity or being able to bear the

criticism which tests it. Again, he is the perverse, unconscious child of the age which he curses. Had not Kant and Schleiermacher, Coleridge and Channing sought, does not Ritschl seek, to remove religion from the realm of metaphysics and to bring it within the realm of experience? They had, however, pursued the same end by different means. One is reminded of that saying of Gretchen concerning Mephistopheles: ‘He says the same thing with the pastor, only in different words.’ Newman says the same words, but means a different thing.

Assuming the reduction of religion to experience, in which Kant and Schleiermacher would have agreed, and asserting the worthlessness of mentality, which they would have denied, we are not surprised to hear Newman say that without Catholicism doubt is invincible. ‘The Church’s infallibility is the provision adopted by the mercy of the Creator to preserve religion in the world. Outside the Catholic Church all things tend to atheism. The Catholic Church is the one face to face antagonist, able to withstand and baffle the fierce energy of passion and the all-dissolving scepticism of the mind. I am a Catholic by virtue of my belief in God. If I should be asked why I believe in God, I should answer, because I believe in myself. I find it impossible to believe in myself, without believing also in the existence of him who lives as a personal, all-seeing, all-judging being in my conscience.’ These passages are mainly taken from the *Apologia*, written long after Newman had gone over to the Roman Church. They perfectly describe the attitude of his mind toward the Anglican Church, so long as he believed this, and not the Roman, to be the true Church. He had once thought that a man could hold a position midway between the Protestantism which he repudiated and the Romanism which he still resisted. He stayed in the *via media* so long as he could. But in 1839 he began to have doubts about the Anglican order of succession. The catholicity of Rome began to overshadow the apostolicity of Anglicanism. The Anglican formularies cannot be at variance with the teachings of the authoritative and universal Church. This is the problem which the last of the *Tracts*, *Tract Ninety*, sets itself. It is one of those which Newman wrote. One must find the sense of the Roman Church in the Thirty-Nine Articles. This tract is prefaced by an extraordinary disquisition upon reserve in the communication of religious knowledge. God’s revelations of himself to mankind have always been a kind of veil. Truth is the reward of holiness. The Fathers were holy men. Therefore what the Fathers said must be true. The principle of reserve the Articles illustrate. They do not mean what they say. They were written in an uncatholic age, that is, in the age of the Reformation. They were written by Catholic men. Else how can the Church of England be now a Catholic Church? Through their reserve they were acceptable in an uncatholic age. They cannot be uncatholic in spirit, else how should they be identical in meaning with the great Catholic creeds? Then follows an exposition of every important article of the thirty-nine, an effort to interpret each in the sense of the Roman Catholic Church of to-day. Four tutors published a protest against the tract. Formal censure was passed upon it. It was now evident to Newman that his place in the leadership of the Oxford Movement was gone. From this time, the spring of 1841, he says he was on his deathbed as regards the Church of England. He withdrew to Littlemore and established a brotherhood there. In the autumn of 1843 he resigned the parochial charge of St. Mary’s at Oxford. On the 9th of October 1845 he was formally admitted to the Roman Church. On the 6th of October Ernest Renan had formally severed his connexion with that Church.

It is a strange thing that in his *Essay on the Development of Christian Doctrine*, written in 1845, Newman himself should have advanced substantially Hampden’s contention. Here are written many things concerning the development of doctrine which commend themselves to minds conversant with the application of historical criticism to the whole dogmatic structure of the Christian ages. The purpose is with Newman entirely polemical, the issue exactly that which one would not have foreseen. Precisely because the development of doctrine is so obvious, because no historical point can be found at which the growth of doctrine ceased and the rule of faith was once for all settled, therefore an infallible authority outside of the development must have existed from the beginning, to provide a means of distinguishing true development from false. This infallible guide is, of course, the Church. It seems incredible that

Newman could escape applying to the Church the same argument which he had so skilfully applied to Scripture and dogmatic history. Similar is the case with the argument of the *Grammar of Assent*. ‘No man is certain of a truth who can endure the thought of its contrary.’ If the reason why I cannot endure the thought of the contradictory of a belief which I have made my own, is that so to think brings me pain and darkness, this does not prove my truth. If my belief ever had its origin in reason, it must be ever refutable by reason. It is not corroborated by the fact that I do not wish to see anything that would refute it. This last fact may be in the highest degree an act of arbitrariness. To make the impossibility of thinking the opposite, the test of truth, and then to shut one’s eyes to those evidences which might compel one to think the opposite, is the essence of irrationality. One attains by this method indefinite assertiveness, but not certainty. Newman lived in some seclusion in the Oratory of St. Philip Neri in Birmingham for many years. A few distinguished men, and a number of his followers, in all not more than a hundred and fifty, went over to the Roman Church after him. The defection was never so great as, in the first shock, it was supposed that it would be. The outward influence of Newman upon the Anglican Church then ceased. But the ideas which he put forth have certainly been of great influence in that Church to this day. Most men know the portrait of the great cardinal, the wide forehead, ploughed deep with horizontal furrows, the pale cheek, down which ‘long lines of shadow slope, which years and anxious thought and suffering give.’ One looks into the wonderful face of those last days — Newman lived to his ninetieth year — and wonders if he found in the infallible Church the peace which he so earnestly sought.

Footnote 8:(return)

Fairbairn, *Catholicism, Roman and Anglican*, .

MODERNISM

It was said that the Oxford Movement furnished the rationale of the reaction. Many causes, of course, combine to make the situation of the Roman Church and the status of religion in the Latin countries of the Continent the lamentable one that it is. That position is worst in those countries where the Roman Church has most nearly had free play. The alienation both of the intellectual and civil life from organised religion is grave. That the Roman Church occupies in England to-day a position more favourable than in almost any nation on the Continent, and better than it occupied in England at the beginning of the nineteenth century, is due in large measure to the general influence of the movement with which we have been dealing. The Anglican Church was at the beginning of the nineteenth century preponderantly evangelical, low-church and conscious of itself as Protestant. At the beginning of the twentieth it is dominantly ritualistic and disposed to minimise its relation to the Reformation. This resurgence of Catholic principles is another effect of the movement of which we speak. Other factors must have wrought for this result besides the body of arguments which Newman and his compeers offered. The argument itself, the mere intellectual factor, is not adequate. There is an inherent contradiction in the effort to ground in reason an authority which is to take the place of reason. Yet round and round this circle all the labours of John Henry Newman go. Cardinal Manning felt this. The victory of the Church was not to be won by argument. It is well known that Newman opposed the decree of infallibility. It cannot be said that upon this point his arguments had great weight. If one assumes that truth comes to us externally through representatives of God, and if the truth is that which they assert, then in the last analysis what they assert is truth. If one has given in to such authority because one distrusts his reason, then it is querulous to complain that the deliverances of authority do not comport with reason. There may be, of course, the greatest interest in the struggle as to the instance in which this authority is to be lodged. This interest attaches to the age-long struggle between Pope and Council. It attaches to the dramatic struggle of Döllinger, Dupanloup, Lord Acton and the rest, in 1870. Once the Church has spoken there is, for the advocate of authoritative religion, no logic but to submit.

Similarly as to the *Encyclical* and *Syllabus of Errors* of 1864, which forecast the present conflict concerning Modernism. The *Syllabus* had a different atmosphere from that which any Englishman in the sixties would have given it. Had not Newman, however, made passionate warfare on the liberalism of the modern world? Was it not merely a question of degrees? Was Gladstone's attitude intelligible? The contrast of two principles in life and religion, the principles of authority and of the spirit, is being brought home to men's consciousness as it has never been before. One reads *Il Santo* and learns concerning the death of Fogazzaro, one looks into the literature relating to Tyrrell, one sees the fate of Loisy, comparing the really majestic achievement in his works and the spirit of his *Simple Reflections* with the *Encyclical Pascendi*, 1907. One understands why these men have done what they could to remain within the Roman Church. One recalls the attitude of Döllinger to the inauguration of the Old Catholic Movement, reflects upon the relative futility of the Old Catholic Church, and upon the position of Hyacinthe Loyson. One appreciates the feeling of these men that it is impossible, from without, to influence as they would the Church which they have loved. The present difficulty of influencing it from within seems almost insuperable. The history of Modernism as an effective contention in the world of Christian thought seems scarcely begun. The opposition to Modernism is not yet a part of the history of thought.

ROBERTSON

In no life are reflected more perfectly the spiritual conflicts of the fifth decade of the nineteenth century than in that of Frederick W. Robertson. No mind worked itself more triumphantly out of these difficulties. Descended from a family of Scottish soldiers, evangelical in piety, a student in Oxford in 1837, repelled by the Oxford Movement, he undertook his ministry under a morbid sense of responsibility. He reacted violently against his evangelicalism. He travelled abroad, read enormously, was plunged into an agony which threatened mentally to undo him. He took his charge at Brighton in 1847, still only thirty-one years old, and at once shone forth in the splendour of his genius. A martyr to disease and petty persecution, dying at thirty-seven, he yet left the impress of one of the greatest preachers whom the Church of England has produced. He left no formal literary work such as he had designed. Of his sermons we have almost none from his own manuscripts. Yet his influence is to-day almost as intense as when the sermons were delivered. It is, before all, the wealth and depth of his thought, the reality of the content of the sermons, which commands admiration. They are a classic refutation of the remark that one cannot preach theology. Out of them, even in their fragmentary state, a well-articulated system might be made. He brought to his age the living message of a man upon whom the best light of his age had shone.

PHILLIPS BROOKS

Something of the same sort may be said concerning Phillips Brooks. He inherited on his father's side the sober rationalism and the humane and secular interest of the earlier Unitarianism, on his mother's side the intensity of evangelical pietism with the Calvinistic form of thought. The conflict of these opposing tendencies in New England was at that time so great that Brooks's parents sought refuge with the low-church element in the Episcopal Church. Brooks's education at Harvard College, where he took his degree in 1855, as also at Alexandria, and still more, his reading and experience, made him sympathetic with that which, in England in those years, was called the Broad Church party. He was deeply influenced by Campbell and Maurice. Later well known in England, he was the compeer of the best spirits of his generation there. Deepened by the experience of the great war, he held in succession two pulpits of large influence, dying as Bishop of Massachusetts in 1893. There is a theological note about his preaching, as in the case of Robertson. Often it is the same note. Brooks had passed through no such crisis as had

Robertson. He had flowered into the greatness of rational belief. His sermons are a contribution to the thinking of his age. We have much finished material of this kind from his own hand, and a book or two besides. His service through many years as preacher to his university was of inestimable worth. The presentation of ever-advancing thought to a great public constituency is one of the most difficult of tasks. It is also one of the most necessary. The fusion of such thoughtfulness with spiritual impulse has rarely been more perfectly achieved than in the preaching of Phillips Brooks.

THE BROAD CHURCH

We have used the phrase, the Broad Church party. Stanley had employed the adjective to describe the real character of the English Church, over against the antithesis of the Low Church and the High. The designation adhered to a group of which Stanley was himself a type. They were not bound together in a party. They had no ecclesiastical end in view. They were of a common spirit. It was not the spirit of evangelicalism. Still less was it that of the Tractarians. It was that which Robertson had manifested. It aimed to hold the faith with an open mind in all the intellectual movement of the age. Maurice should be enumerated here, with reservations. Kingsley beyond question belonged to this group. There was great ardour among them for the improvement of social conditions, a sense of the social mission of Christianity. There grew up what was called a Christian Socialist movement, which, however, never attained or sought a political standing. The Broad Church movement seemed, at one time, assured of ascendancy in the Church of England. Its aims appeared congruous with the spirit of the times. Yet Dean Fremantle esteems himself perhaps the last survivor of an illustrious company.

The men who in 1860 published the volume known as *Essays and Reviews* would be classed with the Broad Church. In its authorship were associated seven scholars, mostly Oxford men. Some one described *Essays and Reviews* as the *Tract Ninety* of the Broad Church. It stirred public sentiment and brought the authors into conflict with authority in a somewhat similar way. The living antagonism of the Broad Church was surely with the Tractarians rather than with the evangelicals. Yet the most significant of the essays, those on miracles and on prophecy, touched opinions common to both these groups. Jowett, later Master of Balliol, contributed an essay on the ‘Interpretation of Scripture.’ It hardly belongs to Jowett’s best work. Yet the controversy then precipitated may have had to do with Jowett’s adherence to Platonic studies instead of his devoting himself to theology. The most decisive of the papers was that of Baden Powell on the ‘Study of the Evidences of Christianity.’ It was mainly a discussion of the miracle. It was radical and conclusive. The essay closes with an allusion to Darwin’s *Origin of Species*, which had then just appeared. Baden Powell died shortly after its publication. The fight came on Rowland Williams’s paper upon Bunson’s *Biblical Researches*. It was really upon the prophecies and their use in ‘Christian Evidences.’ Baron Bunsen was not a great archæologist, but he brought to the attention of English readers that which was being done in Germany in this field. Williams used the archæological material to rectify the current theological notions concerning ancient history. A certain type of English mind has always shown zeal for the interpretation of prophecy. Williams’s thesis, briefly put, was this: the Bible does not always give the history of the past with accuracy; it does not give the history of the future at all; prophecy means spiritual teaching, not secular prognostication. A reader of our day may naturally feel that Wilson, with his paper on the ‘National Church,’ made the greatest contribution. He built indeed upon Coleridge, but he had a larger horizon. He knew the arguments of the great Frenchmen of his day and of their English imitators who, in Benn’s phrase, narrowed and perverted the ideal of a world-wide humanity into that of a Church founded on dogmas and administered by clericals. Wilson argued that in Jesus’ teaching the basis of the religious community is ethical. The Church is but the instrument for carrying out the will of God as manifest in the moral law. The realisation of the will of God must extend beyond the limits of the Church’s activity, however widely these are drawn. There arose a violent agitation. Williams and Wilson were

prosecuted. The case was tried in the Court of Arches. Williams was defended by no less a person than Fitzjames Stephen. The two divines were sentenced to a year's suspension. This decision was reversed by the Lord Chancellor. Fitzjames Stephen had argued that if the men most interested in the church, namely, its clergy, are the only men who may be punished for serious discussion of the facts and truths of religion, then respect on the part of the world for the Church is at an end. By this discussion the English clergy, even if Anglo-Catholic, are in a very different position from the Roman priests, over whom encyclicals, even if not executed, are always suspended.

Similar was the issue in the case of Colenso, Bishop of Natal. Equipped mainly with Cambridge mathematics added to purest self-devotion, he had been sent out as a missionary bishop. In the process of the translation of the Pentateuch for his Zulus, he had come to reflect upon the problem which the Old Testament presents. In a manner which is altogether marvellous he worked out critical conclusions parallel to those of Old Testament scholars on the Continent. He was never really an expert, but in his main contention he was right. He adhered to his opinion despite severe pressure and was not removed from the episcopate. With such guarantees it would be strange indeed if we could not say that biblical studies entered in Great Britain, as also in America, on a development in which scholars of these nations are not behind the best scholars of the world. The trials for heresy of Robertson Smith in Edinburgh and of Dr. Briggs in New York have now little living interest. Yet biblical studies in Scotland and America were incalculably furthered by those discussions. The publication of a book like *Supernatural Religion*, 1872, illustrates a proclivity not uncommon in self-conscious liberal circles, for taking up a contention just when those who made it and have lived with it have decided to lay it down. However, the names of Hatch and Lightfoot alone, not to mention the living, are sufficient to warrant the assertions above made.

More than once in these chapters we have spoken of the service rendered to the progress of Christian thought by the criticism and interpretation of religion at the hands of literary men. That country and age may be esteemed fortunate in which religion occupies a place such that it compels the attention of men of genius. In the history of culture this has by no means always been the case. That these men do not always speak the language of edification is of minor consequence. What is of infinite worth is that the largest minds of the generation shall engage themselves with the topic of religion. A history of thought concerning Christianity cannot but reckon with the opinions, for example, of Carlyle, of Emerson, of Matthew Arnold — to mention only types.

CARLYLE

Carlyle has pictured for us his early home at Ecclefechan on the Border; his father, a stone mason of the highest character; his mother with her frugal, pious ways; the minister, from whom he learned Latin, 'the priestliest man I ever beheld in any ecclesiastical guise.' The picture of his mother never faded from his memory. Carlyle was destined for the Church. Such had been his mother's prayer. He took his arts course in Edinburgh. In the university, he says, 'there was much talk about progress of the species, dark ages, and the like, but the hungry young looked to their spiritual nurses and were bidden to eat the east wind.' He entered Divinity Hall, but already, in 1816, prohibitive doubts had arisen in his mind. Irving sought to help him. Irving was not the man for the task. The Christianity of the Church had become intellectually incredible to Carlyle. For a time he was acutely miserable, bordering upon despair. He has described his spiritual deliverance: 'Precisely that befel me which the Methodists call their conversion, the deliverance of their souls from the devil and the pit. There burst forth a sacred flame of joy in me.' With *Sartor Resartus* his message to the world began. It was printed in *Fraser's Magazine* in 1833, but not published separately until 1838. His difficulty in finding a publisher embittered him. Style had something to do with this, the newness of his message had more. Then for twenty years he poured forth his message. Never did

a man carry such a pair of eyes into the great world of London or set a more peremptory mark upon its notabilities. His best work was done before 1851. His later years were darkened with much misery of body. No one can allege that he ever had a happy mind.

He was a true prophet, but, Elijah-like, he seemed to himself to be alone. His derision of the current religion seems sometimes needless. Yet even that has the grand note of sincerity. What he desired he in no small measure achieved — that his readers should be arrested and feel themselves face to face with reality. His startling intuition, his intellectual uprightness, his grasp upon things as they are, his passion for what ought to be, made a great impression upon his age. It was in itself a religious influence. Here was a mind of giant force, of sternest truthfulness. His untruths were those of exaggeration. His injustices were those of prejudice. He invested many questions of a social and moral, of a political and religious sort with a nobler meaning than they had had before. His *French Revolution*, his papers on *Chartism*, his unceasing comment on the troubled life of the years from 1830 to 1865, are of highest moment for our understanding of the growth of that social feeling in the midst of which we live and work. In his brooding sympathy with the downtrodden he was a great inaugurator of the social movement. He felt the curse of an aristocratic society, yet no one has told us with more drastic truthfulness the evils of our democratic institutions. His word was a great corrective for much 'rose-water' optimism which prevailed in his day. The note of hope is, however, often lacking. The mythology of an absentee God had faded from him. Yet the God who was clear to his mature consciousness, clear as the sun in the heavens, was a God over the world, to judge it inexorably. Again, it is not difficult to accumulate evidence in his words which looks toward pantheism; but what one may call the religious benefit of pantheism, the sense that God is in his world, Carlyle often loses.

Materialism is to-day so deeply discredited that we find it difficult to realise that sixty years ago the problem wore a different look. Carlyle was never weary of pouring out the vials of his contempt on 'mud-philosophies' and exalting the spirit as against matter. Never was a man more opposed to the idea of a godless world, in which man is his own chief end, and his sensual pleasures the main aims of his existence. His insight into the consequences of our commercialism and luxury and absorption in the outward never fails. Man is God's son, but the effort to realise that sonship in the joy and trust of a devout heart and in the humble round of daily life sometimes seems to him cant or superstition. The humble life of godliness made an unspeakable appeal to him. He had known those who lived that life. His love for them was imperishable. Yet he had so recoiled from the superstitions and hypocrisies of others, the Eternal in his majesty was so ineffable, all effort to approach him so unworthy, that almost instinctively he would call upon the man who made the effort, to desist. So magnificent, all his life long, had been his protest against the credulity and stupidity of men, against beliefs which assert the impossible and blink the facts, that, for himself, the great objects of faith were held fast to, so to say, in their naked verity, with a giant's strength. They were half-querulously denied all garment and embodiment, lest he also should be found credulous and self-deceived. From this titan labouring at the foundations of the world, this Samson pulling down temples of the Philistines on his head, this cyclops heaving hills at ships as they pass by, it seems a long way to Emerson. Yet Emerson was Carlyle's friend.

EMERSON

Arnold said in one of his American addresses: 'Besides these voices — Newman, Carlyle, Goethe — there came to us in the Oxford of my youth a voice also from this side of the Atlantic, a clear and pure voice which, for my ear at any rate, brought a strain as new and moving and unforgetable as those others. Lowell has described the apparition of Emerson to your young generation here. He was your Newman, your man of soul and genius, speaking to your bodily ears, a present object for your heart and

imagination.’ Then he quotes as one of the most memorable passages in English speech: ‘Trust thyself. Accept the place which the divine providence has found for you, the society of your contemporaries, the connection of events. Great men have always done so, confiding themselves childlike to the genius of their age, betraying a perception which was stirring in their hearts, working through their hands, dominating their whole being.’ Arnold speaks of Carlyle’s grim insistence upon labour and righteousness but of his scorn of happiness, and then says: ‘But Emerson taught happiness in labour, in righteousness and veracity. In all the life of the spirit, happiness and eternal hope, that was Emerson’s gospel. By his conviction that in the life of the spirit is happiness, by his hope and expectation that this life of the spirit will more and more be understood and will prevail, by this Emerson was great.’

Seven of Emerson’s ancestors were ministers of New England churches. He inherited qualities of self-reliance, love of liberty, strenuous virtue, sincerity, sobriety and fearless loyalty to ideals. The form of his ideals was modified by the glow of transcendentalism which passed over parts of New England in the second quarter of the nineteenth century, but the spirit in which Emerson conceived the laws of life, reverenced them and lived them, was the Puritan spirit, only elevated, enlarged and beautified by the poetic temperament. Taking his degree from Harvard in 1821, despising school teaching, stirred by the passion for spiritual leadership, the ministry seemed to offer the fairest field for its satisfaction. In 1825 he entered the Divinity School in Harvard to prepare himself for the Unitarian ministry. In 1829 he became associate minister of the Second Unitarian Church in Boston. He arrived at the conviction that the Lord’s Supper was not intended by Jesus to be a permanent sacrament. He found his congregation, not unnaturally, reluctant to agree with him. He therefore retired from the pastoral office. He was always a preacher, though of a singular order. His task was to befriend and guide the inner life of man. The influences of this period in his life have been enumerated as the liberating philosophy of Coleridge, the mystical vision of Swedenborg, the intimate poetry of Wordsworth, the stimulating essays of Carlyle. His address before the graduating class of the Divinity School at Cambridge in 1838 was an impassioned protest against what he called the defects of historical Christianity, its undue reliance upon the personal authority of Jesus, its failure to explore the moral nature of man. He made a daring plea for absolute self-reliance and new inspiration in religion: ‘In the soul let redemption be sought. Refuse the good models, even those which are sacred in the imagination of men. Cast conformity behind you. Acquaint men at first hand with deity.’ He never could have been the power he was by the force of his negations. His power lay in the wealth, the variety, the beauty and insight with which he set forth the positive side of his doctrine of the greatness of man, of the presence of God in man, of the divineness of life, of God’s judgment and mercy in the order of the world. One sees both the power and the limitation of Emerson’s religious teaching. At the root of it lay a real philosophy. He could not philosophise. He was always passing from the principle to its application. He could not systematise. He speaks of his ‘formidable tendency to the lapidary style.’ Granting that one finds his philosophy in fragments, just as one finds his interpretation of religion in flashes of marvellous insight, both are worth searching for, and either, in Coleridge’s phrase, finds us, whether we search for it or not.

ARNOLD

What shall we say of Matthew Arnold himself? Without doubt the twenty years by which Arnold was Newman’s junior at Oxford made a great difference in the intellectual atmosphere of that place, and of the English world of letters, at the time when Arnold’s mind was maturing. He was not too late to feel the spell of Newman. His mind was hardly one to appreciate the whole force of that spell. He was at Oxford too early for the full understanding of the limits within which alone the scientific conception of the world can be said to be true. Arnold often boasted that he was no metaphysician. He really need never have mentioned the fact. The assumption that whatever is true can be verified in the sense of the precise kind of

verification which science implies is a very serious mistake. Yet his whole intellectual strength was devoted to the sustaining, one cannot say exactly the cause of religion, but certainly that of noble conduct, and to the assertion of the elation of duty and the joy of righteousness. With all the scorn that Arnold pours upon the trust which we place in God's love, he yet holds to the conviction that 'the power without ourselves which makes for righteousness' is one upon which we may in rapture rely.

Arnold had convinced himself that in an ago such as ours, which will take nothing for granted, but must verify everything, Christianity, in the old form of authoritative belief in supernatural beings and miraculous events, is no longer tenable. We must confine ourselves to such ethical truths as can be verified by experience. We must reject everything which goes beyond these. Religion has no more to do with supernatural dogma than with metaphysical philosophy. It has nothing to do with either. It has to do with conduct. It is folly to make religion depend upon the conviction of the existence of an intelligent and moral governor of the universe, as the theologians have done. For the object of faith in the ethical sense Arnold coined the phrase: 'The Eternal not ourselves which makes for righteousness.' So soon as we go beyond this, we enter upon the region of fanciful anthropomorphism, of extra belief, *aberglaube*, which always revenges itself. These are the main contentions of his book, *Literature and Dogma*, 1875.

One feels the value of Arnold's recall to the sense of the literary character of the Scriptural documents, as urged in his book, *Saint Paul and Protestantism*, 1870, and again to the sense of the influence which the imagination of mankind has had upon religion. One feels the truth of his assertion of our ignorance. One feels Arnold's own deep earnestness. It was his concern that reason and the will of God should prevail. Though he was primarily a literary man, yet his great interest was in religion. One feels so sincerely that his main conclusion is sound, that it is the more trying that his statement of it should be often so perverse and his method of sustaining it so precarious. It is quite certain that the idea of the Eternal not ourselves which makes for righteousness is far from being the clear idea which Arnold claims. It is far from being an idea derived from experience or verifiable in experience, in the sense which he asserts. It seems positively incredible that Arnold did not know that with this conception he passed the boundary of the realm of science and entered the realm of metaphysics, which he so abhorred.

He was the eldest son of Thomas Arnold of Rugby. He was educated at Winchester and Rugby and at Balliol College. He was Professor of Poetry in Oxford from 1857 to 1867. He was an inspector of schools. The years of his best literary labour were much taken up in ways which were wasteful of his rare powers. He came by literary intuition to an idea of Scripture which others had built up from the point of view of a theory of knowledge and by investigation of the facts. He is the helpless personification of a view of the relation of science and religion which has absolutely passed away. Yet Arnold died only in 1888. How much a distinguished inheritance may mean is gathered from the fact that a grand-daughter of Thomas Arnold and niece of Matthew Arnold, Mrs. Humphry Ward, in her novels, has dealt largely with problems of religious life, and more particularly of religious thoughtfulness. She has done for her generation, in her measure, that which George Eliot did for hers.

MARTINEAU

As the chapter and the book draw to their close we can think of no man whose life more nearly spanned the century, or whose work touched more fruitfully almost every aspect of Christian thoughtfulness than did that of James Martineau. We can think of no man who gathered into himself more fully the significant theological tendencies of the age, or whose utterance entitles him to be listened to more reverently as seer and saint. He was born in 1805. He was bred as an engineer. He fulfilled for years the calling of minister and preacher. He gradually exchanged this for the activity of a professor. He was a religious philosopher in the old sense, but he was also a critic and historian. His position with reference to the New Testament was partly antiquated before his *Seat of Authority in Religion*, 1890, made its appearance. Evolutionism

never became with him a coherent and consistent assumption. Ethics never altogether got rid of the innate ideas. The social movement left him almost untouched. Yet, despite all this, he was in some sense a representative progressive theologian of the century.

There is a parallel between Newman and Martineau. Both busied themselves with the problem of authority. Criticism had been fatal to the apprehension which both had inherited concerning the authority of Scripture. From that point onward they took divergent courses. The arguments which touched the infallible and oracular authority of Scripture, for Newman established that of the Church; for Martineau they had destroyed that of the Church four hundred years ago. Martineau's sense, even of the authority of Jesus, reverent as it is, is yet no pietistic and mystical view. The authority of Jesus is that of the truth which he speaks, of the goodness which dwells in him, of God himself and God alone. A real interest in the sciences and true learning in some of them made Martineau able to write that wonderful chapter in his *Seat of Authority*, which he entitled 'God in Nature.' Newman could see in nature, at most a sacramental suggestion, a symbol of transcendental truth.

The Martineaus came of old Huguenot stock, which in England belonged to the liberal Presbyterianism out of which much of British Unitarianism came. The righteousness of a persecuted race had left an austere impress upon their domestic and social life. Intellectually they inherited the advanced liberalism of their day. Harriet Martineau's earlier piety had been of the most fervent sort. She reacted violently against it in later years. She had little of the politic temper and gentleness of her brother. She described one of her own later works as the last word of philosophic atheism. James was, and always remained, of deepest sensitiveness and reverence and of a gentleness which stood in high contrast with his powers of conflict, if necessity arose. Out of Martineau's years as preacher in Liverpool and London came two books of rare devotional quality, *Endeavours after the Christian Life*, 1843 and 1847, and *Hours of Thought on Sacred Things*, 1873 and 1879. Almost all his life he was identified with Manchester College, as a student when the college was located at York, as a teacher when it returned to Manchester and again when it was removed to London. With its removal to Oxford, accomplished in 1889, he had not fully sympathised. He believed that the university itself must some day do justice to the education of men for the ministry in other churches than the Anglican. He was eighty years old when he published his *Types of Ethical Theory*, eighty-two when he gave to the world his *Study of Religion*, eighty-five when his *Seat of Authority* saw the light. The effect of this postponement of publication was not wholly good. The books represented marvellous learning and ripeness of reflection. But they belong to a period anterior to the dates they bear upon their title-pages. Martineau's education and his early professional experience put him in touch with the advancing sciences. In the days when most men of progressive spirit were carried off their feet, when materialism was flaunted in men's faces and the defence of religion was largely in the hands of those who knew nothing of the sciences, Martineau was not moved. He saw the end from the beginning. There is nothing finer in his latest work than his early essays— 'Nature and God,' 'Science, Nescience and Faith,' and 'Religion as affected by Modern Materialism.' He died in 1900 in his ninety-fifth year.

It is difficult to speak of the living in these pages. Personal relations enforce reserve and brevity. Nevertheless, no one can think of Manchester College and Martineau without being reminded of Mansfield College and of Fairbairn, a Scotchman, but of the Independent Church. He also was both teacher and preacher all his days, leader of the movement which brought Mansfield College from Birmingham to Oxford, by the confession both of Anglicans and of Non-conformists the most learned man in his subjects in the Oxford of his time, an historian, touched by the social enthusiasm, but a religious philosopher, *par excellence*. His *Religion and Modern Life*, 1894, his *Catholicism, Roman and Anglican*, 1899, his *Place of Christ in Modern Theology*, 1893, his *Philosophy of the Christian Religion*, 1902, and his *Studies in Religion and Theology*, 1910, indicate the wideness of his sympathies and the scope of the application, of his powers. If imitation is homage, grateful acknowledgment is here

made of rich spoil taken from his books.

Philosophy took a new turn in Britain after the middle of the decade of the sixties. It began to be conceded that Locke and Hume were dead. Had Mill really appreciated that fact he might have been a philosopher more fruitful and influential than he was. Sir William Hamilton was dead. Mansel's endeavour, out of agnosticism to conjure the most absurdly positivistic faith, had left thinking men more exposed to scepticism, if possible, than they had been before. When Hegel was thought in Germany to be obsolete, and everywhere the cry was 'back to Kant,' some Scotch and English scholars, the two Cairds and Seth Pringle-Pattison, with Thomas Hill Green, made a modified Hegelianism current in Great Britain. They led by this path in the introduction of their countrymen to later German idealism. By this introduction philosophy in both Britain and America has greatly gained. Despite these facts, John Caird's *Introduction to the Philosophy of Religion*, 1880, is still only a religious philosophy. It is not a philosophy of religion. His *Fundamental Ideas of Christianity*, 1896, hardly escapes the old antitheses among which theological discussion moved, say, thirty years ago. Edward Caird's *Critical Philosophy of Kant*, 1889, and especially his *Evolution of Religion*, 1892, marked the coming change more definitely than did any of the labours of his brother. Thomas Hill Green gave great promise in his *Introduction to Hume*, 1885, his *Prolegomena to Ethics*, 1883, and still more in essays and papers scattered through the volumes edited by Nettleship after Green's death. His contribution to religious discussion was such as to make his untimely end to be deeply deplored. Seth Pringle-Pattison's early work, *The Development from Kant to Hegel*, 1881, still has great worth. His *Hegelianism and Personality*, 1893, deals with one aspect of the topic which needs ever again to be explored, because of the psychological basis which in religious discussion is now assumed.

JAMES

The greatest contribution of America to religious discussion in recent years is surely William James's *Varieties of Religious Experience*, 1902. The book is unreservedly acknowledged in Britain, and in Germany as well, to be the best which we yet have upon the psychology of religion. Not only so, it gives a new intimation as to what psychology of religion means. It blazes a path along which investigators are eagerly following. Boyce, in his Phi Beta Kappa address at Harvard in 1911, declared James to be the third representative philosopher whom America has produced. He had the form of philosophy as Emerson never had. He could realise whither he was going, as Emerson in his intuitiveness never did. He criticised the dominant monism in most pregnant way. He recurred to the problems which dualism owned but could not solve. We cannot call the new scheme dualism. The world does not go back. Yet James made an over-confident generation feel that the centuries to which dualism had seemed reasonable were not so completely without intelligence as has been supposed by some. No philosophy may claim completeness as an interpretation of the universe. No more conclusive proof of this judgment could be asked than is given quite unintentionally in Haeckel's *Weltrãthsel*.

At no point is this recall more earnest than in James's dealing with the antithesis of good and evil. The reaction of the mind of the race, and primarily of individuals, upon the fact of evil, men's consciousness of evil in themselves, their desire to be rid of it, their belief that there is a deliverance from it and that they have found that deliverance, is for James the point of departure for the study of the actual phenomena and the active principle of religion. The truest psychological and philosophical instinct of the ago thus sets the experience of conversion in the centre of discussion. Apparently most men have, at some time and in some way, the consciousness of a capacity for God which is unfulfilled, of a relation to God unrealised, which is broken and resumed, or yet to be resumed. They have the sense that their own effort must contribute to this recovery. They have the sense also that something without themselves empowers them to attempt this recovery and to persevere in the attempt. The psychology of religion is thus put in the

forefront. The vast masses of material of this sort which the religious world, both past and present, possesses, have been either actually unexplored, or else set forth in ways which distorted and obscured the facts. The experience is the fact. The best science the world knows is now to deal with it as it would deal with any other fact. This is the epoch-making thing, the contribution to method in James's book. James was born in New York in 1842, the son of a Swedenborgian theologian. He took his medical degree at Harvard in 1870. He began to lecture there in anatomy in 1872 and became Professor of Philosophy in 1885. He was a Gifford and a Hibbert Lecturer. He died in 1910.

When James's thesis shall have been fully worked out, much supposed investigation of primitive religions, which is really nothing but imagination concerning primitive religions, will be shown in its true worthlessness. We know very little about primitive man. What we learn as to primitive man, on the side of his religion, we must learn in part from the psychology of the matured and civilised, the present living, thinking, feeling man in contact with his religion. Matured religion is not to be judged by the primitive, but the reverse. The real study of the history of religions, the study of the objective phenomena, from earliest to latest times, has its place. But the history of religions is perverted when it takes for fact in the life of primitive man that which never existed save in the imagination of twentieth century students. Early Christianity, on its inner and spiritual side, is to be judged by later Christianity, by present Christianity, by the Christian experience which we see and know to-day, and not conversely, as men have always claimed. The modern man is not to be converted after the pattern which it is alleged that his grandfather followed. For, first, there is the question as to whether his grandfather did conform to this pattern. And beyond that, it is safer to try to understand the experience of the grandfather, whom we do not know, by the psychology and experience of the grandson, whom we do know, with, of course, a judicious admixture of knowledge of the history of the nineteenth century, which would occasion characteristic differences. The modern saint is not asked to be a saint like Francis. In the first place, how do we know what Francis was like? In the second place, the experience of Francis may be most easily understood by the aid of modern experience of true revolt from worldliness and of consecration to self-sacrifice, as these exist among us, with, of course, the proper background furnished by the history of the thirteenth century. Souls are one. Our souls may be, at least in some measure, known to ourselves. Even the souls of some of our fellows may be measurably known to us. What are the facts of the religious experience? How do souls react in face of the eternal? The experience of religion, the experience of the fatherhood of God, of the sonship of man, of the moving of the spirit, is surely one experience. How did even Christ's great soul react, experience, work, will, and suffer? By what possible means can we ever know how he reacted, worked, willed, suffered? In the literature we learn only how men thought that he reacted. We must inquire of our own souls. To be sure, Christ belonged to the first century, and we live in the twentieth. It is possible for us to learn something of the first century and of the concrete outward conditions which caused his life to take the shape which it did. We learn this by strict historical research. Assuredly the supreme measure in which the spirit of all truth and goodness once took possession of the Nazarene, remains to us a mystery unfathomed and unfathomable. Dwelling in Jesus, that spirit made through him a revelation of the divine such as the world has never seen. Yet that mystery leads forth along the path of that which is intelligible. And, in another sense, even such religious experience as we ourselves may have, poor though it be and sadly limited, leads back into the same mystery.

It was with this contention that religion is a fact of the inner life of man, that it is to be understood through consciousness, that it is essentially and absolutely reasonable and yet belongs to the transcendental world, it was with this contention that, in the person of Immanuel Kant, the history of modern religious thought began. It is with this contention, in one of its newest and most far-reaching applications in the work of William James, that this history continues. For no one can think of the number of questions which recent years have raised, without realising that this history is by no means concluded. It is conceivable that the changes which the twentieth century will bring may be as noteworthy as those

which the nineteenth century has seen. At least we may be grateful that so great and sure a foundation has been laid.

KANT'S THEORY OF KNOWLEDGE by H. A. Prichard

CONTENTS

PREFACE
CHAPTER I. THE PROBLEM OF THE CRITIQUE
CHAPTER II. THE SENSIBILITY AND THE UNDERSTANDING
CHAPTER III. SPACE
CHAPTER IV. PHENOMENA AND THINGS IN THEMSELVES
NOTE ON THE FIRST ANTINOMY
CHAPTER V. TIME AND INNER SENSE
CHAPTER VI. KNOWLEDGE AND REALITY
CHAPTER VII. THE METAPHYSICAL DEDUCTION OF THE CATEGORIES
CHAPTER VIII. THE TRANSCENDENTAL DEDUCTION OF THE CATEGORIES
CHAPTER IX. GENERAL CRITICISM OF THE TRANSCENDENTAL DEDUCTION OF THE CATEGORIES
CHAPTER X. THE SCHEMATISM OF THE CATEGORIES
CHAPTER XI. THE MATHEMATICAL PRINCIPLES
CHAPTER XII. THE ANALOGIES OF EXPERIENCE
CHAPTER XIII. THE POSTULATES OF EMPIRICAL THOUGHT
NOTE ON THE REFUTATION OF IDEALISM

PREFACE

This book is an attempt to think out the nature and tenability of Kant's Transcendental Idealism, an attempt animated by the conviction that even the elucidation of Kant's meaning, apart from any criticism, is impossible without a discussion on their own merits of the main issues which he raises.

My obligations are many and great: to Caird's *Critical Philosophy of Kant* and to the translations of Meiklejohn, Max Müller, and Professor Mahaffy; to Mr. J. A. Smith, Fellow of Balliol College, and to Mr. H. W. B. Joseph, Fellow of New College, for what I have learned from them in discussion; to Mr. A. J. Jenkinson, Fellow of Brasenose College, for reading and commenting on the first half of the MS.; to Mr. H. H. Joachim, Fellow of Merton College, for making many important suggestions, especially with regard to matters of translation; to Mr. Joseph, for reading the whole of the proofs and for making many valuable corrections; and, above all, to my wife for constant and unfailing help throughout, and to Professor Cook Wilson, to have been whose pupil I count the greatest of philosophical good fortunes. Some years ago it was my privilege to be a member of a class with which Professor Cook Wilson read a portion of Kant's *Critique of Pure Reason*, and subsequently I have had the advantage of discussing with him several of the more important passages. I am especially indebted to him in my discussion of the following topics: the distinction between the Sensibility and the Understanding (p-31, 146-9, 162-6), the term 'form of perception' (p, 40, 133 fin.-135), the *Metaphysical Exposition of Space* (p-8), Inner Sense (Ch. V, and p-9), the *Metaphysical Deduction of the Categories* (p-53), Kant's account of 'the reference of representations to an object' (p-86), an implication of perspective (), the impossibility of a 'theory' of knowledge (), and the points considered, p med.-202 med., 214 med.-215 med., and 218. The views expressed in the pages referred to originated from Professor Cook Wilson, though it must not be assumed that he would accept them in the form in which they are there stated.

CHAPTER I. THE PROBLEM OF THE CRITIQUE

The problem of the *Critique* may be stated in outline and approximately in Kant's own words as follows.

Human reason is called upon to consider certain questions, which it cannot decline, as they are presented by its own nature, but which it cannot answer. These questions relate to God, freedom of the will, and immortality. And the name for the subject which has to deal with these questions is metaphysics. At one time metaphysics was regarded as the queen of all the sciences, and the importance of its aim justified the title. At first the subject, propounding as it did a dogmatic system, exercised a despotic sway. But its subsequent failure brought it into disrepute. It has constantly been compelled to retrace its steps; there has been fundamental disagreement among philosophers, and no philosopher has successfully refuted his critics. Consequently the current attitude to the subject is one of weariness and indifference. Yet humanity cannot really be indifferent to such problems; even those who profess indifference inevitably make metaphysical assertions; and the current attitude is a sign not of levity but of a refusal to put up with the illusory knowledge offered by contemporary philosophy. Now the objects of metaphysics, God, freedom, and immortality, are not objects of experience in the sense in which a tree or a stone is an object of experience. Hence our views about them cannot be due to experience; they must somehow be apprehended by pure reason, i. e. by thinking and without appeal to experience. Moreover, it is in fact by thinking that men have always tried to solve the problems concerning God, freedom, and immortality. What, then, is the cause of the unsatisfactory treatment of these problems and men's consequent indifference? It must, in some way, lie in a failure to attain the sure scientific method, and really consists in the neglect of an inquiry which should be a preliminary to all others in metaphysics. Men ought to have begun with a critical investigation of pure reason itself. Reason should have examined its own nature, to ascertain in general the extent to which it is capable of attaining knowledge without the aid of experience. This examination will decide whether reason is able to deal with the problems of God, freedom, and immortality at all; and without it no discussion of these problems will have a solid foundation. It is this preliminary investigation which the *Critique of Pure Reason* proposes to undertake. Its aim is to answer the question, 'How far can reason go, without the material presented and the aid furnished by experience?' and the result furnishes the solution, or at least the key to the solution, of all metaphysical problems.

Kant's problem, then, is similar to Locke's. Locke states that his purpose is to inquire into the original, certainty, and extent of human knowledge; and he says, "If, by this inquiry into the nature of the understanding I can discover the powers thereof; how far they reach, to what things they are in any degree proportionate, and where they fail us; I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension; to stop when it is at the utmost extent of its tether; and to sit down in a quiet ignorance of those things, which, upon examination, are found to be beyond the reach of our capacities." Thus, to use Dr. Caird's analogy, the task which both Locke and Kant set themselves resembled that of investigating a telescope, before turning it upon the stars, to determine its competence for the work.

The above outline of Kant's problem is of course only an outline. Its definite formulation is expressed in the well-known question, 'How are *a priori* synthetic judgements possible?' To determine the meaning of this question it is necessary to begin with some consideration of the terms '*a priori*' and 'synthetic'.

While there is no difficulty in determining what Kant would have recognized as an *a priori* judgement, there is difficulty in determining what he meant by calling such a judgement *a priori*. The general account is given in the first two sections of the Introduction. An *a priori* judgement is introduced as something opposed to an *a posteriori* judgement, or a judgement which has its source in experience. Instances of the

latter would be ‘This body is heavy’, and ‘This body is hot’. The point of the word ‘experience’ is that there is direct apprehension of some individual, e. g. an individual body. To say that a judgement has its source in experience is of course to imply a distinction between the judgement and experience, and the word ‘source’ may be taken to mean that the judgement depends for its validity upon the experience of the individual thing to which the judgement relates. An *a priori* judgement, then, as first described, is simply a judgement which is not *a posteriori*. It is independent of all experience; in other words, its validity does not depend on the experience of individual things. It might be illustrated by the judgement that all three-sided figures must have three angles. So far, then, no positive meaning has been given to *a priori*.

Kant then proceeds, not as we should expect, to state the positive meaning of *a priori*; but to give tests for what is *a priori*. Since a test implies a distinction between itself and what is tested, it is implied that the meaning of *a priori* is already known.

The tests given are necessity and strict universality. Since judgements which are necessary and strictly universal cannot be based on experience, their existence is said to indicate another source of knowledge. And Kant gives as illustrations, (1) any proposition in mathematics, and (2) the proposition ‘Every change must have a cause’.

So far Kant has said nothing which determines the positive meaning of *a priori*. A clue is, however, to be found in two subsequent phrases. He says that we may content ourselves with having established as a fact the pure use of our faculty of knowledge. And he adds that not only in judgements, but even in conceptions, is an *a priori* origin manifest. The second statement seems to make the *a priori* character of a judgement consist in its origin. As this origin cannot be experience, it must, as the first statement implies, lie in our faculty of knowledge. Kant’s point is that the existence of universal and necessary judgements shows that we must possess a faculty of knowledge capable of yielding knowledge without appeal to experience. The term *a priori*, then, has some reference to the existence of this faculty; in other words, it gives expression to a doctrine of ‘innate ideas’. Perhaps, however, it is hardly fair to press the phrase ‘*test* of *a priori* judgements’. If so, it may be said that on the whole, by *a priori* judgements Kant really means judgements which are universal and necessary, and that he regards them as implying a faculty which gives us knowledge without appeal to experience.

We may now turn to the term ‘synthetic judgement’. Kant distinguishes analytic and synthetic judgements thus. In any judgement the predicate B either belongs to the subject A, as something contained (though covertly) in the conception A, or lies completely outside the conception A, although it stands in relation to it. In the former case the judgement is called analytic, in the latter synthetic. ‘All bodies are extended’ is an analytic judgement; ‘All bodies are heavy’ is synthetic. It immediately follows that only synthetic judgements extend our knowledge; for in making an analytic judgement we are only clearing up our conception of the subject. This process yields no new knowledge, for it only gives us a clearer view of what we know already. Further, all judgements based on experience are synthetic, for it would be absurd to base an analytical judgement on experience, when to make the judgement we need not go beyond our own conceptions. On the other hand, *a priori* judgements are sometimes analytic and sometimes synthetic. For, besides analytical judgements, all judgements in mathematics and certain judgements which underlie physics are asserted independently of experience, and they are synthetic.

Here Kant is obviously right in vindicating the synthetic character of mathematical judgements. In the arithmetical judgement $7 + 5 = 12$, the thought of certain units as a group of twelve is no mere repetition of the thought of them as a group of five added to a group of seven. Though the same units are referred to, they are regarded differently. Thus the thought of them as twelve means either that we think of them as formed by adding one unit to a group of eleven, or that we think of them as formed by adding two units to a group of ten, and so on. And the assertion is that the same units, which can be grouped in one way, can also be grouped in another. Similarly, Kant is right in pointing out that the geometrical judgement, ‘A straight line between two points is the shortest,’ is synthetic, on the ground that the conception of

straightness is purely qualitative, while the conception of shortest distance implies the thought of quantity.

It should now be an easy matter to understand the problem expressed by the question, ‘How are *a priori* synthetic judgements possible?’ Its substance may be stated thus. The existence of *a posteriori* synthetic judgements presents no difficulty. For experience is equivalent to perception, and, as we suppose, in perception we are confronted with reality, and apprehend it as it is. If I am asked, ‘How do I know that my pen is black or my chair hard?’ I answer that it is because I see or feel it to be so. In such cases, then, when my assertion is challenged, I appeal to my experience or perception of the reality to which the assertion relates. My appeal raises no difficulty because it conforms to the universal belief that if judgements are to rank as knowledge, they must be made to conform to the nature of things, and that the conformity is established by appeal to actual experience of the things. But do *a priori* synthetic judgements satisfy this condition? Apparently not. For when I assert that every straight line is the shortest way between its extremities, I have not had, and never can have, experience of all possible straight lines. How then can I be sure that all cases will conform to my judgement? In fact, how can I anticipate my experience at all? How can I make an assertion about any individual until I have had actual experience of it? In an *a priori* synthetic judgement the mind in some way, in virtue of its own powers and independently of experience, makes an assertion to which it claims that reality must conform. Yet why should reality conform? *A priori* judgements of the other kind, viz. analytic judgements, offer no difficulty, since they are at bottom tautologies, and consequently denial of them is self-contradictory and meaningless. But there is difficulty where a judgement asserts that a term B is connected with another term A, B being neither identical with nor a part of A. In this case there is no contradiction in asserting that A is not B, and it would seem that only experience can determine whether all A is or is not B. Otherwise we are presupposing that things must conform to our ideas about them. Now metaphysics claims to make *a priori* synthetic judgements, for it does not base its results on any appeal to experience. Hence, before we enter upon metaphysics, we really ought to investigate our right to make *a priori* synthetic judgements at all. Therein, in fact, lies the importance to metaphysics of the existence of such judgements in mathematics and physics. For it shows that the difficulty is not peculiar to metaphysics, but is a general one shared by other subjects; and the existence of such judgements in mathematics is specially important because there their validity or certainty has never been questioned. The success of mathematics shows that at any rate under certain conditions *a priori* synthetic judgements are valid, and if we can determine these conditions, we shall be able to decide whether such judgements are possible in metaphysics. In this way we shall be able to settle a disputed case of their validity by examination of an undisputed case. The general problem, however, is simply to show what it is which makes *a priori* synthetic judgements as such possible; and there will be three cases, those of mathematics, of physics, and of metaphysics.

The outline of the solution of this problem is contained in the Preface to the Second Edition. There Kant urges that the key is to be found by consideration of mathematics and physics. If the question be raised as to what it is that has enabled these subjects to advance, in both cases the answer will be found to lie in a change of method. “Since the earliest times to which the history of human reason reaches, mathematics has, among that wonderful nation the Greeks, followed the safe road of a science. Still it is not to be supposed that it was as easy for this science to strike into, or rather to construct for itself, that royal road, as it was for logic, in which reason has only to do with itself. On the contrary, I believe that it must have remained long in the stage of groping (chiefly among the Egyptians), and that this change is to be ascribed to a *revolution*, due to the happy thought of one man, through whose experiment the path to be followed was rendered unmistakable for future generations, and the certain way of a science was entered upon and sketched out once for all.... A new light shone upon the first man (Thales, or whatever may have been his name) who demonstrated the properties of the isosceles triangle; for he found that he ought not to investigate that which he saw in the figure or even the mere conception of the same, and learn its properties from this, but that he ought to produce the figure by virtue of that which he himself had thought

into it *a priori* in accordance with conceptions and had represented (by means of a construction), and that in order to know something with certainty *a priori* he must not attribute to the figure any property other than that which necessarily follows from that which he has himself introduced into the figure, in accordance with his conception."

Here Kant's point is as follows. Geometry remained barren so long as men confined themselves either to the empirical study of individual figures, of which the properties were to be discovered by observation, or to the consideration of the mere conception of various kinds of figure, e. g. of an isosceles triangle. In order to advance, men had in some sense to produce the figure through their own activity, and in the act of constructing it to recognize that certain features were necessitated by those features which they had given to the figure in constructing it. Thus men had to make a triangle by drawing three straight lines so as to enclose a space, and then to recognize that three angles must have been made by the same process. In this way the mind discovered a general rule, which must apply to all cases, because the mind itself had determined the nature of the cases. A property B follows from a nature A; all instances of A must possess the property B, because they have solely that nature A which the mind has given them and whatever is involved in A. The mind's own rule holds good in all cases, because the mind has itself determined the nature of the cases.

Kant's statements about physics, though not the same, are analogous. Experiment, he holds, is only fruitful when reason does not follow nature in a passive spirit, but compels nature to answer its own questions. Thus, when Torricelli made an experiment to ascertain whether a certain column of air would sustain a given weight, he had previously calculated that the quantity of air was just sufficient to balance the weight, and the significance of the experiment lay in his expectation that nature would conform to his calculations and in the vindication of this expectation. Reason, Kant says, must approach nature not as a pupil but as a judge, and this attitude forms the condition of progress in physics.

The examples of mathematics and physics suggest, according to Kant, that metaphysics may require a similar revolution of standpoint, the lack of which will account for its past failure. An attempt should therefore be made to introduce such a change into metaphysics. The change is this. Hitherto it has been assumed that our knowledge must conform to objects. This assumption is the real cause of the failure to extend our knowledge *a priori*, for it limits thought to the analysis of conceptions, which can only yield tautological judgements. Let us therefore try the effect of assuming that objects must conform to our knowledge. Herein lies the Copernican revolution. We find that this reversal of the ordinary view of the relation of objects to the mind enables us for the first time to understand the possibility of *a priori* synthetic judgements, and even to demonstrate certain laws which lie at the basis of nature, e. g. the law of causality. It is true that the reversal also involves the surprising consequence that our faculty of knowledge is incapable of dealing with the objects of metaphysics proper, viz. God, freedom, and immortality, for the assumption limits our knowledge to objects of possible experience. But this very consequence, viz. the impossibility of metaphysics, serves to test and vindicate the assumption. For the view that our knowledge conforms to objects as things in themselves leads us into an insoluble contradiction when we go on, as we must, to seek for the unconditioned; while the assumption that objects must, as phenomena, conform to our way of representing them, removes the contradiction. Further, though the assumption leads to the denial of speculative knowledge in the sphere of metaphysics, it is still possible that reason in its practical aspect may step in to fill the gap. And the negative result of the assumption may even have a positive value. For if, as is the case, the moral reason, or reason in its practical aspect, involves certain postulates concerning God, freedom, and immortality, which are rejected by the speculative reason, it is important to be able to show that these objects fall beyond the scope of the speculative reason. And if we call reliance on these postulates, as being presuppositions of morality, faith, we may say that knowledge must be abolished to make room for faith.

This answer to the main problem, given in outline in the Preface, is undeniably plausible. Yet

examination of it suggests two criticisms which affect Kant's general position.

In the first place, the parallel of mathematics which suggests the 'Copernican' revolution does not really lead to the results which Kant supposes. Advance in mathematics is due to the adoption not of any conscious assumption but of a certain procedure, viz. that by which we draw a figure and thereby see the necessity of certain relations within it. To preserve the parallel, the revolution in metaphysics should have consisted in the adoption of a similar procedure, and advance should have been made dependent on the application of an at least quasi-mathematical method to the objects of metaphysics. Moreover, since these objects are God, freedom, and immortality, the conclusion should have been that we ought to study God, freedom, and immortality by somehow constructing them in perception and thereby gaining insight into the necessity of certain relations. Success or failure in metaphysics would therefore consist simply in success or failure to see the necessity of the relations involved. Kant, however, makes the condition of advance in metaphysics consist in the adoption not of a method of procedure but of an assumption, viz. that objects conform to the mind. And it is impossible to see how this assumption can assist what, on Kant's theory, it ought to have assisted, viz. the study of God, freedom, and immortality, or indeed the study of anything. In geometry we presuppose that individual objects conform to the universal rules of relation which we discover. Now suppose we describe a geometrical judgement, e. g. that two straight lines cannot enclose a space, as a mental law, because we are bound to think it true. Then we may state the presupposition by saying that objects, e. g. individual pairs of straight lines, must conform to such a mental law. But the explicit recognition of this presupposition and the conscious assertion of it in no way assist the solution of particular geometrical problems. The presupposition is really a condition of geometrical thinking at all. Without it there is no geometrical thinking, and the recognition of it places us in no better position for the study of geometrical problems. Similarly, if we wish to think out the nature of God, freedom, and immortality, we are not assisted by assuming that these objects must conform to the laws of our thinking. We must presuppose this conformity if we are to think at all, and consciousness of the presupposition puts us in no better position. What is needed is an insight similar to that which we have in geometry, i. e. an insight into the necessity of the relations under consideration such as would enable us to see, for example, that being a man, as such, involves living for ever.

Kant has been led into the mistake by a momentary change in the meaning given to 'metaphysics'. For the moment he is thinking of metaphysics, not as the inquiry concerned with God, freedom, and immortality, but as the inquiry which has to deal with the problem as to how we can know *a priori*. This problem is assisted, at any rate prima facie, by the assumption that things must conform to the mind. And this assumption can be said to be suggested by mathematics, inasmuch as the mathematician presupposes that particular objects must correspond to the general rules discovered by the mind. From this point of view Kant's only mistake, if the parallelism is to be maintained, is that he takes for an assumption which enables the mathematician to advance a metaphysical presupposition of the advance, on which the mathematician never reflects, and awareness of which would in no way assist his mathematics.

In the second place the 'Copernican' revolution is not strictly the revolution which Kant supposes it to be. He speaks as though his aim is precisely to reverse the ordinary view of the relation of the mind to objects. Instead of the mind being conceived as having to conform to objects, objects are to be conceived as having to conform to the mind. But if we consider Kant's real position, we see that these views are only verbally contrary, since the word object refers to something different in each case. On the ordinary view objects are something outside the mind, in the sense of independent of it, and the ideas, which must conform to objects, are something within the mind, in the sense of dependent upon it. The conformity then is of something within the mind to something outside it. Again, the conformity means that one of the terms, viz. the object, exists first and that then the other term, the idea, is fitted to or made to correspond to it. Hence the real contrary of this view is that ideas, within the mind, exist first and that objects outside the mind, coming into existence afterwards, must adapt themselves to the ideas. This of course strikes us as

absurd, because we always think of the existence of the object as the presupposition of the existence of the knowledge of it; we do not think the existence of the knowledge as the presupposition of the existence of the object. Hence Kant only succeeds in stating the contrary of the ordinary view with any plausibility, because in doing so he makes the term object refer to something which like 'knowledge' is within the mind. His position is that objects within the mind must conform to our general ways of knowing. For Kant, therefore, the conformity is not between something within and something without the mind, but between two realities within the mind, viz. the individual object, as object of perception, i. e. a phenomenon, and our general ways of perceiving and thinking. But this view is only verbally the contrary of the ordinary view, and consequently Kant does not succeed in reversing the ordinary view that we know objects independent of or outside the mind, by bringing our ideas into conformity with them. In fact, his conclusion is that we do not know this object, i. e. the thing in itself, at all. Hence his real position should be stated by saying not that the ordinary view puts the conformity between mind and things in the wrong way, but that we ought not to speak of conformity at all. For the thing in itself being unknowable, our ideas can never be made to conform to it. Kant then only reaches a conclusion which is apparently the reverse of the ordinary view by substituting another object for the thing in itself, viz. the phenomenon or appearance of the thing in itself to us.

Further, this second line of criticism, if followed out, will be found to affect his statement of the problem as well as that of its solution. It will be seen that the problem is mis-stated, and that the solution offered presupposes it to be mis-stated. His statement of the problem takes the form of raising a difficulty which the existence of *a priori* knowledge presents to the ordinary view, according to which objects are independent of the mind, and ideas must be brought into conformity with them. In a synthetic *a priori* judgement we claim to discover the nature of certain objects by an act of our thinking, and independently of actual experience of them. Hence if a supporter of the ordinary view is asked to justify the conformity of this judgement or idea with the objects to which it relates, he can give no answer. The judgement having *ex hypothesi* been made without reference to the objects, the belief that the objects must conform to it is the merely arbitrary supposition that a reality independent of the mind must conform to the mind's ideas. But Kant, in thus confining the difficulty to *a priori* judgements, implies that empirical judgements present no difficulty to the ordinary view; since they rest upon actual experience of the objects concerned, they are conformed to the objects by the very process through which they arise. He thereby fails to notice that empirical judgements present a precisely parallel difficulty. It can only be supposed that the conformity of empirical judgements to their objects is guaranteed by the experience upon which they rest, if it be assumed that in experience we apprehend objects as they are. But our experience or perception of individual objects is just as much mental as the thinking which originates *a priori* judgements. If we can question the truth of our thinking, we can likewise question the truth of our perception. If we can ask whether our ideas must correspond to their objects, we can likewise ask whether our perceptions must correspond to them. The problem relates solely to the correspondence between something within the mind and something outside it; it applies equally to perceiving and thinking, and concerns all judgements alike, empirical as well as *a priori*. Kant, therefore, has no right to imply that empirical judgements raise no problem, if he finds difficulty in *a priori* judgements. He is only able to draw a distinction between them, because, without being aware that he is doing so, he takes account of the relation of the object to the subject in the case of an *a priori* judgement, while in the case of an empirical judgement he ignores it. In other words, in dealing with the general connexion between the qualities of an object, he takes into account the fact that we are thinking it, but, in dealing with the perception of the coexistence of particular qualities of an object, he ignores the fact that we are perceiving it. Further, that the real problem concerns all synthetic judgements alike is shown by the solution which he eventually reaches. His conclusion turns out to be that while both empirical and *a priori* judgements are valid of phenomena, they are not valid of things in themselves; i. e. that of things in themselves we know nothing at all, not even their particular

qualities. Since, then, his conclusion is that even empirical judgements are not valid of things in themselves, it shows that the problem cannot be confined to *a priori* judgements, and therefore constitutes an implicit criticism of his statement of the problem.

Must there not, however, be some problem peculiar to *a priori* judgements? Otherwise why should Kant have been led to suppose that his problem concerned them only? Further consideration will show that there is such a problem, and that it was only owing to the mistake indicated that Kant treated this problem as identical with that of which he actually offered a solution. In the universal judgements of mathematics we apprehend, as we think, general rules of connexion which must apply to all possible cases. Such judgements, then, presuppose a conformity between the connexions which we discover and all possible instances. Now Kant's treatment of this conformity as a conformity between our ideas and things has two implications. In the first place, it implies, as has been pointed out, that relation to the subject, as thinking, is taken into account in the case of the universal connexion, and that relation to the subject, as perceiving, is ignored in the case of the individual thing. In the second place, it implies that what is related to the subject as the object of its thought must be subjective or mental; that because we have to think the general connexion, the connexion is only our own idea, the conformity of things to which may be questioned. But the treatment, to be consistent, should take account of relation to the subject in both cases or in neither. If the former alternative be accepted, then the subjective character attributed by Kant in virtue of this relation to what is object of thought, and equally attributable to what is object of perception, reduces the problem to that of the conformity in general of all ideas, including perceptions, within the mind to things outside it; and this problem does not relate specially to *a priori* judgements. To discover the problem which relates specially to them, the other alternative must be accepted, that of ignoring relation to the subject in both cases. The problem then becomes 'What renders possible or is presupposed by the conformity of individual things to certain laws of connexion?' And, inasmuch as to deny the conformity is really to deny that there are laws of connexion, the problem reduces itself to the question, 'What is the presupposition of the existence of definite laws of connexion in the world?' And the only answer possible is that reality is a system or a whole of connected parts, in other words, that nature is uniform. Thus it turns out that the problem relates to the uniformity of nature, and that the question 'How are *a priori* synthetic judgements possible?' has in reality nothing to do with the problem of the relation of reality to the knowing subject, but is concerned solely with the nature of reality.

Further, it is important to see that the alternative of ignoring relation to the subject is the right one, not only from the point of view of the problem peculiar to *a priori* judgements, but also from the point of view of the nature of knowledge in general. Perceiving and thinking alike presuppose that reality is immediately object of the mind, and that the act of apprehension in no way affects or enters into the nature of what we apprehend about reality. If, for instance, I assert on the strength of perception that this table is round, I imply that I see the table, and that the shape which I judge it to have is not affected by the fact that I am perceiving it; for I mean that the table really is round. If some one then convinces me that I have made a mistake owing to an effect of foreshortening, and that the table is really oval, I amend my assertion, not by saying that the table is round but only to my apprehension, but by saying that it looks round. Thereby I cease to predicate roundness of the table altogether; for I mean that while it still looks round, it is not really so. The case of universal judgements is similar. The statement that a straight line is the shortest distance between its extremities means that it really is so. The fact is presupposed to be in no way altered by our having apprehended it. Moreover, reality is here just as much implied to be directly object of the mind as it is in the case of the singular judgement. Making the judgement consists, as we say, in *seeing* the connexion between the direction between two points and the shortest distance between them. The connexion of real characteristics is implied to be directly object of thought. Thus both perceiving and thinking presuppose that the reality to which they relate is directly object of the mind, and that the character of it which we apprehend in the resulting judgement is not affected or altered by the fact that we

have had to perceive or conceive the reality.

Kant in the formulation of his problem implicitly admits this presupposition in the case of perception. He implies that empirical judgements involve no difficulty, because they rest upon the perception or experience of the objects to which they relate. On the other hand, he does not admit the presupposition in the case of conception, for he implies that in *a priori* judgements we are not confronted with reality but are confined to our own ideas. Hence we ought to ask why Kant is led to adopt an attitude in the latter case which he does not adopt in the former. The answer appears to be twofold. In the first place, there is an inveterate tendency to think of universals, and therefore of the connexions between them, as being not objective realities but mere ideas. In other words, we tend to adopt the conceptualist attitude, which regards individuals as the only reality, and universals as mental fictions. In consequence, we are apt to think that while in perception, which is of the individual, we are confronted by reality, in universal judgements, in which we apprehend connexions between universals, we have before us mere ideas. Kant may fairly be supposed to have been unconsciously under the influence of this tendency. In the second place, we apprehend a universal connexion by the operation of thinking. Thinking is essentially an activity; and since activity in the ordinary sense in which we oppose action to knowledge originates something, we tend to think of the activity of thinking as also originating something, viz. that which is our object when we think. Hence, since we think of what is real as independent of us and therefore as something which we may discover but can in no sense make, we tend to think of the object of thought as only an idea. On the other hand, what is ordinarily called perception, though it involves the activity of thinking, also involves an element in respect of which we are passive. This is the fact pointed to by Kant's phrase 'objects are *given* in perception'. In virtue of this passive element we are inclined to think that in perception we simply stand before the reality in a passive attitude. The reality perceived is thought to be, so to say, there, existing independently of us; relation to the subject is unnoticed because of our apparently wholly passive attitude. At times, and especially when he is thinking of the understanding as a faculty of spontaneity, Kant seems to have been under the influence of this second tendency.

The preceding summary of the problem of the *Critique* represents the account given in the two Prefaces and the Introduction. According to this account, the problem arises from the unquestioned existence of *a priori* knowledge in mathematics and physics and the problematic existence of such knowledge in metaphysics, and Kant's aim is to determine the range within which *a priori* knowledge is possible. Thus the problem is introduced as relating to *a priori* knowledge as such, no distinction being drawn between its character in different cases. Nevertheless the actual discussion of the problem in the body of the *Critique* implies a fundamental distinction between the nature of *a priori* knowledge in mathematics and its nature in physics, and in order that a complete view of the problem may be given, this distinction must be stated.

The 'Copernican' revolution was brought about by consideration of the facts of mathematics. Kant accepted as an absolute starting-point the existence in mathematics of true universal and necessary judgements. He then asked, 'What follows as to the nature of the objects known in mathematics from the fact that we really know them?' Further, in his answer he accepted a distinction which he never examined or even questioned, viz. the distinction between things in themselves and phenomena. This distinction assumed, Kant inferred from the truth of mathematics that things in space and time are only phenomena. According to him mathematicians are able to make the true judgements that they do make only because they deal with phenomena. Thus Kant in no way sought to *prove* the truth of mathematics. On the contrary, he argued from the truth of mathematics to the nature of the world which we thereby know. The phenomenal character of the world being thus established, he was able to reverse the argument and to regard the phenomenal character of the world as *explaining* the validity of mathematical judgements. They are valid, because they relate to phenomena. And the consideration which led Kant to take mathematics as his starting-point seems to have been the self-evidence of mathematical judgements. As

we directly apprehend their necessity, they admit of no reasonable doubt.

On the other hand, the general principles underlying physics, e. g. that every change must have a cause, or that in all change the quantum of matter is constant, appeared to Kant in a different light. Though certainly not based on experience, they did not seem to him self-evident. Hence, in the case of these principles, he sought to give what he did not seek to give in the case of mathematical judgements, viz. a proof of their truth. The nerve of the proof lies in the contention that these principles are involved not merely in any general judgement in physics, e. g. 'All bodies are heavy,' but even in any singular judgement, e. g. 'This body is heavy,' and that the validity of singular judgements is universally conceded. Thus here the fact upon which he takes his stand is not the admitted truth of the universal judgements under consideration, but the admitted truth of any singular judgement in physics. His treatment, then, of the universal judgements of mathematics and that of the principles underlying physics are distinguished by the fact that, while he accepts the former as needing no proof, he seeks to prove the latter from the admitted validity of singular judgements in physics. At the same time the acceptance of mathematical judgements and the proof of the *a priori* principles of physics have for Kant a common presupposition which distinguishes mathematics and physics from metaphysics. Like universal judgements in mathematics, singular judgements in physics, and therefore the principles which they presuppose, are true only if the objects to which they relate are phenomena. Both in mathematics and physics, therefore, it is a condition of *a priori* knowledge that it relates to phenomena and not to things in themselves. But, just for this reason, metaphysics is in a different position; since God, freedom, and immortality can never be objects of experience, *a priori* knowledge in metaphysics, and therefore metaphysics itself, is impossible. Thus for Kant the very condition, the realization of which justifies the acceptance of mathematical judgements and enables us to prove the principles of physics, involves the impossibility of metaphysics.

Further, the distinction drawn between *a priori* judgements in mathematics and in physics is largely responsible for the difficulty of understanding what Kant means by *a priori*. His unfortunate tendency to explain the term negatively could be remedied if it could be held either that the term refers solely to mathematical judgements or that he considers the truth of the law of causality to be apprehended in the same way that we see that two and two are four. For an *a priori* judgement could then be defined as one in which the mind, on the presentation of an individual in perception or imagination, and in virtue of its capacity of thinking, apprehends the necessity of a specific relation. But this definition is precluded by Kant's view that the law of causality and similar principles, though *a priori*, are not self-evident.

CHAPTER II. THE SENSIBILITY AND THE UNDERSTANDING

The distinction between the sensibility and the understanding is to Kant fundamental both in itself and in relation to the conclusions which he reaches. An outline, therefore, of this distinction must precede any statement or examination of the details of his position. Unfortunately, in spite of its fundamental character, Kant never thinks of questioning or criticizing the distinction in the form in which he draws it, and the presence of certain confusions often renders it difficult to be sure of his meaning.

The distinction may be stated in his own words thus: “There are two stems of human knowledge, which perhaps spring from a common but to us unknown root, namely sensibility and understanding.” “Our knowledge springs from two fundamental sources of the mind; the first receives representations (receptivity for impressions); the second is the power of knowing an object by means of these representations (spontaneity of conceptions). Through the first an object is *given* to us; through the second the object is *thought* in relation to the representation (which is a mere determination of the mind). Perception and conceptions constitute, therefore, the elements of all our knowledge, so that neither conceptions without a perception in some way corresponding to them, nor perception without conceptions can yield any knowledge.... Neither of these qualities has a preference over the other. Without sensibility no object would be given to us, and without understanding no object would be thought. Thoughts without content are empty, perceptions without conceptions are blind. Hence it is as necessary for the mind to make its conceptions sensuous (i. e. to add to them the object in perception) as to make its perceptions intelligible (i. e. to bring them under conceptions). Neither of these powers or faculties can exchange its function. The understanding cannot perceive, and the senses cannot think. Only by their union can knowledge arise.”

The distinction so stated appears straightforward and, on the whole, sound. And it is fairly referred to by Kant as the distinction between the faculties of perceiving and conceiving or thinking, provided that the terms perceiving and conceiving or thinking be taken to indicate a distinction within perception in the ordinary sense of the word. His meaning can be stated thus: ‘All knowledge requires the realization of two conditions; an individual must be presented to us in perception, and we as thinking beings must bring this individual under or recognize it as an instance of some universal. Thus, in order to judge ‘This is a house’ or ‘That is red’ we need the presence of the house or of the red colour in perception, and we must ‘recognize’ the house or the colour, i. e. apprehend the individual as a member of a certain kind. Suppose either condition unrealized. Then if we suppose a failure to conceive, i. e. to apprehend the individual as a member of some kind, we see that our perception — if it could be allowed to be anything at all — would be blind i. e. indeterminate, or a mere ‘blur’. What we perceived would be for us as good as nothing. In fact, we could not even say that we were perceiving. Again, if we suppose that we had merely the conception of a house, and neither perceived nor had perceived an individual to which it applied, we see that the conception, being without application, would be neither knowledge nor an element in knowledge. Moreover, the content of a conception is derived from perception; it is only through its relation to perceived individuals that we become aware of a universal. To know the meaning of ‘redness’ we must have experienced individual red things; to know the meaning of ‘house’ we must at least have had experience of individual men and of their physical needs. Hence ‘conceptions’ without ‘perceptions’ are void or empty. The existence of conceptions presupposes experience of corresponding individuals, even though it also implies the activity of thinking in relation to these individuals.’

Further, it is true to say that as perceiving we are passive; we do not do anything. This, as has been pointed out, is the element of truth contained in the statement that objects are *given* to us. On the other hand, it may be truly said that as conceiving, in the sense of bringing an individual under a universal, we

are essentially active. This is presupposed by the notice or attention involved in perception ordinarily so called, i. e. perception in the full sense in which it includes conceiving as well as perceiving. Kant, therefore, is justified in referring to the sensibility as a 'receptivity' and to the understanding as a 'spontaneity'.

The distinction, so stated, appears, as has been already said, intelligible and, in the main, valid. Kant, however, renders the elucidation of his meaning difficult by combining with this view of the distinction an incompatible and unwarranted theory of perception. He supposes, without ever questioning the supposition, that perception is due to the operation of things outside the mind, which act upon our sensibility and thereby produce sensations. On this supposition, what we perceive is not, as the distinction just stated implies, the thing itself, but a sensation produced by it. Consequently a problem arises as to the meaning on this supposition of the statements 'by the sensibility objects are given to us' and 'by the understanding they are thought'. The former statement must mean that when a thing affects us there is a sensation. It cannot mean that by the sensibility we know that there exists a thing which causes the sensation, for this knowledge would imply the activity of thinking; nor can it mean that in virtue of the sensibility the thing itself is presented to us. The latter statement must mean that when sensation arises, the understanding judges that there is something causing it; and this assertion must really be *a priori*, because not dependent upon experience. Unfortunately the two statements so interpreted are wholly inconsistent with the account of the functions of the sensibility and the understanding which has just been quoted.

Further, this theory of perception has two forms. In its first form the theory is physical rather than metaphysical, and is based upon our possession of physical organs. It assumes that the reality to be apprehended is the world of space and time, and it asserts that by the action of bodies upon our physical organs our sensibility is affected, and that thereby sensations are originated in us. Thereupon a problem arises. For if the contribution of the sensibility to our knowledge of the physical world is limited to a succession of sensations, explanation must be given of the fact that we have succeeded with an experience confined to these sensations in acquiring knowledge of a world which does not consist of sensations. Kant, in fact, in the *Aesthetic* has this problem continually before him, and tries to solve it. He holds that the mind, by means of its forms of perception and its conceptions of the understanding, superinduces upon sensations, as data, spatial and other relations, in such a way that it acquires knowledge of the spatial world.

An inherent difficulty, however, of this 'physical' theory of perception leads to a transformation of it. If, as the theory supposes, the cause of sensation is outside or beyond the mind, it cannot be known. Hence the initial assumption that this cause is the physical world has to be withdrawn, and the cause of sensation comes to be thought of as the thing in itself of which we can know nothing. This is undoubtedly the normal form of the theory in Kant's mind.

It may be objected that to attribute to Kant at any time the physical form of the theory is to accuse him of an impossibly crude confusion between things in themselves and the spatial world, and that he can never have thought that the cause of sensation, being as it is outside the mind, is spatial. But the answer is to be found in the fact that the problem just referred to as occupying Kant's attention in the *Aesthetic* is only a problem at all so long as the cause of sensation is thought of as a physical body. For the problem 'How do we, beginning with mere sensation, come to know a spatial and temporal world?' is only a problem so long as it is supposed that the cause of sensation is a spatial and temporal world or a part of it, and that this world is what we come to know. If the cause of sensation, as being beyond the mind, is held to be unknowable and so not known to be spatial or temporal, the problem has disappeared. Corroboration is given by certain passages in the *Critique* which definitely mention 'the senses', a term which refers to bodily organs, and by others to which meaning can be given only if they are taken to imply that the objects which affect our sensibility are not unknown things in themselves, but things known to be spatial. Even the use of the plural in the term 'things in themselves' implies a tendency to identify the unknowable reality

beyond the mind with bodies in space. For the implication that different sensations are due to different things in themselves originates in the view that different sensations are due to the operation of different spatial bodies.

It is now necessary to consider how the distinction between the sensibility and the understanding contributes to articulate the problem 'How are *a priori* synthetic judgements possible?' As has been pointed out, Kant means by this question, 'How is it possible that the mind is able, in virtue of its own powers, to make universal and necessary judgements which anticipate its experience of objects?' To this question his general answer is that it is possible and only possible because, so far from ideas, as is generally supposed, having to conform to things, the things to which our ideas or judgements relate, viz. phenomena, must conform to the nature of the mind. Now, if the mind's knowing nature can be divided into the sensibility and the understanding, the problem becomes 'How is it possible for the mind to make such judgements in virtue of its sensibility and its understanding?' And the answer will be that it is possible because the things concerned, i. e. phenomena, must conform to the sensibility and the understanding, i. e. to the mind's perceiving and thinking nature. But both the problem and the answer, so stated, give no clue to the particular *a priori* judgements thus rendered possible nor to the nature of the sensibility and the understanding in virtue of which we make them. It has been seen, however, that the judgements in question fall into two classes, those of mathematics and those which form the presuppositions of physics. And it is Kant's aim to relate these classes to the sensibility and the understanding respectively. His view is that mathematical judgements, which, as such, deal with spatial and temporal relations, are essentially bound up with our perceptive nature, i. e. with our sensibility, and that the principles underlying physics are the expression of our thinking nature, i. e. of our understanding. Hence if the vindication of this relation between our knowing faculties and the judgements to which they are held to give rise is approached from the side of our faculties, it must be shown that our sensitive nature is such as to give rise to mathematical judgements, and that our understanding or thinking nature is such as to originate the principles underlying physics. Again, if the account of this relation is to be adequate, it must be shown to be exhaustive, i. e. it must be shown that the sensibility and the understanding give rise to no other judgements. Otherwise there may be other *a priori* judgements bound up with the sensibility and the understanding which the inquiry will have ignored. Kant, therefore, by his distinction between the sensibility and the understanding, sets himself another problem, which does not come into sight in the first formulation of the general question 'How are *a priori* synthetic judgements possible?' He has to determine what *a priori* judgements are related to the sensibility and to the understanding respectively. At the same time the distinction gives rise to a division within the main problem. His chief aim is to discover how it is that *a priori* judgements are universally applicable. But, as Kant conceives the issue, the problem requires different treatment according as the judgements in question are related to the sensibility or to the understanding. Hence arises the distinction between the *Transcendental Aesthetic* and the *Transcendental Analytic*, the former dealing with the *a priori* judgements of mathematics, which relate to the sensibility, and the latter dealing with the *a priori* principles of physics, which originate in the understanding. Again, within each of these two divisions we have to distinguish two problems, viz. 'What *a priori* judgements are essentially related to the faculty in question?' and 'How is it that they are applicable to objects?'

It is important, however, to notice that the distinction between the sensibility and the understanding, in the form in which it serves as a basis for distinguishing the *Aesthetic* and the *Analytic*, is not identical with or even compatible with the distinction, as Kant states it when he is considering the distinction in itself and is not thinking of any theory which is to be based upon it. In the latter case the sensibility and the understanding are represented as inseparable faculties involved in *all* knowledge. Only from the union of both can knowledge arise. But, regarded as a basis for the distinction between the *Aesthetic* and the *Analytic*, they are implied to be the source of different kinds of knowledge, viz. mathematics and the principles of physics. It is no answer to this to urge that Kant afterwards points out that space as an object

presupposes a synthesis which does not belong to sense. No doubt this admission implies that even the apprehension of spatial relations involves the activity of the understanding. But the implication is really inconsistent with the existence of the *Aesthetic* as a distinct part of the subject dealing with a special class of *a priori* judgements.

CHAPTER III. SPACE

It is the aim of the *Aesthetic* to deal with the *a priori* knowledge which relates to the sensibility. This knowledge, according to Kant, is concerned with space and time. Hence he has to show *firstly* that our apprehension of space and time is *a priori*, i. e. that it is not derived from experience but originates in our apprehending nature; and *secondly* that within our apprehending nature this apprehension belongs to the sensibility and not to the understanding, or, in his language, that space and time are forms of perception or sensibility. Further, if his treatment is to be exhaustive, he should also show *thirdly* that space and time are the only forms of perception. This, however, he makes no attempt to do except in one passage, where the argument fails. The first two points established, Kant is able to develop his main thesis, viz. that it is a condition of the validity of the *a priori* judgements which relate to space and time that these are characteristics of phenomena, and not of things in themselves.

It will be convenient to consider his treatment of space and time separately, and to begin with his treatment of space. It is necessary, however, first of all to refer to the term ‘form of perception’. As Kant conceives a form of perception, it involves three antitheses.

(1) As a *form* of perception it is opposed, as a way or mode of perceiving, to particular perceptions.

(2) As a form or mode of *perception* it is opposed to a form or mode of *conception*.

(3) As a form of *perception* it is also opposed, as a way in which we apprehend things, to a way in which things are.

While we may defer consideration of the second and third antitheses, we should at once give attention to the nature of the first, because Kant confuses it with two other antitheses. There is no doubt that in general a *form* of perception means for Kant a general capacity of perceiving which, as such, is opposed to the actual perceptions in which it is manifested. For according to him our spatial perceptions are not foreign to us, but manifestations of our general perceiving nature; and this view finds expression in the assertion that space is a form of perception or of sensibility.

Unfortunately, however, Kant frequently speaks of this form of perception as if it were the same thing as the actual perception of empty space. In other words, he implies that such a perception is possible, and confuses it with a potentiality, i. e. the power of perceiving that which is spatial. The confusion is possible because it can be said with some plausibility that a perception of empty space — if its possibility be allowed — does not inform us about actual things, but only informs us what must be true of things, if there prove to be any; such a perception, therefore, can be thought of as a possibility of knowledge rather than as actual knowledge.

The second confusion is closely related to the first, and arises from the fact that Kant speaks of space not only as a form of *perception*, but also as the form of *phenomena* in opposition to sensation as their matter. “That which in the phenomenon corresponds to the sensation I term its matter; but that which effects that the manifold of the phenomenon can be arranged under certain relations I call the form of the phenomenon. Now that in which alone our sensations can be arranged and placed in a certain form cannot itself be sensation. Hence while the matter of all phenomena is only given to us *a posteriori*, their form [i. e. space] must lie ready for them all together *a priori* in the mind.” Here Kant is clearly under the influence of his theory of perception. He is thinking that, given the origination of sensations in us by the thing in itself, it is the business of the mind to arrange these sensations spatially in order to attain knowledge of the spatial world. Space being, as it were, a kind of empty vessel in which sensations are arranged, is said to be the form of phenomena. Moreover, if we bear in mind that ultimately bodies in space are for Kant only spatial arrangements of sensations, we see that the assertion that space is the form of phenomena is only Kant’s way of saying that all bodies are spatial. Now Kant, in thus asserting

that space is the form of phenomena, is clearly confusing this assertion with the assertion that space is a form of perception, and he does so in consequence of the first confusion, viz. that between a capacity of perceiving and an actual perception of empty space. For in the passage last quoted he continues thus: "I call all representations *pure* (in the transcendental sense) in which nothing is found which belongs to sensation. Accordingly there will be found *a priori* in the mind the pure form of sensuous perceptions in general, wherein all the manifold of phenomena is perceived in certain relations. This pure form of sensibility will also itself be called *pure perception*. Thus, if I abstract from the representation of a body that which the understanding thinks respecting it, such as substance, force, divisibility, &c., and also that which belongs to sensation, such as impenetrability, hardness, colour, &c., something is still left over for me from this empirical perception, viz. extension and shape. These belong to pure perception, which exists in the mind *a priori*, even without an actual object of the senses or a sensation, as a mere form of sensibility." Here Kant has passed, without any consciousness of a transition, from treating space as that in which the manifold of sensation is arranged to treating it as a capacity of perceiving. Moreover, since Kant in this passage speaks of space as a perception, and thereby identifies space with the perception of it, the confusion may be explained thus. The form of phenomena is said to be the space in which all sensations are arranged, or in which all bodies are; space, apart from all sensations or bodies, i. e. empty, being the object of a pure perception, is treated as identical with a pure perception, viz. the perception of empty space; and the perception of empty space is treated as identical with a capacity of perceiving that which is spatial.

The existence of the confusion, however, is most easily realized by asking, 'How did Kant come to think of space and time as the *only* forms of perception?' It would seem obvious that the perception of *anything* implies a form of perception in the sense of a mode or capacity of perceiving. To perceive colours implies a capacity for seeing; to hear noises implies a capacity for hearing. And these capacities may fairly be called forms of perception. As soon as this is realized, the conclusion is inevitable that Kant was led to think of space and time as the only forms of perception, because in this connexion he was thinking of each as a form of phenomena, i. e. as something in which all bodies or their states are, or, from the point of view of our knowledge, as that in which sensuous material is to be arranged; for there is nothing except space and time in which such arrangement could plausibly be said to be carried out.

As has been pointed out, Kant's argument falls into two main parts, one of which prepares the way for the other. The aim of the former is to show *firstly* that our apprehension of space is *a priori*, and *secondly* that it belongs to perception and not to conception. The aim of the latter is to conclude from these characteristics of our apprehension of space that space is a property not of things in themselves but only of phenomena. These arguments may be considered in turn.

The really valid argument adduced by Kant for the *a priori* character of our apprehension of space is based on the nature of geometrical judgements. The universality of our judgements in geometry is not based upon experience, i. e. upon the observation of individual things in space. The necessity of geometrical relations is apprehended directly in virtue of the mind's own apprehending nature. Unfortunately in the present context Kant ignores this argument and substitutes two others, both of which are invalid.

1. "Space is no empirical conception which has been derived from external experiences. For in order that certain sensations may be related to something external to me (that is, to something in a different part of space from that in which I am), in like manner, in order that I may represent them as external to and next to each other, and consequently as not merely different but as in different places, the representation of space must already exist as a foundation. Consequently, the representation of space cannot be borrowed from the relations of external phenomena through experience; but, on the contrary, this external experience is itself first possible only through the said representation." Here Kant is thinking that in order to apprehend, for example, that A is to the right of B we must first apprehend empty space. He concludes that

our apprehension of space is *a priori*, because we apprehend empty space *before* we become aware of the spatial relations of individual objects in it.

To this the following reply may be made. (*a*) The term *a priori* applied to an apprehension should mean, not that it arises prior to experience, but that its validity is independent of experience. (*b*) That to which the term *a priori* should be applied is not the apprehension of empty space, which is individual, but the apprehension of the nature of space in general, which is universal. (*c*) We do not apprehend empty space before we apprehend individual spatial relations of individual bodies or, indeed, at any time. (*d*) Though we come to apprehend *a priori* the nature of space in general, the apprehension is not prior but posterior in time to the apprehension of individual spatial relations. (*e*) It does not follow from the temporal priority of our apprehension of individual spatial relations that our apprehension of the nature of space in general is 'borrowed from experience', and is therefore not *a priori*.

2. "We can never represent to ourselves that there is no space, though we can quite well think that no objects are found in it. It must, therefore, be considered as the condition of the possibility of phenomena, and not as a determination dependent upon them, and it is an *a priori* representation, which necessarily underlies external phenomena."

Here the premise is simply false. If 'represent' or 'think' means 'believe', we can no more represent or think that there are no objects in space than that there is no space. If, on the other hand, 'represent' or 'think' means 'make a mental picture of', the assertion is equally false. Kant is thinking of empty space as a kind of receptacle for objects, and the *a priori* character of our apprehension of space lies, as before, in the supposed fact that in order to apprehend objects in space we must begin with the apprehension of empty space.

The examination of Kant's arguments for the *perceptive* character of our apprehension of space is a more complicated matter. By way of preliminary it should be noticed that they presuppose the possibility in general of distinguishing features of objects which belong to the perception of them from others which belong to the conception of them. In particular, Kant holds that our apprehension of a body as a substance, as exercising force and as divisible, is due to our understanding as conceiving it, while our apprehension of it as extended and as having a shape is due to our sensibility as perceiving it. The distinction, however, will be found untenable in principle; and if this be granted, Kant's attempt to distinguish in this way the extension and shape of an object from its other features can be ruled out on general grounds. In any case, it must be conceded that the arguments fail by which he seeks to show that space in particular belongs to perception.

There appears to be no way of distinguishing perception and conception as the apprehension of different realities except as the apprehension of the individual and of the universal respectively. Distinguished in this way, the faculty of perception is that in virtue of which we apprehend the individual, and the faculty of conception is that power of reflection in virtue of which a universal is made the explicit object of thought. If this be granted, the only test for what is perceived is that it is individual, and the only test for what is conceived is that it is universal. These are in fact the tests which Kant uses. But if this be so, it follows that the various characteristics of objects cannot be divided into those which are perceived and those which are conceived. For the distinction between universal and individual is quite general, and applies to all characteristics of objects alike. Thus, in the case of colour, we can distinguish colour in general and the individual colours of individual objects; or, to take a less ambiguous instance, we can distinguish a particular shade of redness and its individual instances. Further, it may be said that perception is of the individual shade of red of the individual object, and that the faculty by which we become explicitly aware of the particular shade of red in general is that of conception. The same distinction can be drawn with respect to hardness, or shape, or any other characteristic of objects. The distinction, then, between perception and conception can be drawn with respect to any characteristic of objects, and does not serve to distinguish one from another.

Kant's arguments to show that our apprehension of space belongs to perception are two in number, and both are directed to show not, as they should, that space is a *form* of perception, but that it is a *perception*. The first runs thus: "Space is no discursive, or, as we say, general conception of relations of things in general, but a pure perception. For, in the first place, we can represent to ourselves only one space, and if we speak of many spaces we mean thereby only parts of one and the same unique space. Again, these parts cannot precede the one all-embracing space as the component parts, as it were, out of which it can be composed, but can be thought only in it. Space is essentially one; the manifold in it, and consequently the general conception of spaces in general, rests solely upon limitations."

Here Kant is clearly taking the proper test of perception. Its object, as being an individual, is unique; there is only one of it, whereas any conception has a plurality of instances. But he reaches his conclusion by supposing that we first perceive empty space and then become aware of its parts by dividing it. Parts of space are essentially limitations of the one space; therefore to apprehend them we must first apprehend space. And since space is *one*, it must be object of perception; in other words, space, in the sense of the one all-embracing space, i. e. the totality of individual spaces, is something perceived.

The argument appears open to two objections. In the *first* place, we do *not* perceive space as a whole, and then, by dividing it, come to apprehend individual spaces. We perceive individual spaces, or, rather, individual bodies occupying individual spaces. We then apprehend that these spaces, as spaces, involve an infinity of other spaces. In other words, it is reflection on the general nature of space, the apprehension of which is involved in our apprehension of individual spaces or rather of bodies in space, which gives rise to the apprehension of the totality of spaces, the apprehension being an act, not of perception, but of thought or conception. It is necessary, then, to distinguish (*a*) individual spaces, which we perceive; (*b*) the nature of space in general, of which we become aware by reflecting upon the character of perceived individual spaces, and which we conceive; (*c*) the totality of individual spaces, the thought of which we reach by considering the nature of space in general.

In the *second* place, the distinctions just drawn afford no ground for distinguishing space as something perceived from any other characteristic of objects as something conceived; for any other characteristic admits of corresponding distinctions. Thus, with respect to colour it is possible to distinguish (*a*) individual colours which we perceive; (*b*) colouredness in general, which we conceive by reflecting on the common character exhibited by individual colours and which involves various kinds or species of colouredness; (*c*) the totality of individual colours, the thought of which is reached by considering the nature of colouredness in general.

Both in the case of colour and in that of space there is to be found the distinction between universal and individual, and therefore also that between conception and perception. It may be objected that after all, as Kant points out, there is only one space, whereas there are many individual colours. But the assertion that there is only one space simply means that all individual bodies in space are related spatially. This will be admitted, if the attempt be made to think of two bodies as in different spaces and therefore as not related spatially. Moreover, there is a parallel in the case of colour, since individual coloured bodies are related by way of colour, e. g. as brighter and duller; and though such a relation is different from a relation of bodies in respect of space, the difference is due to the special nature of the universals conceived, and does not imply a difference between space and colour in respect of perception and conception. In any case, space as a whole is not object of perception, which it must be if Kant is to show that space, as being one, is perceived; for space in this context must mean the totality of individual spaces.

Kant's second argument is stated as follows: "Space is represented as an infinite *given* magnitude. Now every conception must indeed be considered as a representation which is contained in an infinite number of different possible representations (as their common mark), and which therefore contains these *under itself*, but no conception can, as such, be thought of as though it contained *in itself* an infinite number of representations. Nevertheless, space is so conceived, for all parts of space *ad infinitum* exist

simultaneously. Consequently the original representation of space is an *a priori perception* and not a *conception*." In other words, while a conception implies an infinity of individuals which come under it, the elements which constitute the conception itself (e. g. that of triangularity or redness) are not infinite; but the elements which go to constitute space are infinite, and therefore space is not a conception but a perception.

Though, however, space in the sense of the infinity of spaces may be said to contain an infinite number of spaces if it be meant that it *is* these infinite spaces, it does not follow, nor is it true, that space in this sense is object of perception.

The aim of the arguments just considered, and stated in § 2 of the *Aesthetic*, is to establish the two characteristics of our apprehension of space, from which it is to follow that space is a property of things only as they appear to us and not as they are in themselves. This conclusion is drawn in § 4. §§ 2 and 4 therefore complete the argument. § 3, a passage added in the second edition of the *Critique*, interrupts the thought, for ignoring § 2, it once more establishes the *a priori* and perceptive character of our apprehension of space, and independently draws the conclusion drawn in § 4. Since, however, Kant draws the final conclusion in the same way in § 3 and in § 4, and since a passage in the *Prolegomena*, of which § 3 is only a summary, gives a more detailed account of Kant's thought, attention should be concentrated on § 3, together with the passage in the *Prolegomena*.

It might seem at the outset that since the arguments upon which Kant bases the premises for his final argument have turned out invalid, the final argument itself need not be considered. The argument, however, of § 3 ignores the preceding arguments for the *a priori* and perceptive character of our apprehension of space. It returns to the *a priori* synthetic character of geometrical judgements, upon which stress is laid in the Introduction, and appeals to this as the justification of the *a priori* and perceptive character of our apprehension of space.

The argument of § 3 runs as follows: "Geometry is a science which determines the properties of space synthetically and yet *a priori*. What, then, must be the representation of space, in order that such a knowledge of it may be possible? It must be originally perception, for from a mere conception no propositions can be deduced which go beyond the conception, and yet this happens in geometry. But this perception must be *a priori*, i. e. it must occur in us before all sense-perception of an object, and therefore must be pure, not empirical perception. For geometrical propositions are always apodeictic, i. e. bound up with the consciousness of their necessity (e. g. space has only three dimensions), and such propositions cannot be empirical judgements nor conclusions from them."

"Now how can there exist in the mind an external perception which precedes the objects themselves, and in which the conception of them can be determined *a priori*? Obviously not otherwise than in so far as it has its seat in the subject only, as the formal nature of the subject to be affected by objects and thereby to obtain *immediate representation*, i. e. *perception* of them, and consequently only as the form of the external sense in general."

Here three steps are taken. From the *synthetic* character of geometrical judgements it is concluded that space is not something which we *conceive*, but something which we *perceive*. From their *a priori* character, i. e. from the consciousness of necessity involved, it is concluded that the perception of space must be *a priori* in a new sense, that of taking place *before* the perception of objects in it. From the fact that we perceive space before we perceive objects in it, and thereby are able to anticipate the spatial relations which condition these objects, it is concluded that space is only a characteristic of our perceiving nature, and consequently that space is a property not of things in themselves, but only of things as perceived by us.

Two points in this argument are, even on the face of it, paradoxical. Firstly, the term *a priori*, as applied not to geometrical judgements but to the perception of space, is given a temporal sense; it means not something whose validity is independent of experience and which is the manifestation of the nature of

the mind, but something which takes place before experience. Secondly, the conclusion is not that the perception of space *is the manifestation of* the mind's perceiving nature, but that it *is* the mind's perceiving nature. For the conclusion is that space is the formal nature of the subject to be affected by objects, and therefore the form of the external sense in general. Plainly, then, Kant here confuses an actual perception and a form or way of perceiving. These points, however, are more explicit in the corresponding passage in the *Prolegomena*.

It begins thus: "Mathematics carries with it thoroughly apodeictic certainty, that is, absolute necessity, and, therefore, rests on no empirical grounds, and consequently is a pure product of reason, and, besides, is thoroughly synthetical. How, then, is it possible for human reason to accomplish such knowledge entirely *a priori*?... But we find that all mathematical knowledge has this peculiarity, that it must represent its conception previously in *perception*, and indeed *a priori*, consequently in a perception which is not empirical but pure, and that otherwise it cannot take a single step. Hence its judgements are always *intuitive*.... This observation on the nature of mathematics at once gives us a clue to the first and highest condition of its possibility, viz. that there must underlie it *a pure perception* in which it can exhibit or, as we say, *construct* all its conceptions in the concrete and yet *a priori*. If we can discover this pure perception and its possibility, we may thence easily explain how *a priori* synthetical propositions in pure mathematics are possible, and consequently also how the science itself is possible. For just as empirical perception enables us without difficulty to enlarge synthetically in experience the conception which we frame of an object of perception through new predicates which perception itself offers us, so pure perception also will do the same, only with the difference that in this case the synthetical judgement will be *a priori* certain and apodeictic, while in the former case it will be only *a posteriori* and empirically certain; for the latter [i. e. the empirical perception on which the *a posteriori* synthetic judgement is based] contains only that which is to be found in contingent empirical perception, while the former [i. e. the pure perception on which the *a priori* synthetic judgement is based] contains that which is bound to be found in pure perception, since, as *a priori* perception, it is inseparably connected with the conception *before all experience* or individual sense-perception."

This passage is evidently based upon the account which Kant gives in the *Doctrine of Method* of the method of geometry. According to this account, in order to apprehend, for instance, that a three-sided figure must have three angles, we must draw in imagination or on paper an individual figure corresponding to the conception of a three-sided figure. We then see that the very nature of the act of construction involves that the figure constructed must possess three angles as well as three sides. Hence, perception being that by which we apprehend the individual, a perception is involved in the act by which we form a geometrical judgement, and the perception can be called *a priori*, in that it is guided by our *a priori* apprehension of the necessary nature of the act of construction, and therefore of the figure constructed.

The account in the *Prolegomena*, however, differs from that of the *Doctrine of Method* in one important respect. It asserts that the perception involved in a mathematical judgement not only may, but must, be pure, i. e. must be a perception in which no spatial object is present, and it implies that the perception must take place *before* all experience of actual objects. Hence *a priori*, applied to perception, has here primarily, if not exclusively, the temporal meaning that the perception takes place *antecedently to all experience*.

The thought of the passage quoted from the *Prolegomena* can be stated thus: 'A mathematical judgement implies the perception of an individual figure antecedently to all experience. This may be said to be the first condition of the possibility of mathematical judgements which is revealed by reflection. There is, however, a prior or higher condition. The perception of an individual figure involves as its basis another pure perception. For we can only construct and therefore perceive an individual figure in empty space. Space is that *in which* it must be constructed and perceived. A perception of empty space is, therefore,

necessary. If, then, we can discover how this perception is possible, we shall be able to explain the possibility of *a priori* synthetical judgements of mathematics.'

Kant continues as follows: "But with this step the difficulty seems to increase rather than to lessen. For henceforward the question is '*How is it possible to perceive anything a priori?*' A perception is such a representation as would immediately depend upon the presence of the object. Hence it seems impossible *originally* to perceive *a priori*, because perception would in that case have to take place without an object to which it might refer, present either formerly or at the moment, and accordingly could not be perception.... How can *perception* of the object precede the object itself?" Kant here finds himself face to face with the difficulty created by the preceding section. Perception, as such, involves the actual presence of an object; yet the pure perception of space involved by geometry — which, as pure, is the perception of empty space, and which, as the perception of empty space, is *a priori* in the sense of temporally prior to the perception of actual objects — presupposes that an object is not actually present.

The solution is given in the next section. "Were our perception necessarily of such a kind as to represent things *as they are in themselves*, no perception would take place *a priori*, but would always be empirical. For I can only know what is contained in the object in itself, if it is present and given to me. No doubt it is even then unintelligible how the perception of a present thing should make me know it as it is in itself, since its qualities cannot migrate over into my faculty of representation; but, even granting this possibility, such a perception would not occur *a priori*, i. e. before the object was presented to me; for without this presentation, no basis of the relation between my representation and the object can be imagined; the relation would then have to rest upon inspiration. It is therefore possible only in one way for my perception to precede the actuality of the object and to take place as *a priori* knowledge, viz. *if it contains nothing but the form of the sensibility, which precedes in me, the subject, all actual impressions through which I am affected by objects*. For I can know *a priori* that objects of the senses can only be perceived in accordance with this form of the sensibility. Hence it follows that propositions which concern merely this form of sensuous perception will be possible and valid for objects of the senses, and in the same way, conversely, that perceptions which are possible *a priori* can never concern any things other than objects of our senses."

This section clearly constitutes the turning-point in Kant's argument, and primarily expresses, in an expanded form, the central doctrine of § 3 of the *Aesthetic*, that an external perception anterior to objects themselves, and in which our conceptions of objects can be determined *a priori*, is possible, if, and only if, it has its seat in the subject as its formal nature of being affected by objects, and consequently as the form of the external sense in general. It argues that, since this is true, and since geometrical judgements involve such a perception anterior to objects, space must be only the form of sensibility.

Now why does Kant think that this conclusion follows? Before we can answer this question we must remove an initial difficulty. In this passage Kant unquestionably identifies a form of perception with an actual perception. It is at once an actual perception and a capacity of perceiving. This is evident from the words, "It is possible only in one way for my perception to precede the actuality of the object ... viz. *if it contains nothing but the form of the sensibility*." The identification becomes more explicit a little later. "A pure perception (of space and time) can underlie the empirical perception of objects, because it is nothing but the mere form of the sensibility, which precedes the actual appearance of the objects, in that it in fact first makes them possible. Yet this faculty of perceiving *a priori* affects not the matter of the phenomenon, i. e. that in it which is sensation, for this constitutes that which is empirical, but only its form, viz. space and time." His argument, however, can be successfully stated without this identification. It is only necessary to re-write his cardinal assertion in the form 'the perception of space must be nothing but the *manifestation* of the form of the sensibility'. Given this modification, the question becomes, 'Why does Kant think that the perception of empty space, involved by geometrical judgements, can be only a manifestation of our perceiving nature, and not in any way the apprehension of a real quality of objects?'

The answer must be that it is because he thinks that, while in empirical perception a real object is present, in the perception of empty space a real object is not present. He regards this as proving that the latter perception is only of something subjective or mental. “Space and time, by being pure *a priori* perceptions, prove that they are mere forms of our sensibility which must precede all empirical perception, i. e. sense-perception of actual objects.” His main conclusion now follows easily enough. If in perceiving empty space we are only apprehending a manifestation of our perceiving nature, what we apprehend in a geometrical judgement is really a law of our perceiving nature, and therefore, while it *must* apply to our perceptions of objects or to objects as perceived, it *cannot* apply to objects apart from our perception, or, at least, there is no ground for holding that it does so.

If, however, this fairly represents Kant’s thought, it must be allowed that the conclusion which he should have drawn is different, and even that the conclusion which he does draw is in reality incompatible with his starting-point.

His starting-point is the view that the truth of geometrical judgements presupposes a perception of empty space, in virtue of which we can discover rules of spatial relation which must apply to all spatial objects subsequently perceived. His problem is to discover the presupposition of this presupposition. The proper answer must be, not that space is a form of sensibility or a way in which objects appear to us, but that space is the form of all objects, i. e. that all objects are spatial. For in that case they must be subject to the laws of space, and therefore if we can discover these laws by a study of empty space, the only condition to be satisfied, if the objects of subsequent perception are to conform to the laws which we discover, is that all objects should be spatial. Nothing is implied which enables us to decide whether the objects are objects as they are in themselves or objects as perceived; for in either case the required result follows. If in empirical perception we apprehend things only as they appear to us, and if space is the form of them as they appear to us, it will no doubt be true that the laws of spatial relation which we discover must apply to things as they appear to us. But on the other hand, if in empirical perception we apprehend things as they are, and if space is their form, i. e. if things are spatial, it will be equally true that the laws discovered by geometry must apply to things as they are.

Again, Kant’s starting-point really commits him to the view that space is a characteristic of things as they are. For — paradoxical though it may be — his problem is to explain the possibility of *perceiving a priori*, i. e. of *perceiving* the characteristics of an object anterior to the actual presence of the object in perception. This implies that *empirical* perception, which involves the actual presence of the object, involves no difficulty; in other words, it is implied that empirical perception is of objects as they are. And we find Kant admitting this to the extent of allowing *for the sake of argument* that the perception of a present thing can make us know the thing as it is in itself. But if empirical perception gives us things as they are, and if, as is the case, and as Kant really presupposes, the objects of empirical perception are spatial, then, since space is their form, the judgements of geometry must relate to things as they are. It is true that on this view Kant’s first presupposition of geometrical judgements has to be stated by saying that we are able to perceive a real characteristic of things in space, before we perceive the things; and, no doubt, Kant thinks this impossible. According to him, when we perceive empty space no object is present, and therefore what is before the mind must be merely mental. But no greater difficulty is involved than that involved in the corresponding supposition required by Kant’s own view. It is really just as difficult to hold that we can perceive a characteristic of things as they appear to us *before* they appear, as to hold that we can perceive a characteristic of them as they are in themselves *before* we perceive them.

The fact is that the real difficulty with which Kant is grappling in the *Prolegomena* arises, not from the supposition that spatial bodies are things in themselves, but from the supposed presupposition of geometry that we must be able to perceive empty space before we perceive bodies in it. It is, of course, impossible to defend the perception of empty space, but *if* it be maintained, the space perceived must be conceded to be not, as Kant thinks, something mental or subjective, but a real characteristic of things. For, as has been

pointed out, the paradox of pure perception is reached solely through the consideration that, while in empirical perception we perceive objects, in pure perception we do not, and since the objects of empirical perception are spatial, space must be a real characteristic of them.

The general result of the preceding criticism is that Kant's conclusion does not follow from the premises by which he supports it. It should therefore be asked whether it is not possible to take advantage of this hiatus by presenting the argument for the merely phenomenal character of space without any appeal to the possibility of perceiving empty space. For it is clear that what was primarily before Kant, in writing the *Critique*, was the *a priori* character of geometrical judgements themselves, and not the existence of a perception of empty space which they were held to presuppose.

If, then, the conclusion that space is only the form of sensibility can be connected with the *a priori* character of geometrical judgements without presupposing the existence of a perception of empty space, his position will be rendered more plausible.

This can be done as follows. The essential characteristic of a geometrical judgement is not that it takes place prior to experience, but that it is not based upon experience. Thus a judgement, arrived at by an activity of the mind in which it remains within itself and does not appeal to actual experience of the objects to which the judgement relates, is implied to hold good of those objects. If the objects were things as they are in themselves, the validity of the judgement could not be justified, for it would involve the gratuitous assumption that a necessity of thought is binding on things which *ex hypothesi* are independent of the nature of the mind. If, however, the objects in question are things as perceived, they will be through and through conditioned by the mind's perceiving nature; and, consequently, if a geometrical rule, e. g. that a three-sided figure must have three angles, is really a law of the mind's perceiving nature, all individual perceptions, i. e. all objects as perceived by us, will necessarily conform to the law. Therefore, in the latter case, and in that only, will the universal validity of geometrical judgements be justified. Since, then, geometrical judgements are universally valid, space, which is that of which geometrical laws are the laws, must be merely a form of perception or a characteristic of objects as perceived by us.

This appears to be the best form in which the substance of Kant's argument, stripped of unessentials, can be stated. It will be necessary to consider both the argument and its conclusion.

The argument, so stated, is undeniably plausible. Nevertheless, examination of it reveals two fatal defects. In the first place, its starting-point is false. To Kant the paradox of geometrical judgements lies in the fact that they are not based upon an appeal to experience of the things to which they relate. It is implied, therefore, that judgements which are based on experience involve no paradox, and for the reason that in experience we apprehend things as they are. In contrast with this, it is implied that in geometrical judgements the connexion which we apprehend is not real, i. e. does not relate to things as they are. Otherwise, there would be no difficulty; if in geometry we apprehended rules of connexion relating to things as they are, we could allow without difficulty that the things must conform to them. No such distinction, however, can be drawn between *a priori* and empirical judgements. For the necessity of connexion, e. g. between being a three-sided figure and being a three-angled figure, is as much a characteristic of things as the empirically-observed shape of an individual body, e. g. a table. Geometrical judgements, therefore, cannot be distinguished from empirical judgements on the ground that in the former the mind remains within itself, and does not immediately apprehend fact or a real characteristic of reality. Moreover, since in a geometrical judgement we do in fact think that we are apprehending a real connexion, i. e. a connexion which applies to things and to things as they are in themselves, to question the reality of the connexion is to question the validity of thinking altogether, and to do this is implicitly to question the validity of our thought about the nature of our own mind, as well as the validity of our thought about things independent of the mind. Yet Kant's argument, in the form in which it has just been stated, presupposes that our thought is valid at any rate when it is concerned with our perceptions of things, even if it is not valid when concerned with the things as they are in themselves.

This consideration leads to the second criticism. The supposition that space is only a form of perception, even if it be true, *in no way assists* the explanation of the universal validity of geometrical judgements. Kant's argument really confuses a *necessity* of relation with the *consciousness of a necessity* of relation. No doubt, if it be a law of our perceiving nature that, whenever we perceive an object as a three-sided figure, the object as perceived contains three angles, it follows that any object as perceived will conform to this law; just as if it be a law of things as they are in themselves that three-sided figures contain three angles, all three-sided figures will in themselves have three angles. But what has to be explained is the universal applicability, not of a law, but of a judgement about a law. For Kant's real problem is to explain why *our judgement* that a three-sided figure must contain three angles must apply to all three-sided figures. Of course, if it be granted that in the judgement we apprehend the true law, the problem may be regarded as solved. But how are we to know that what we judge *is* the true law? The answer is in no way facilitated by the supposition that the judgement relates to our perceiving nature. It can just as well be urged that what we think to be a necessity of our perceiving nature is not a necessity of it, as that what we think to be a necessity of things as they are in themselves is not a necessity of them. The best, or rather the only possible, answer is simply that that of which we apprehend the necessity must be true, or, in other words, that we *must* accept the validity of thought. Hence nothing is gained by the supposition that space is a form of sensibility. If what we judge to be necessary is, as such, valid, a judgement relating to things in themselves will be as valid as a judgement relating to our perceiving nature.

This difficulty is concealed from Kant by his insistence on the *perception* of space involved in geometrical judgements. This leads him at times to identify the judgement and the perception, and, therefore, to speak of the judgement as a perception. Thus we find him saying that mathematical judgements are always *perceptive*, and that "It is only possible for my perception to precede the actuality of the object and take place as *a priori* knowledge, if &c." Hence, if, in addition, a geometrical judgement, as being a judgement about a necessity, be identified with a necessity of judging, the conformity of things to these universal judgements will become the conformity of things to rules or necessities of our judging, i. e. of our perceiving nature, and Kant's conclusion will at once follow. Unfortunately for Kant, a geometrical judgement, however closely related to a perception, must itself, as the apprehension of what is necessary and universal, be an act of thought rather than of perception, and therefore the original problem of the conformity of things to our mind can be forced upon him again, even after he thinks that he has solved it, in the new form of that of the conformity within the mind of perceiving to thinking.

The fact is simply that the universal validity of geometrical judgements can in no way be 'explained'. It is not in the least explained or made easier to accept by the supposition that objects are 'phenomena'. These judgements must be accepted as being what we presuppose them to be in making them, viz. the direct apprehension of necessities of relation between real characteristics of real things. To explain them by reference to the phenomenal character of what is known is really — though contrary to Kant's intention — to throw doubt upon their validity; otherwise, they would not need explanation. As a matter of fact, it is *impossible* to question their validity. In the act of judging, doubt is impossible. Doubt can arise only when we subsequently reflect and temporarily lose our hold upon the consciousness of necessity in judging. The doubt, however, since it is non-existent in our geometrical consciousness, is really groundless, and, therefore, the problem to which it gives rise is unreal. Moreover if, *per impossibile*, doubt could be raised, it could not be set at rest. No vindication of a judgement in which we are conscious of a necessity could do more than take the problem a stage further back, by basing it upon some other consciousness of a necessity; and since this latter judgement could be questioned for precisely the same reason, we should only be embarking upon an infinite process.

We may now consider Kant's conclusion in abstraction from the arguments by which he reaches it. It

raises three main difficulties.

In the first place, it is not the conclusion to be expected from Kant's own standpoint. The phenomenal character of space is inferred, not from the fact that we make judgements at all, but from the fact that we make judgements of a particular kind, viz. *a priori* judgements. From this point of view empirical judgements present no difficulty. It should, therefore, be expected that the qualities which we attribute to things in empirical judgements are not phenomenal, but belong to things as they are. Kant himself implies this in drawing his conclusion concerning the nature of space. "Space does not represent any quality of things in themselves or things in relation to one another; that is, it does not represent any determination of things which would attach to the objects themselves and would remain, even though we abstracted from all subjective conditions of perception. For neither absolute nor relative determinations of objects can be perceived prior to the existence of the things to which they belong, and therefore not *a priori*." It is, of course, implied that in experience, where we do not discover determinations of objects prior to the existence of the objects, we do apprehend determinations of things as they are in themselves, and not as they are in relation to us. Thus we should expect the conclusion to be, not that all that we know is phenomenal — which is Kant's real position — but that spatial (and temporal) relations alone are phenomenal, i. e. that they alone are the result of a transmutation due to the nature of our perceiving faculties. This conclusion would, of course, be absurd, for what Kant considers to be the empirically known qualities of objects disappear, if the spatial character of objects is removed. Moreover, Kant is prevented by his theory of perception from seeing that this is the real solution of his problem, absurd though it may be. Since perception is held to arise through the origination of sensations by things in themselves, empirical knowledge is naturally thought of as knowledge about sensations, and since sensations are palpably within the mind, and are held to be due to things in themselves, knowledge about sensations can be regarded as phenomenal.

On the other hand, if we consider Kant's conclusion from the point of view, not of the problem which originates it, but of the distinction in terms of which he states it, viz. that between things as they are in themselves and things as perceived by us, we are led to expect the contrary result. Since perception is the being affected by things, and since the nature of the affection depends upon the nature of our capacity of being affected, in *all* perception the object will become distorted or transformed, as it were, by our capacity of being affected. The conclusion, therefore, should be that in all judgements, empirical as well as *a priori*, we apprehend things only as perceived. The reason why Kant does not draw this conclusion is probably that given above, viz. that by the time Kant reaches the solution of his problem empirical knowledge has come to relate to sensation only; consequently, it has ceased to occur to him that empirical judgements could possibly give us knowledge of things as they are. Nevertheless, Kant should not have retained in his formulation of the problem a distinction irreconcilable with his solution of it; and if he had realized that he was doing so he might have been compelled to modify his whole view.

The second difficulty is more serious. If the truth of geometrical judgements presupposes that space is only a property of objects as perceived by us, it is a paradox that geometricians should be convinced, as they are, of the truth of their judgements. They undoubtedly think that their judgements apply to things as they are in themselves, and not merely as they appear to us. They certainly do not think that the relations which they discover apply to objects only as perceived. Not only, therefore, do they not think that bodies in space are phenomena, but they do not even leave it an open question whether bodies are phenomena or not. Hence, if Kant be right, they are really in a state of illusion, for on his view the true geometrical judgement should include in itself the phenomenal character of spatial relations; it should be illustrated by expressing Euclid I. 5 in the form that the equality of the angles at the base of an isosceles triangle belongs to objects as perceived. Kant himself lays this down. "The proposition 'all objects are beside one another in space' is valid under the limitation that these things are taken as objects of our sensuous perception. If I join the condition to the perception, and say 'all things, as external phenomena, are beside

one another in space', the rule is valid universally, and without limitation." Kant, then, is in effect allowing that it is possible for geometricians to make judgements, of the necessity of which they are convinced, and yet to be wrong; and that, therefore, the apprehension of the necessity of a judgement is no ground of its truth. It follows that the truth of geometrical judgements can no longer be accepted as a starting-point of discussion, and, therefore, as a ground for inferring the phenomenal character of space.

There seems, indeed, one way of avoiding this consequence, viz. to suppose that for Kant it was an absolute starting-point, which nothing would have caused him to abandon, that only those judgements of which we apprehend the necessity are true. It would, of course, follow that geometricians would be unable to apprehend the necessity of geometrical judgements, and therefore to make such judgements, until they had discovered that things as spatial were only phenomena. It would not be enough that they should think that the phenomenal or non-phenomenal character of things as spatial must be left an open question for the theory of knowledge to decide. In this way the necessity of admitting the illusory character of geometry would be avoided. The remedy, however, is at least as bad as the disease. For it would imply that geometry must be preceded by a theory of knowledge, which is palpably contrary to fact. Nor could Kant accept it; for he avowedly bases his theory of knowledge, i. e. his view that objects as spatial are phenomena, upon the truth of geometry; this procedure would be circular if the making of true geometrical judgements was allowed to require the prior adoption of his theory of knowledge.

The third difficulty is the most fundamental. Kant's conclusion (and also, of course, his argument) presupposes the validity of the distinction between phenomena and things in themselves. If, then, this distinction should prove untenable in principle, Kant's conclusion with regard to space must fail on general grounds, and it will even have been unnecessary to consider his arguments for it. The importance of the issue, however, requires that it should be considered in a separate chapter.

CHAPTER IV. PHENOMENA AND THINGS IN THEMSELVES

The distinction between phenomena and things in themselves can be best approached by considering Kant's formulation of the alternative views of the nature of space and time. "What are space and time? Are they real existences? Or are they merely determinations or relations of things, such, however, as would also belong to them in themselves, even if they were not perceived, or are they attached to the form of perception only, and consequently to the subjective nature of our mind, without which these predicates can never be attributed to any thing?"

Of these three alternatives, the first can be ignored. It is opposed to the second, and is the view that space and time are things rather than relations between things. This opposition falls within the first member of the wider opposition between things as they are in themselves and things as they are as perceived, and Kant, and indeed any one, would allow that if space and time belong to things as they are in themselves and not to things only as perceived, they are relations between things rather than things. The real issue, therefore, lies between the second and third alternatives. Are space and time relations between things which belong to them both in themselves and also as perceived by us, or are they relations which belong to things only as perceived?

To this question we may at once reply that, inasmuch as it involves an impossible antithesis, it is wholly unreal. The thought of a property or a relation which belongs to things as perceived involves a contradiction. To take Plato's example, suppose that we are looking at a straight stick, partially immersed in water. If we have not previously seen the stick, and are ignorant of the laws of refraction, we say that the stick is bent. If, however, we learn the effect of refraction, and observe the stick from several positions, we alter our assertion. We say that the stick is not really bent, but only looks or appears bent to us. But, if we reflect at all, we do not express our meaning by saying that the stick *is* bent to us as perceiving, though not in reality. The word 'is' essentially relates to what really is. If, therefore, the phrase 'to us as perceiving' involves an opposition to the phrase 'in reality', as it must if it is to be a real qualification of 'is', it cannot rightly be added to the word 'is'. To put the matter more explicitly, the assertion that something *is* so and so implies that it is so and so in itself, whether it be perceived or not, and therefore the assertion that something is so and so to us as perceiving, though not in itself, is a contradiction in terms. The phrase 'to us as perceiving', as a restriction upon the word 'is', merely takes back the precise meaning of the word 'is'. That to which the phrase can be added is not the word 'is', but the word 'looks' or 'appears'. We can rightly say that the stick looks or appears bent to us as perceiving. But even then the addition only helps to make explicit the essential meaning of 'appears', for 'appears' really means 'appears to us', and 'as perceiving' only repeats the meaning of 'appears' from the side of the perceiving subject as opposed to that of the object perceived. The essential point, however, is thereby brought out that the phrase 'to us as perceiving' essentially relates not to what a thing is, but to what it looks or appears to us.

What, then, is the proper statement of Kant's view that space is a determination of things only as they appear to us, and not as they are in themselves? It should be said that things are not in reality spatial, but only look or appear spatial to us. It should not be said that they *are* spatial for our perception, though not in themselves. Thus the view properly stated implies that space is an illusion, inasmuch as it is not a real property of things at all. This implication, however, is precisely the conclusion which Kant wishes to avoid. He takes infinite trouble to explain that he does not hold space and time to be illusions. Though *transcendentally ideal* (i. e. though they do not belong to things in themselves), they are *empirically real*. In other words, space and time are real relations of *something*, though not of things in themselves.

How, then, does Kant obtain something of which space and time can be regarded as really relations?

He reaches it by a transition which at first sight seems harmless. In stating the fact of perception he substitutes for the assertion that things appear so and so to us the assertion that things produce appearances in us. In this way, instead of an assertion which relates to the thing and states what it is not but only appears, he obtains an assertion which introduces a second reality distinct from the thing, viz. an appearance or phenomenon, and thereby he gains something other than the thing to which space can be attached as a real predicate. He thus gains something in respect of which, with regard to spatial relations we can be said to have *knowledge* and not illusion. For the position now is that space, though not a property of things in themselves, *is* a property of phenomena or appearances; in other words, that while things in themselves are not spatial, phenomena and appearances *are* spatial. As evidence of this transition, it is enough to point out that, while he states the *problem* in the form 'Are things in themselves spatial or are they only spatial as appearing to us?' he usually states the *conclusion* in the form 'Space is the form of phenomena', i. e. phenomena are spatial. A transition is thereby implied from 'things as appearing' to 'appearances'. At the same time, it is clear that Kant is not aware of the transition, but considers the expressions equivalent, or, in other words, fails to distinguish them. For both modes of stating the conclusion are to be found even in the same sentence. "This predicate [space] is applied to things only in so far as they appear to us, i. e. are objects of sensibility [i. e. phenomena]." Again, the common phrase 'things as phenomena' implies the same confusion. Moreover, if Kant had realized that the transition was more than one of phraseology he must have seen that it was necessary to recast his argument.

It may be said, then, that Kant is compelled to end with a different distinction from that with which he begins. He begins with the distinction between things as they are in themselves and things as they appear to us, the distinction relating to one and the same reality regarded from two different points of view. He ends with the distinction between two different realities, things-in-themselves, external to, in the sense of independent of, the mind, and phenomena or appearances within it. Yet if his *argument* is to be valid, the two distinctions should be identical, for it is the first distinction to which the argument appeals. In fact, we find him expressing what is to him the same distinction now in the one way and now in the other as the context requires.

The final form of Kant's conclusion, then, is that while things in themselves are not, or, at least, cannot be known to be spatial, 'phenomena,' or the appearances produced in us by things in themselves, are spatial. Unfortunately, the conclusion in this form is no more successful than it is in the former form, that things are spatial only as perceived. Expressed by the formula 'phenomena are spatial', it has, no doubt, a certain plausibility; for the word 'phenomena' to some extent conceals the essentially mental character of what is asserted to be spatial. But the plausibility disappears on the substitution of 'appearances' — the true equivalent of Kant's *Erscheinungen* — for 'phenomena'. Just as it is absurd to describe the fact that the stick only looks bent by saying that, while the stick is not bent, the appearance which it produces is bent, so it is, even on the face of it, nonsense to say that while things are not spatial, the appearances which they produce in us are spatial. For an 'appearance', being necessarily something mental, cannot possibly be said to be extended. Moreover, it is really an abuse of the term 'appearance' to speak of appearances *produced by* things, for this phrase implies a false severance of the appearance from the things which appear. If there are 'appearances' at all, they are appearances *of* things and not appearances *produced by* them. The importance of the distinction lies in the difference of implication. To speak of appearances produced by things is to imply that the object of perception is merely something mental, viz. an appearance. Consequently, access to a non-mental reality is excluded; for a perception of which the object is something belonging to the mind's own being cannot justify an inference to something beyond the mind, and the result is inevitably solipsism. On the other hand, the phrase 'appearances of things', whatever defects it may have, at least implies that it is a non-mental reality which appears, and therefore that in perception we are in direct relation to it; the phrase, therefore, does not imply from the very

beginning that the apprehension of a non-mental reality is impossible.

The objection will probably be raised that this criticism is much too summary. We do, it will be said, distinguish in ordinary consciousness between appearance and reality. Consequently there must be some form in which Kant's distinction between things in themselves and phenomena and the conclusion based upon it are justified. Moreover, Kant's reiterated assertion that his view does not imply that space is an illusion, and that the distinction between the real and the illusory is possible *within* phenomena, requires us to consider more closely whether Kant may not after all be entitled to hold that space is not an illusion.

This objection is, of course, reasonable. No one can satisfy himself of the justice of the above criticisms until he has considered the real nature of the distinction between appearance and reality. This distinction must, therefore, be analysed. But before this is done it is necessary, in order to discover the real issue, to formulate the lines on which Kant may be defended. 'The reality,' it may be urged, 'which ideally we wish to know must be admitted to exist *in itself*, in the sense of independently of the perception, and consequently its nature must be admitted to be independent of perception. Ideally, then, our desire is to know things as they are in themselves, a desire sufficiently expressed by the assertion that we desire to know things, for to know them is to know them as they are, i. e. as they are independently of perception. Again, since the reality which we desire to know consists of individuals, and since the apprehension of an individual implies perception, knowledge of reality requires perception. If in perception we apprehended reality as it is, no difficulty would arise. But we do not, for we are compelled to distinguish what things are, and what they look or appear; and what they appear essentially relates to perception. We perceive them as they look or appear and, therefore, not as they are, for what they look and what they are are *ex hypothesi* distinguished. And this fact constitutes a fatal obstacle to knowledge in general. We cannot know anything as it *is*. At least the negative side of Kant's position must be justified. We never can know things as they are in themselves. What then do we know? Two alternative answers may be given. It may be held that the positive side of Kant's position, though indefensible in the form that we know things as they appear to us, is valid in the form that we know what things look or appear. This, no doubt, implies that our ordinary beliefs about reality are illusory, for what things look is *ex hypothesi* different from what they are. But the implication does not constitute an important departure from Kant's view. For in any case only that is knowledge proper which relates to things as they are, and therefore the supposed knowledge of things as they appear may be discarded without serious loss. On the other hand, it may be held that the positive side of Kant's position can be vindicated in the form that, while we do not know things in themselves, we do know the appearances which they produce in us. It is true that this view involves the difficulty of maintaining that appearances are spatial, but the difficulty is not insuperable. Moreover, in this form the doctrine has the advantage that, unlike the former, it does not imply that the knowledge which we have is only of illusions, for instead of implying that our knowledge is merely knowledge of what things look but really are not, it implies that we know the real nature of realities of another kind, viz. of appearances. Again, in this form of the view, it may be possible to vindicate Kant's doctrine that the distinction between the real and the illusory is tenable within what we know, for it may be possible to distinguish within appearances between a 'real' appearance and an 'illusory' appearance.'

An implication of this defence should be noticed. The issue relates to the nature of space, and may be stated in terms of it. For, since space is a presupposition of all other properties which the non-philosophical consciousness attributes to physical things, it makes no difference whether we say that things *only appear* heavy, hard, in motion, &c., or whether we say that things *only appear* spatial. In the same way it is a matter of indifference whether we say that, though things are not heavy, hard, &c., their appearances are so, or whether we say that, though things are not spatial, their appearances are so. The issue, then, concerns the possibility of maintaining either that things only appear spatial, or that the appearances which they produce are spatial, while the things themselves are not, or, at least cannot be

known to be, spatial.

The tenability of these alternative positions has to be considered apart from the argument of the *Aesthetic*, for this, as we have seen, breaks down. At the outset it is important to realize that these positions are the product of philosophical reflection, and constitute general theories of knowledge. As has been pointed out, the distinction between appearance and reality first arises in our ordinary or scientific consciousness. In this consciousness we are compelled to distinguish between appearance and reality with respect to the details of a reality which, as a whole, or, in principle, we suppose ourselves to know. Afterwards in our philosophical consciousness we come to reflect upon this distinction and to raise the question whether it is not applicable to reality as a whole. We ask with respect to knowledge in general, and not merely with respect to certain particular items of knowledge, whether we know or can know reality, and not merely appearance. The two positions just stated are alternative ways of answering the question in the negative. They are, then, philosophical views based upon a distinction found in our ordinary consciousness. Consequently, in order to decide whether the distinction will bear the superstructure placed upon it by the philosophical consciousness, it is necessary to examine the distinction as it exists in our ordinary consciousness.

The distinction is applied in our ordinary consciousness both to the primary and to the secondary qualities of matter, i. e. to the size, shape, position and motion of physical bodies, and to their colour, warmth, &c. We say, for instance, that the moon looks or appears as large as the sun, though really it is much smaller. We say that railway lines, though parallel, look convergent, just as we say that the straight stick in water looks bent. We say that at sunset the sun, though really below the horizon, looks above it. Again, we say that to a person who is colour blind the colour of an object looks different to what it really is, and that the water into which we put our hand may be warmer than it appears to our touch.

The case of the primary qualities may be considered first. Since the instances are identical in principle, and only differ in complexity, it will be sufficient to analyse the simplest, that of the apparent convergence of the railway lines.

Two points at once force themselves upon our notice. In the first place, we certainly suppose that we perceive the reality which we wish to know, i. e. the reality which, as we suppose, exists independently of our perception, and not an ‘appearance’ of it. It is, as we say, the real lines which we see. Even the term ‘convergent’, in the assertion that the lines look convergent, conveys this implication. For ‘convergent’ is essentially a characteristic not of an appearance but of a reality, in the sense in which something independent of perception may be opposed as a reality to an ‘appearance’, which, as such, presupposes perception. We can say neither that an appearance is convergent, nor that the appearance of the lines is convergent. Only a reality similar to the lines, e. g. two roads, can be said to be convergent. Our ordinary thought, therefore, furnishes no ground for the view that the object of perception is not the thing, but merely an appearance of or produced by it. In the second place, the assertion that the lines *look* convergent implies considerable knowledge of the real nature of the reality to which the assertion relates. Both the terms ‘lines’ and ‘convergent’ imply that the reality *is* spatial. Further, if the context is such that we mean that, while the lines look convergent, we do not know their real relation, we imply that the lines really possess some characteristic which falls within the genus to which convergence belongs, i. e. we imply that they are convergent, divergent, or parallel. If, on the other hand, the context is such that we mean that the lines only look convergent, we imply that the lines are parallel, and therefore presuppose complete knowledge in respect of the very characteristic in regard to which we state what is only appearance. The assertion, then, in respect of a primary quality, that a thing looks so and so implies knowledge of its general character as spatial, and ignorance only of a detail; and the assertion that a thing only looks or appears so and so implies knowledge of the detail in question.

Attention may now be drawn to a general difficulty which may be raised with respect to the use of the terms ‘looks’ and ‘appears’. It may be stated thus: ‘If the lines are not convergent, how is it possible even

to say that they *look* convergent? Must it not be implied that at least under *certain* circumstances we should perceive the lines as they are? Otherwise, why should we use the words ‘look’ or ‘appear’ at all? Moreover, this implication can be pushed further; for if we maintain that we perceive the real lines, we may reasonably be asked whether we must not under *all* circumstances perceive them as they are. It seems as though a reality cannot be perceived except as it is.’ It is the view to which this difficulty gives rise which is mainly responsible for the doctrine that the object of perception is not the reality, but an appearance. Since we do distinguish between what things look and what they are, it would seem that the object of perception cannot be the thing, but only an appearance produced by it. Moreover, the doctrine gains in plausibility from the existence of certain illusions in the case of which the reality to which the illusion relates seems non-existent. For instance, if we look steadily at the flame of a candle, and then press one eyeball with a finger, we see, as we say, two candles; but since *ex hypothesi* there is only one candle, it seems that what we see must be, not the candle, but two images or appearances produced by it.

This difficulty is raised in order to draw attention to the fact that, in the case of the railway lines, where it can be met on its own ground, this is because, and only because, we believe space to be ‘real’, i. e. to be a characteristic of reality, and because we understand its nature. The distinction between the actual and the apparent angle made by two straight lines presupposes a limiting case in which they coincide. If the line of sight along which we observe the point of intersection of two lines is known to be at right angles to both lines, we expect, and rightly expect, to see the angle of intersection as it is. Again, if we look at a short portion of two railway lines from a point known to be directly above them, and so distant that the effects of perspective are imperceptible, we can say that the lines look what they are, viz. parallel. Thus, from the point of view of the difficulty which has been raised, there is this justification in general for saying that two lines *look* parallel or *look* at right angles, that we know that in certain cases what they look is identical with what they are. In the same way, assertions of the type that the moon *looks* as large as the sun receive justification from our knowledge that two bodies of equal size and equally distant from the observer *are* what they look, viz. of the same size. And in both cases the justification presupposes knowledge of the reality of space and also such insight into its nature as enables us to see that in certain cases there must be an identity between what things look and what they are in respect of certain spatial relations. Again, in such cases we see that so far is it from being necessary to think that a thing must be perceived as it is, that it is not only possible but necessary to distinguish what a thing looks from what it is, and precisely in consequence of the nature of space. The visual perception of spatial relations from its very nature presupposes a particular point of view. Though the perception itself cannot be spatial, it presupposes a particular point in space as a standpoint or point of view, and is therefore subject to conditions of perspective. This is best realized by considering the supposition that perfect visual powers would enable us to see the whole of a body at once, and that this perception would be possible if we had eyes situated all round the body. The supposition obviously breaks down through the impossibility of combining two or more points of view in one perception. But if visual perception is necessarily subject to conditions of perspective, the spatial relations of bodies can never look what they are except in the limiting case referred to. Moreover, this distinction is perfectly intelligible, as we should expect from the necessity which we are under of drawing it. We understand perfectly why it is that bodies must, in respect of their spatial relations, look different to what they are, and we do so solely because we understand the nature of space, and therefore also the conditions of perspective involved in the perception of what is spatial. It is, therefore, needless to make the assertion ‘Two lines appear convergent’ intelligible by converting the verb ‘appears’ into a substantive, viz. an ‘appearance’, and then making the assertion relate to an ‘appearance’. For — apart from the fact that this would not achieve the desired end, since no suitable predicate could be found for the appearance — the assertion that the lines *look* or *appear* convergent is perfectly intelligible in itself, though not capable of being stated in terms of anything else. If we generalize this result, we may say that the distinction between appearance and reality, drawn with

regard to the primary qualities of bodies, throughout presupposes the reality of space, and is made possible, and indeed necessary, by the nature of space itself.

We may now turn to the way in which we draw the distinction with respect to the secondary qualities of physical things. It must, it seems, be admitted that in our ordinary consciousness we treat these qualities as real qualities of bodies. We say that a bell is noisy; that sugar is sweet; that roses smell; that a mustard plaster is hot; that the sky is blue. It must also be admitted that in our ordinary consciousness we draw a distinction between appearance and reality *within* these qualities, just as we do *within* the primary qualities. Just as we speak of the right or real shape of a body, so we speak of its right or real colour, taste, &c., and distinguish these from its apparent colours, taste, &c., to some individual. We thereby imply that these qualities are real qualities of bodies, and that the only difficulty is to determine the particular character of the quality in a given case. Yet, as the history of philosophy shows, it takes but little reflection to throw doubt on the reality of these qualities. The doubt arises not merely from the apparent impossibility of finding a principle by which to determine the right or real quality in a given case, but also and mainly from misgivings as to the possible reality of heat, smell, taste, noise, and colour apart from a percipient. It must also be admitted that this misgiving is well founded; in other words, that these supposed real qualities do presuppose a percipient, and therefore cannot be qualities of things, since the qualities of a thing must exist independently of the perception of the thing. This will readily be allowed in the case of all the secondary qualities except colour. No one, it may reasonably be said, who is familiar with and really faces the issue, will maintain that sounds, smells, tastes, and sensations of touch exist apart from a sensitive subject. So much is this the case, that when once the issue is raised, it is difficult and, in the end, impossible to use the word ‘appear’ in connexion with these qualities. Thus it is difficult and, in the end, impossible to say that a bell *appears* noisy, or that sugar *appears* sweet. We say, rather, that the bell and the sugar produce certain sensations in us.

The case of colour, however, is more difficult. From the closeness of its relation to the shape of bodies, it seems to be a real quality of bodies, and not something relative to a sensitive subject like the other secondary qualities. In fact, so intimate seems the relation of colour to the shape of bodies, that it would seem — as has, of course, often been argued — that if colour be relative to a sensitive subject, the primary qualities of bodies must also be relative to a sensitive subject, on the ground that shape is inseparable from colour. Yet whether this be so or not, it must, in the end, be allowed that colour does presuppose a sensitive subject in virtue of its own nature, and quite apart from the difficulty — which is in itself insuperable — of determining the right colour of individual bodies. It must, therefore, be conceded that colour is not a quality of bodies. But if this be true, the use of the term ‘look’ or ‘appear’ in connexion with colour involves a difficulty which does not arise when it is used in connexion with the primary qualities. Bodies undoubtedly look or appear coloured. Now, as has already been suggested, the term ‘look’ seems to presuppose some identity between what a thing is and what it looks, and at least the possibility of cases in which they are what they look — a possibility which, as we have seen, is realized in the case of the primary qualities. Yet, if colour is not a quality of bodies, then, with respect to colour, things look what they never are, or, in other words, are wholly different from what they look; and since it seems impossible to hold that colour is really a property of bodies, this conclusion must, in spite of its difficulty, be admitted to be true.

There remain, however, to be noticed two respects in which assertions concerning what things look in respect of colour agree with corresponding assertions in respect of the primary qualities. They imply that what we perceive is a reality, in the sense already explained. Thus the assertion that the grass looks green implies that it is a reality which looks green, or, in other words, that the object of perception is a reality, and not an ‘appearance’. Again, such assertions imply that the reality about which the assertion is made is spatial. The term ‘grass’ implies extension, and only what is extended can be said to look coloured. If it be urged that what looks coloured need only *look* extended, it may be replied that the two considerations

which lead us to think that things only *look* coloured presuppose that they *are* spatial. For the two questions, the consideration of which leads to this conclusion, are, 'What is the right or real colour of an individual thing?' and 'Has it really any colour at all, or does it only look coloured?' and neither question is significant unless the thing to which it refers is understood to be spatial.

We may now return to the main issue. Is it possible to maintain either (1) the position that only appearances are spatial and possess all the qualities which imply space, or (2) the position that things only appear spatial and only appear or look as if they possessed the qualities which imply space? It may be urged that these questions have already been implicitly answered in the negative. For the division of the qualities of things into primary and secondary is exhaustive, and, as has been shown, the distinction between 'appearance' and 'reality', when drawn with respect to the primary qualities and to colour — the only secondary quality with respect to which the term 'appears' can properly be used — presupposes the reality of space. Consequently, since we do draw the distinction, we must accept the reality of that which is the condition of drawing it at all. But even though this be conceded — and the concession is inevitable — the problem cannot be regarded as solved until we have discovered what it is in the nature of space which makes both positions untenable. Moreover, the admission that in the case of colour there is no identity between what things look and what they are removes at a stroke much of the difficulty of one position, viz. that we only know what things look or appear, and not what they are. For the admission makes it impossible to maintain as a general principle that there must be some identity between what they look and what they are. Consequently, it seems *possible* that things should be wholly different from what they appear, and, if so, the issue cannot be decided on general grounds. What is in substance the same point may be expressed differently by saying that just as things only *look* coloured, so things may only *look* spatial. We are thus again led to see that the issue really turns on the nature of space and of spatial characteristics in particular.

Cf. p-7.

Cf. .

In discussing the distinction between the real and the apparent shape of bodies, it was argued that while the nature of space makes it necessary to distinguish in general between what a body looks and what it is, yet the use of the term *look* receives justification from the existence of limiting cases in which what a thing looks and what it is are identical. The instances considered, however, related to qualities involving only two dimensions, e. g. convergence and bentness, and it will be found that the existence of these limiting cases is due solely to this restriction. If the assertion under consideration involves a term implying three dimensions, e. g. 'cubical' or 'cylindrical', there are no such limiting cases. Since our visual perception is necessarily subject to conditions of perspective, it follows that although we can and do see a cube, we can never see it as it *is*. It *is*, so to say, in the way in which a child draws the side of a house, i. e. with the effect of perspective eliminated; but it never can be seen in this way. No doubt, our unreflective knowledge of the nature of perspective enables us to allow for the effect of perspective, and to ascertain the real shape of a solid object from what it looks when seen from different points. In fact, the habit of allowing for the effect of perspective is so thoroughly ingrained in human beings that the child is not aware that he is making this allowance, but thinks that he draws the side of the house as he sees it. Nevertheless, it is true that we never see a cube as it is, and if we say that a thing looks cubical, we ought only to mean that it looks precisely what a thing looks which is a cube.

It is obvious, however, that two dimensions are only an abstraction from three, and that the spatial relations of bodies, considered fully, involve three dimensions; in other words, spatial characteristics are, properly speaking, three-dimensional. It follows that terms which fully state spatial characteristics can never express what things look, but only what they are. A body may be cylindrical, and we may see a cylindrical body; but such a body can never, strictly speaking, *look* cylindrical. The opposition, however, between what a thing *is* and what it *looks* implies that what it *is* is independent of a percipient, for it is

precisely correlation to a percipient which is implied by ‘looking’ or ‘appearing’. In fact, it is the view that what a thing really is it is, independently of a percipient, that forms the real starting-point of Kant’s thought. It follows, then, that the spatial characteristics of things, and therefore space itself, must belong to what they are in themselves apart from a percipient, and not to what they look. Consequently, it is so far from being true that we only know what things look and not what they are, that in the case of spatial relations we actually know what things are, even though they never look what they are.

This conclusion, however, seems to present a double difficulty. It is admitted that we perceive things as they look, and not as they are. How, then, is it possible for the belief that things *are* spatial to arise? For how can we advance from knowledge of what they look to knowledge of what they are but do not look? Again, given that the belief has arisen, may it not after all be illusion? No vindication seems possible. For how can it be possible to base the knowledge of what things are, independently of perception, upon the knowledge of what they look? Nevertheless, the answer is simple. In the case of the perception of what is spatial there is no transition *in principle* from knowledge of what things look to knowledge of what things are, though there is continually such a transition *in respect of details*. It is, of course, often necessary, and often difficult, to determine the precise position, shape, &c., of a thing, and if we are to come to a decision, we must appeal to what the thing looks or appears under various conditions. But, from the very beginning, our consciousness of what a thing appears in respect of spatial characteristics implies the consciousness of it as spatial and therefore also as, in particular, three-dimensional. If we suppose the latter consciousness absent, any assertion as to what a thing appears in respect of spatial characteristics loses significance. Thus, although there is a process by which we come to learn that railway lines are really parallel, there is no process by which we come to learn that they are really spatial. Similarly, although there is a process by which we become aware that a body is a cube, there is no process by which we become aware that it has a solid shape of some kind; the process is only concerned with the determination of the precise shape of the body. The second difficulty is, therefore, also removed. For if assertions concerning the apparent shape, &c. of things presuppose the consciousness that the things *are* spatial, to say that this consciousness may be illusory is to say that all statements concerning what things *appear*, in respect of spatial relations, are equally illusory. But, since it is wholly impossible to deny that we can and do state what things appear in this respect, the difficulty must fall to the ground.

There remains to be answered the question whether Kant’s position is tenable in its other form, viz. that while we cannot say that reality is spatial, we can and must say that the appearances which it produces are spatial. This question, in view of the foregoing, can be answered as soon as it is stated. We must allow that reality is spatial, since, as has been pointed out, assertions concerning the apparent shape of things presuppose that they are spatial. We must equally allow that an appearance cannot be spatial. For on the one hand, as has just been shown, space and spatial relations can only qualify something the existence of which is not relative to perception, since it is impossible to perceive what is spatial as it is; and on the other hand an appearance, as being *ex hypothesi* an appearance to some one, i. e. to a percipient, must be relative to perception.

We may say, then, generally, that analysis of the distinction between appearance and reality, as it is actually drawn in our ordinary consciousness, shows the falsity of both forms of the philosophical agnosticism which appeals to the distinction. We know things; not appearances. We know what things are; and not merely what they appear but are not. We may also say that Kant cannot possibly be successful in meeting, at least in respect of space, what he calls ‘the easily foreseen but worthless objection that the ideality of space and of time would turn the whole sensible world into pure illusion’. For space, according to him, is not a property of things in themselves; it cannot, as has been shown, be a property of appearances; to say that it is a property of things as they appear to us is self-contradictory; and there is nothing else of which it can be said to be a property.

In conclusion, it may be pointed out that the impossibility that space and spatial characteristics should

qualify appearances renders untenable Kant's attempt to draw a distinction between reality and appearance *within* 'phenomena' or 'appearances'. The passage in which he tries to do so runs as follows:

"We generally indeed distinguish in appearances that which essentially belongs to the perception of them, and is valid for every human sense in general, from that which belongs to the same perception accidentally, as valid not for the sensibility in general, but for a particular state or organization of this or that sense. Accordingly, we are accustomed to say that the former is knowledge which represents the object itself, whilst the latter represents only the appearance of the same. This distinction, however, is only empirical. If we stop here (as is usual) and do not again regard that empirical perception as itself a mere phenomenon (as we ought to do), in which nothing which concerns a thing in itself is to be found, our transcendental distinction is lost; and in that case we are after all believing that we know things in themselves, although in the world of sense, investigate its objects as profoundly as we may, we have to do with nothing but appearances. Thus we call the rainbow a mere appearance during a sunny shower, but the rain the thing in itself; and this is right, if we understand the latter conception only physically as that which in universal experience and under all different positions with regard to the senses is in perception so and so determined and not otherwise. But if we consider this empirical element in general, and inquire, without considering its agreement with every human sense, whether it represents an object in itself (not the raindrops, for their being phenomena by itself makes them empirical objects), the question of the relation of the representation to the object is transcendental; and not only are the raindrops mere appearances, but even their circular form, nay, even the space in which they fall, are nothing in themselves but mere modifications or fundamental dispositions of our sensuous perception; the transcendental object, however, remains unknown to us."

Kant's meaning is plain. He is anxious to justify the physical distinction made in our ordinary or non-philosophical consciousness between a thing in itself and a mere appearance, but at the same time to show that it falls within appearances, in respect of the philosophical distinction between things in themselves and appearances or phenomena. The physical distinction is the first of which we become aware, and it arises through problems connected with our senses. Owing, presumably, to the contradictions which would otherwise ensue, the mind is forced to distinguish between things and the 'appearances' which they produce, and to recognize that they do not correspond. The discrepancy is due to the fact that our perceptions are conditioned by the special positions of our physical organs with regard to the object of perception, and we discover its real nature by making allowance for these special positions. We thereby advance in knowledge to the extent of overcoming an obstacle due to the nature of our senses. But, this obstacle overcome, philosophical reflection forces upon us another. The thing which we distinguish in our ordinary consciousness from its appearances is, after all, only another appearance; and although the physical problem is solved concerning its accordance with our special senses, there remains the philosophical problem as to whether this appearance need correspond to what in the end is the real thing, viz. that which exists in itself and apart from all perception. The only possible answer is that it need not. We therefore can only know appearances and not reality; in other words, we cannot have knowledge proper. At the same time, our knowledge of appearances is objective to the extent that the appearances in question are the same for every one, and for us on various occasions; for the effects due to special positions of our senses have been removed. If, therefore, we return to the physical distinction, we see that the 'things' to which it refers are only a special kind of appearance, viz. that which is the same for every one, and for us at all times. The physical distinction, then, being a distinction between one kind of appearance and another, falls within 'phenomena' or 'appearances'.

Now the obvious objection to this line of thought is that the result of the second or metaphysical application of the distinction between reality and appearance is to destroy or annul the first or physical application of it. To oppose the rain, i. e. the raindrops as the thing in itself to the rainbow as a mere appearance is to imply that the rain is not an appearance. For though what is opposed to a *mere*

appearance may still be an appearance, it cannot be called an appearance at all if it be described as the thing in itself. If it be only another appearance, it is the same in principle as that to which it is opposed, and consequently cannot be opposed to it. Thus, if Kant means by the rain, in distinction from the rainbow, the appearance when, as we say, we see the circular raindrops, the title of this appearance to the term thing in itself is no better than that of the rainbow; it is, in fact, if anything, worse, for the appearance is actual only under exceptional circumstances. We may never see the raindrops thus, or in Kant's language, have this 'appearance'; and therefore, in general, an appearance of this kind is not actual but only possible. The truth is that we can only distinguish something as the thing in itself from an appearance, so long as we mean by the thing in itself what Kant normally means by it, viz. something which exists independently of perception and is not an appearance at all. That of which Kant is really thinking, and which he *calls* the appearance which is the thing, in distinction from a mere appearance, is not an appearance; on the contrary, it is the raindrops themselves, which he describes as circular and as falling through space, and which, as circular and falling, must exist and have these characteristics in themselves apart from a percipient. Kant's formula for an empirical thing, i. e. a thing which is an appearance, viz. 'that which in universal experience and under all different positions with regard to the senses is in perception so and so determined', is merely an attempt to achieve the impossible, viz. to combine in one the characteristics of a thing and an appearance. While the reference to *perception* and to *position with regard to the senses* implies that what is being defined is an appearance, the reference to *universal* experience, to *all* positions with regard to the senses, and to that which *is so and so determined* implies that it is a thing. But, plainly, mention of position with regard to the senses, if introduced at all, should refer to the *differences* in perception due to the different position of the object in particular cases. There is nothing of which it can be said that we perceive it in the same way or that it looks the same from *all* positions. When Kant speaks of that which under *all* different positions with regard to the senses is so and so determined, he is really referring to something in the consideration of which all reference to the senses has been discarded; it is what should be described as that which *in reality and apart from* all positions with regard to the senses is so and so determined; and this, as such, cannot be an appearance. Again, the qualification of 'is so and so determined' by 'in perception' is merely an attempt to treat as relative to perception, and so as an appearance, what is essentially independent of perception. Kant, no doubt, is thinking of a real presupposition of the process by which we distinguish between the real and the apparent qualities of bodies, i. e. between what they are and what they appear. We presuppose that that quality is really, and not only apparently, a quality of a body, which we and every one, judging from what it looks under various conditions (i. e. 'in universal experience'), must believe it to possess in itself and independently of all perception. His mistake is that in formulating this presupposition he treats as an appearance, and so as relative to perception, just that which is being distinguished from what, as an appearance, is relative to perception.

Underlying the mistake is the identification of perception with judgement. Our apprehension of what things *are* is essentially a matter of thought or judgement, and not of perception. We do not *perceive* but *think* a thing as it is. It is true that we can follow Kant's language so far as to say that our judgement that the portion of the great circle joining two points on the surface of a sphere is the shortest way between them *via* the surface belongs essentially to the thinking faculty of every intelligent being, and also that it is valid for all intelligences, in the sense that they must all hold it to be true; and we can contrast this judgement with a perception of the portion of the great circle as something which, though it cannot be said to be invalid, still differs for different beings according to the position from which they perceive it. Kant, however, treats the judgement as a *perception*; for if we apply his general assertion to this instance, we find him saying that what we judge the portion of the great circle to be essentially belongs to the *perception* of it, and is valid for the *sensuous* faculty of every human being, and that thereby it can be distinguished from what belongs to the same perception of a great circle accidentally, e. g. its apparent

colour, which is valid only for a particular organization of this or that sense. In this way he correlates what the great circle really is, as well as what it looks, with perception, and so is able to speak of what it is for perception. But, in fact, what the great circle is, is correlated with thought, and not with perception; and if we raise Kant's transcendental problem in reference not to perception but to thought, it cannot be solved in Kant's agnostic manner. For it is a presupposition of thinking that things are in themselves what we think them to be; and from the nature of the case a presupposition of thinking not only cannot be rightly questioned, but cannot be questioned at all.

NOTE ON THE FIRST ANTINOMY

Kant holds that the antinomy or contradiction which arises when we consider the character of the world as spatial and temporal, viz. that we are equally bound to hold that the world is infinite in space and time, and that it is finite in space and time, is due to regarding the world as a thing in itself. He holds that the contradiction disappears, as soon as it is recognized that the world is only a phenomenon, for then we find that we need only say that the world is *capable* of being extended infinitely in respect of time and space. Objects in space and time are only phenomena, and, as such, are actual only in perception. When we say that a past event, or that a body which we do not perceive, is real, we merely assert the possibility of a 'perception'. "All events from time immemorial prior to my existence mean nothing else than the possibility of prolonging the chain of experience from the present perception upwards to the conditions which determine this perception according to time." "That there may be inhabitants of the moon, although no one has ever seen them, must certainly be admitted, but this assertion only means that we could come upon them in the possible progress of experience." The contradictions, therefore, can be avoided by substituting for the actual infinity of space and time, as relating to things in themselves, the possible infinity of a series of 'perceptions'.

This contention, if successful, is clearly important. If it could be shown that the treatment of the world as a thing in itself is the source of a contradiction, we should have what at least would seem a strong, if not conclusive, ground for holding that the world is a phenomenon, and, consequently, that the distinction between phenomena and things in themselves is valid.

Professor Cook Wilson has, however, pointed out that Kant's own doctrine does not avoid the difficulty. For, though, according to Kant, the infinity of actual representations of spaces and times is only possible, yet the possibilities of these representations will be themselves infinite, and, as such, will give rise to contradictions similar to those involved in the infinity of space and time. Moreover, as Professor Cook Wilson has also pointed out, there is no contradiction involved in the thought of the world as spatial and temporal; for, as we see when we reflect, we always presuppose that space and time are infinite, and we are only tempted to think that they must be finite, because, when maintaining that the world must be a whole, we are apt to make the false assumption, without in any way questioning it, that any whole must be finite.

CHAPTER V. TIME AND INNER SENSE

The arguments by which Kant seeks to show that time is not a determination of things in themselves but only a form of perception are, *mutatis mutandis*, identical with those used in his treatment of space. They are, therefore, open to the same criticisms, and need no separate consideration.

Time, however, according to Kant, differs from space in one important respect. It is the form not of outer but of inner sense; in other words, while space is the form under which we perceive things, time is the form under which we perceive ourselves. It is upon this difference that attention must be concentrated. The existence of the difference at all is upon general grounds surprising. For since the arguments by which Kant establishes the character of time as a form of perception run *pari passu* with those used in the case of space, we should expect time, like space, to be a form under which we perceive things; and, as a matter of fact, it will be found that the only *argument* used to show that time is the form of inner, as opposed to outer, sense is not only independent of Kant's general theory of forms of sense, but is actually inconsistent with it. Before, however, we attempt to decide Kant's right to distinguish between inner and outer sense, we must consider the facts which were before Kant's mind in making the distinction.

These facts and, to a large extent, the frame of mind in which Kant approached them, find expression in the passage in Locke's *Essay*, which explains the distinction between 'ideas of sensation' and 'ideas of reflection'.

"Whence has it [i. e. the mind] all the materials of reason and knowledge? To this I answer, in one word, from experience.... Our observation, employed either about external, sensible objects, or about the internal operations of our minds, perceived and reflected on, by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge...."

"First, Our senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways, wherein those objects do affect them: and thus we come by those ideas we have of Yellow, White, Heat, Cold, Soft, Hard, Bitter, Sweet, and all those, which we call sensible qualities; which, when I say the senses convey into the mind, I mean, they, from external objects, convey into the mind what produces there those perceptions. This great source of most of the ideas we have, depending wholly upon our senses, and derived by them to the understanding, I call *sensation*."

"Secondly, The other fountain, from which experience furnisheth the understanding with ideas, is the perception of the operations of our own mind within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on, and consider, do furnish the understanding with another set of ideas, which could not be had from things without; and such are Perception, Thinking, Doubting, Believing, Reasoning, Knowing, Willing, and all the different actings of our own minds; which we being conscious of, and observing in ourselves, do, from these, receive into our understandings as distinct ideas, as we do from bodies affecting our senses. This source of ideas every man has wholly in himself; and though it be not sense as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense. But, as I call the other sensation, so I call this *reflection*; the ideas it affords being such only as the mind gets, by reflecting on its own operations within itself."

Here Locke is thinking of the distinction between two attitudes of mind, which, however difficult it may be to state satisfactorily, must in some sense be recognized. The mind, undoubtedly, in virtue of its powers of perceiving and thinking — or whatever they may be — becomes through a temporal process aware of a spatial world in its varied detail. In the first instance, its attention is absorbed in the world of which it thus becomes aware; subsequently, however, it is in some way able to direct its attention away from this world to the activities in virtue of which it has become aware of this world, and in some sense to make

itself its own object. From being conscious it becomes self-conscious. This process by which the mind turns its attention back upon itself is said to be a process of ‘reflection’. While we should say that it is by perception that we become aware of things in the physical world, we should say that it is by reflection that we become aware of our activities of perceiving, thinking, willing, &c. Whatever difficulties the thought of self-consciousness may involve, and however inseparable, and perhaps even temporally inseparable, the attitudes of consciousness and self-consciousness may turn out to be, the distinction between these attitudes must be recognized. The object of the former is the world, and the object of the latter is in some sense the mind itself; and the attitudes may be described as that of our ordinary, scientific, or unreflecting consciousness and that of reflection.

The significance of Locke’s account of this distinction lies for our purposes in its anticipation of Kant. He states the second attitude, as well as the first, in terms of sense. Just as in our apprehension of the world things external to, in the sense of existing independently of, the mind are said to act on our physical organs or ‘senses’, and thereby to produce ‘perceptions’ in the mind, so the mind is said to become conscious of its own operations by ‘sense’. We should notice, however, that Locke hesitates to use the word ‘sense’ in the latter case, on the ground that it involves no operation of external things (presumably upon our physical organs), though he thinks that the difficulty is removed by calling the sense in question ‘internal’.

Kant is thinking of the same facts, and also states them in terms of sense, though allowance must be made for the difference of standpoint, since for him ‘sense’, in the case of the external sense, refers not to the affection of our physical organs by physical bodies, but to the affection of the mind by things in themselves. Things in themselves act on our minds and produce in them appearances, or rather sensations, and outer sense is the mind’s capacity for being so affected by outer things, i. e. things independent of the mind. This is, in essentials, Kant’s statement of the attitude of consciousness, i. e. of our apprehension of the world which exists independently of the mind, and which, for him, is the world of things in themselves. He also follows Locke in giving a parallel account of the attitude of self-consciousness. He asks, ‘How can the subject perceive itself?’ Perception *in man* is essentially passive; the mind must be *affected* by that which it perceives. Consequently, if the mind is to perceive itself, it must be affected by its own activity; in other words, there must be an inner sense, i. e. a capacity in virtue of which the mind is affected by itself. Hence Kant is compelled to extend his agnosticism to the knowledge of ourselves. Just as we do not know things, but only the appearances which they produce in us, so we do not know ourselves, but only the appearances which we produce in ourselves; and since time is a mode of relation of these appearances, it is a determination not of ourselves, but only of the appearances due to ourselves.

The above may be said to represent the train of thought by which Kant arrived at his doctrine of time and the inner sense. It was reached by combining recognition of the fact that we come to be aware not only of the details of the physical world, but also of the successive process on our part by which we have attained this knowledge, with the view that our apprehension of this successive process is based on ‘sense’, just as is our apprehension of the world. But the question remains whether Kant is, on his own principles, entitled to speak of an inner sense at all. According to him, knowledge begins with the production in us of sensations, or, as we ought to say in the present context, appearances by the action of things in themselves. These sensations or appearances can reasonably be ascribed to external sense. They may be ascribed to sense, because they arise through our being *affected* by things in themselves. The sense may be called external, because the object affecting it is external to the mind, i. e. independent of it. In conformity with this account, internal sense must be the power of being affected by something internal to the mind, i. e. dependent upon the mind itself, and since being affected implies the activity of affecting, it will be the power of being affected by the mind’s own activity. The activity will presumably be that of arranging spatially the sensations or appearances due to things in themselves. This activity must be said to produce an affection in us, the affection being an appearance due to ourselves. Lastly, the mind must be

said to arrange these appearances temporally. Hence it will be said to follow that we know only the appearances due to ourselves and not ourselves, and that time is only a determination of these appearances.

The weakness of the position just stated lies on the surface. It provides no means of determining whether any affection produced in us is produced by ourselves rather than by the thing in itself; consequently we could never say that a given affection was an appearance due to *ourselves*, and therefore to *inner* sense. On the contrary, we should ascribe all affections to things in themselves, and should, therefore, be unable to recognize an *inner* sense at all. In order to recognize an inner sense we must know that certain affections are due to *our* activity, and, to do this, we must know what the activity consists in — for we can only be aware that we are active by being aware of an activity of ours of a particular kind — and, therefore, we must know ourselves. Unless, then, we know ourselves, we cannot call any affections internal.

If, however, the doctrine of an internal sense is obviously untenable from Kant's own point of view, why does he hold it? The answer is that, inconsistently with his general view, he continues to think of the facts as they really are, and that he is deceived by an ambiguity into thinking that the facts justify a distinction between internal and external sense.

He brings forward only one argument to show that time is the form of the internal sense. "Time is nothing else than the form of the internal sense, i. e. of the perception of ourselves and our inner state. For time cannot be any determination of external phenomena; it has to do neither with a shape nor a position; on the contrary, it determines the relation of representations in our internal state."

To follow this argument it is first necessary to realize a certain looseness and confusion in the expression of it. The term 'external', applied to phenomena, has a double meaning. It must mean (1) that of which the parts are external to one another, i. e. spatial; for the ground on which time is denied to be a determination of external phenomena is that it has nothing to do with a shape or a position. It must also mean (2) external to, in the sense of independent of, the mind; for it is contrasted with our internal state, and if 'internal', applied to 'our state', is not to be wholly otiose, it can only serve to emphasize the contrast between our state and something external to in the sense of independent of us. Again, 'phenomena,' in the phrase 'external phenomena', can only be an unfortunate expression for things independent of the mind, these things being here called phenomena owing to Kant's view that bodies in space are phenomena. Otherwise, 'phenomena' offers no contrast to 'our state' and to 'representations'. The passage, therefore, presupposes a distinction between states of ourselves and things in space, the former being internal to, or dependent upon, and the latter external to, or independent of, the mind.

It should now be easy to see that the argument involves a complete *non sequitur*. The conclusion which is justified is that time is a form not of things but of our own states. For the fact to which he appeals is that while things, as being spatial, are not related temporally, our states are temporally related; and if 'a form' be understood as a mode of relation, this fact can be expressed by the formula 'Time is a form not of things but of our own states', the corresponding formula in the case of space being 'Space is a form not of our states but of things'. But the conclusion which Kant desires to draw — and which he, in fact, actually draws — is the quite different conclusion that time is a form of *perception* of our states, the corresponding conclusion in the case of space being that space is a form of perception of things. For time is to be shown to be the form of inner sense, i. e. the form of the perception of what is internal to ourselves, i. e. of our own states. The fact is that the same unconscious transition takes place in Kant's account of time which, as we saw, takes place in his account of space. In the case of space, Kant passes from the assertion that space is a form of things, in the sense that all things are spatially related — an assertion which he expresses by saying that space is the form of phenomena — to the quite different assertion that space is a form of perception, in the sense of a way in which we perceive things as opposed to a way in which things are. Similarly, in the case of time, Kant passes from the assertion that time is the

form of our internal states, in the sense that all our states are temporally related, to the assertion that time is a way in which we perceive our states as opposed to a way in which our states really are. Further, the two positions, which he thus fails to distinguish, are not only different, but incompatible. For if space is a form of things, and time is a form of our states, space and time cannot belong only to our mode of perceiving things and ourselves respectively, and not to the things and ourselves; for *ex hypothesi* things *are* spatially related, and our states *are* temporally related.

Kant's procedure, therefore, may be summed up by saying that he formulates a view which is true but at the same time inconsistent with his general position, the view, viz. that while things in space are not temporally related, the acts by which we come to apprehend them are so related; and further, that he is deceived by the verbally easy transition from a legitimate way of expressing this view, viz. that time is the form of our states, to the desired conclusion that time is the form of inner sense.

The untenable character of Kant's position with regard to time and the knowledge of ourselves can be seen in another way. It is not difficult to show that, in order to prove that we do not know *things*, but only the appearances which they produce, we must allow that we do know *ourselves*, and not appearances produced by ourselves, and, consequently, that time is real and not phenomenal. To show this, it is only necessary to consider the objection which Kant himself quotes against his view of time. The objection is important in itself, and Kant himself remarks that he has heard it so unanimously urged by intelligent men that he concludes that it must naturally present itself to every reader to whom his views are novel. According to Kant, it runs thus: "Changes are real (this is proved by the change of our own representations, even though all external phenomena, together with their changes, be denied). Now changes are only possible in time; therefore time is something real." And he goes on to explain why this objection is so unanimously brought, even by those who can bring no intelligible argument against the ideality of space. "The reason is that men have no hope of proving apodeictically the absolute reality of space, because they are confronted by idealism, according to which the reality of external objects is incapable of strict proof, whereas the reality of the object of our internal senses (of myself and my state) is immediately clear through consciousness. External objects might be mere illusion, but the object of our internal senses is to their mind undeniably something real."

Here, though Kant does not see it, he is faced with a difficulty from which there is no escape. On the one hand, according to him, we do not know things in themselves, i. e. things independent of the mind. In particular, we cannot know that they are spatial; and the objection quoted concedes this. On the other hand, we do know phenomena or the appearances produced by things in themselves. Phenomena or appearances, however, as he always insists, are essentially states or determinations of the mind. To the question, therefore, 'Why are we justified in saying that we do know phenomena, whereas we do not know the things which produce them?' Kant could only answer that it is because phenomena are dependent upon the mind, as being its own states. As the objector is made to say, 'the reality of the object of our internal senses (of myself and my state) is immediately clear through consciousness.' If we do not know things in themselves, because they are independent of the mind, we only know phenomena because they are dependent upon the mind. Hence Kant is only justified in denying that we know things in themselves if he concedes that we really know our own states, and not merely appearances which they produce.

Again, Kant must allow — as indeed he normally does — that these states of ours are related by way of succession. Hence, since these states are really our states and not appearances produced by our states, these being themselves unknown, time, as a relation of these states, must itself be real, and not a way in which we apprehend what is real. It must, so to say, be really in what we apprehend about ourselves, and not put into it by us as perceiving ourselves.

The objection, then, comes to this. Kant must at least concede that we undergo a succession of changing states, even if he holds that *things*, being independent of the mind, cannot be shown to undergo such a

succession; consequently, he ought to allow that time is not a way in which we apprehend ourselves, but a real feature of our real states. Kant's answer does not meet the point, and, in any case, proceeds on the untenable assumption that it is possible for the characteristic of a thing to belong to it as perceived, though not in itself.

CHAPTER VI. KNOWLEDGE AND REALITY

Kant's theory of space, and, still more, his theory of time, are bewildering subjects. It is not merely that the facts with which he deals are complex; his treatment of them is also complicated by his special theories of 'sense' and of 'forms of perception'. Light, however, may be thrown upon the problems raised by the *Aesthetic*, and upon Kant's solution of them, in two ways. In the first place, we may attempt to vindicate the implication of the preceding criticism, that the very nature of knowledge presupposes the independent existence of the reality known, and to show that, in consequence, all idealism is of the variety known as subjective. In the second place, we may point out the way in which Kant is misled by failing to realize (1) the directness of the relation between the knower and the reality known, and (2) the impossibility of transferring what belongs to one side of the relation to the other.

The question whether any reality exists independently of the knowledge of it may be approached thus. The standpoint of the preceding criticism of Kant may be described as that of the plain man. It is the view that the mind comes by a temporal process to apprehend or to know a spatial world which exists independently of it or of any other mind, and that the mind knows it as it exists in the independence. 'Now this view,' it may be replied, 'is exposed to at least one fatal objection. It presupposes the possibility of knowing the thing in itself, i. e. something which exists independently of the mind which comes to know it. Whatever is true, this is not. Whatever be the criticism to which Kant's doctrine is exposed in detail, it contains one inexpugnable thesis, viz. that the thing in itself cannot be known. Unless the physical world stands in essential relation to the mind, it is impossible to understand how it can be known. This position being unassailable, any criticism of an idealistic theory must be compatible with it, and therefore confined to details. Moreover, Kant's view can be transformed into one which will defy criticism. Its unsatisfactory character lies in the fact that in regarding the physical world as dependent on the mind, it really alters the character of the world by reducing the world to a succession of 'appearances' which, as such, can only be mental, i. e. can only belong to the mind's own being. Bodies, as being really appearances in the mind, are regarded as on the level of transitory mental occurrences, and as thereby at least resembling feelings and sensations. This consequence, however, can be avoided by maintaining that the real truth after which Kant was groping was that knower and known form an inseparable unity, and that, therefore, any reality which is not itself a knower, or the knowing of a knower, presupposes a mind which knows it. In that case nothing is suggested as to the special nature of the reality known, and, in particular, it is not implied to be a transitory element of the mind's own being. The contention merely attributes to any reality, conceived to have the special nature ordinarily attributed to it, the additional characteristic that it is known. Consequently, on this view, the physical world can retain the permanence ordinarily attributed to it. To the objection that, at any rate, *our* knowledge is transitory, and that if the world is relative to it the world also must be transitory, it may be replied — though with some sense of uneasiness — that the world must be considered relative not to us as knowers, but to a knower who knows always and completely, and whose knowing is in some way identical with ours. Further, the view so transformed has two other advantages. In the first place, it renders it possible to dispense with what has been called the Mrs. Harris of philosophy, the thing in itself. As Kant states his position, the thing in itself must be retained, for it is impossible to believe that there is no reality other than what is mental. But if the physical world need not be considered to be a succession of mental occurrences, it can be considered to be the reality which is not mental. In the second place, knowledge proper is vindicated, for on this view we do not know 'only' phenomena; we know the reality which is not mental, and we know it as it is, for it is as object of knowledge.'

'Moreover, the contention must be true, and must form the true basis of idealism. For the driving force

of idealism is furnished by the question, ‘How can the mind and reality come into the relation which we call knowledge?’ This question is unanswerable so long as reality is thought to stand in no essential relation to the knowing mind. Consequently, in the end, knowledge and reality must be considered inseparable. Again, even if it be conceded that the mind in some way gains access to an independent reality, it is impossible to hold that the mind can really know it. For the reality cannot in the relation of knowledge be what it is apart from this relation. It must become in some way modified or altered in the process. Hence the mind cannot on this view know the reality as it is. On the other hand, if the reality is essentially relative to a knower, the knower knows it as it is, for what it is is what it is in this relation.’

The fundamental objection, however, to this line of thought is that it contradicts the very nature of knowledge. Knowledge unconditionally presupposes that the reality known exists independently of the knowledge of it, and that we know it as it exists in this independence. It is simply *impossible* to think that any reality depends upon our knowledge of it, or upon any knowledge of it. If there is to be knowledge, there must first *be* something to be known. In other words, knowledge is essentially discovery, or the finding of what already is. If a reality could only be or come to be in virtue of some activity or process on the part of the mind, that activity or process would not be ‘knowing’, but ‘making’ or ‘creating’, and to make and to know must in the end be admitted to be mutually exclusive.

This presupposition that what is known exists independently of being known is quite general, and applies to feeling and sensation just as much as to parts of the physical world. It must in the end be conceded of a toothache as much as of a stone that it exists independently of the knowledge of it. There must be a pain to be attended to or noticed, which exists independently of our attention or notice. The true reason for asserting feeling and sensation to be dependent on the mind is that they presuppose not a knowing, but a feeling and a sentient subject respectively. Again, it is equally presupposed that knowing in no way alters or modifies the thing known. We can no more think that in apprehending a reality we do not apprehend it as it is apart from our knowledge of it, than we can think that its existence depends upon our knowledge of it. Hence, if ‘things in themselves’ means ‘things existing independently of the knowledge of them’, knowledge is essentially of ‘things in themselves’. It is, therefore, unnecessary to consider whether idealism is assisted by the supposition of a non-finite knowing mind, correlated with reality as a whole. For reality must equally be independent of it. Consequently, if the issue between idealism and realism is whether the physical world is or is not dependent on the mind, it cannot turn upon a dependence in respect of knowledge.

That the issue does not turn upon knowledge is confirmed by our instinctive procedure when we are asked whether the various realities which we suppose ourselves to know depend upon the mind. Our natural procedure is not to treat them simply as realities and to ask whether, as realities, they involve a mind to know them, but to treat them as realities of the particular kind to which they belong, and to consider relation to the mind of some kind other than that of knowledge. We should say, for instance, that a toothache or an emotion, as being a feeling, presupposes a mind capable of feeling, whose feeling it is; for if the mind be thought of as withdrawn, the pain or the feeling must also be thought of as withdrawn. We should say that an act of thinking presupposes a mind which thinks. We should, however, naturally deny that an act of thinking or knowing, in order to be, presupposes that it is known either by the thinker whose act it is, or by any other mind. In other words, we should say that knowing presupposes a mind, not as something which *knows* the knowing, but as something which *does* the knowing. Again, we should naturally say that the shape or the weight of a stone is *not* dependent on the mind which perceives the stone. The shape, we should say, would disappear with the disappearance of the stone, but would not disappear with the disappearance of the mind which perceives the stone. Again, we should assert that the stone itself, so far from depending on the mind which perceives it, has an independent being of its own. We might, of course, find difficulty in deciding whether a reality of some particular kind, e. g. a colour, is dependent on a mind. But, in any case, we should think that the ground for decision lay in the special

character of the reality in question, and should not treat it merely as a reality related to the mind as something known. We should ask, for instance, whether a colour, as a colour, involves a mind which sees, and not whether a colour, as a reality, involves its being known. Our natural procedure, then, is to divide realities into two classes, those which depend on a mind, and may therefore be called mental, and those which do not, and to conclude that some realities depend upon the mind, while others do not. We thereby ignore a possible dependence of realities on their being known; for not only is the dependence which we recognize of some other kind, e. g. in respect of feeling or sentience, but if the dependence were in respect of knowledge, we could not distinguish in respect of dependence between one reality and another.

Further, if reality be allowed to exist independently of knowledge, it is easy to see that, from the idealist's point of view, Kant's procedure was essentially right, and that all idealism, when pressed, must prove subjective; in other words, that the idealist must hold that the mind can only know what is mental and belongs to its own being, and that the so-called physical world is merely a succession of appearances. Moreover, our instinctive procedure is justified. For, in the first place, since it is impossible to think that a reality depends for its existence upon being known, it is impossible to reach an idealistic conclusion by taking into account relation by way of knowledge; and if this be the relation considered, the only conclusion can be that all reality is independent of the mind. Again, since knowledge is essentially of reality as it is apart from its being known, the assertion that a reality is dependent upon the mind is an assertion of the kind of thing which it is in itself, apart from its being known. And when we come to consider what we mean by saying of a reality that it depends upon the mind, we find we mean that it is in its own nature of such a kind as to disappear with the disappearance of the mind, or, more simply, that it is of the kind called mental. Hence, we can only decide that a particular reality depends upon the mind by appeal to its special character. We cannot treat it simply as a reality the relation of which to the mind is solely that of knowledge. And we can only decide that all reality is dependent upon the mind by appeal to the special character of all the kinds of reality of which we are aware. Hence, Kant in the *Aesthetic*, and Berkeley before him, were essentially right in their procedure. They both ignored consideration of the world simply as a reality, and appealed exclusively to its special character, the one arguing that in its special character as spatial and temporal it presupposed a percipient, and the other endeavouring to show that the primary qualities are as relative to perception as the secondary. Unfortunately for their view, in order to think of bodies in space as dependent on the mind, it is necessary to think of them as being in the end only certain sensations or certain combinations of sensations which may be called appearances. For only sensations or combinations of them can be thought of as at once dependent on the mind, and capable with any plausibility of being identified with bodies in space. In other words, in order to think of the world as dependent on the mind, we have to think of it as consisting only of a succession of appearances, and in fact Berkeley, and, at certain times, Kant, did think of it in this way.

That this is the inevitable result of idealism is not noticed, so long as it is supposed that the essential relation of realities to the mind consists in their being known; for, as we have seen, nothing is thereby implied as to their special nature. To say of a reality that it is essentially an object of knowledge is merely to add to the particular nature ordinarily attributed to the existent in question the further characteristic that it must be known. Moreover, since in fact, though contrary to the theory, any reality exists independently of the knowledge of it, when the relation thought of between a reality and the mind is *solely* that of knowledge, the realities can be thought of as independent of the mind. Consequently, the physical world can be thought to have that independence of the mind which the ordinary man attributes to it, and, therefore, need not be conceived as only a succession of appearances. But the advantage of this form of idealism is really derived from the very fact which it is the aim of idealism in general to deny. For the conclusion that the physical world consists of a succession of appearances is only avoided by taking into account the relation of realities to the mind by way of knowledge, and, then, without being aware of the inconsistency, making use of the independent existence of the reality known.

Again, that the real contrary to realism is *subjective* idealism is confirmed by the history of the theory of knowledge from Descartes onwards. For the initial supposition which has originated and sustained the problem is that in knowledge the mind is, at any rate in the first instance, confined within itself. This supposition granted, it has always seemed that, while there is no difficulty in understanding the mind's acquisition of knowledge of what belongs to its own being, it is difficult, if not impossible, to understand how it can acquire knowledge of what does not belong to its own being. Further, since the physical world is ordinarily thought of as something which does not belong to the mind's own being, the problem has always been not 'How is it possible to know anything?' but 'How is it possible to know a particular kind of reality, viz. the physical world?' Moreover, in consequence of the initial supposition, any answer to this question has always presupposed that our apprehension of the physical world is indirect. Since *ex hypothesi* the mind is confined within itself, it can only apprehend a reality independent of it through something within the mind which 'represents' or 'copies' the reality; and it is perhaps Hume's chief merit that he showed that no such solution is possible, or, in other words, that, on the given supposition, knowledge of the physical world is impossible.

Now the essential weakness of this line of thought lies in the initial supposition that the mind can only apprehend what belongs to its own being. It is as much a fact of our experience that we directly apprehend bodies in space, as that we directly apprehend our feelings and sensations. And, as has already been shown, what is spatial cannot be thought to belong to the mind's own being on the ground that it is relative to perception. Further, if it is legitimate to ask, 'How can we apprehend what does not belong to our being?' it is equally legitimate to ask, 'How can we apprehend what does belong to our own being?' It is wholly arbitrary to limit the question to the one kind of reality. If a question is to be put at all, it should take the form, 'How is it possible to apprehend anything?' But this question has only to be put to be discarded. For it amounts to a demand to *explain* knowledge; and any answer to it would involve the derivation of knowledge from what was not knowledge, a task which must be as impossible as the derivation of space from time or of colour from sound. Knowledge is *sui generis*, and, as such, cannot be explained.

Moreover, it may be noted that the support which this form of idealism sometimes receives from an argument which uses the terms 'inside' and 'outside' the mind is unmerited. At first sight it seems a refutation of the plain man's view to argue thus: 'The plain man believes the spatial world to exist whether any one knows it or not. Consequently, he allows that the world is outside the mind. But, to be known, a reality must be inside the mind. Therefore, the plain man's view renders knowledge impossible.' But, as soon as it is realized that 'inside the mind' and 'outside the mind' are metaphors, and, therefore, must take their meaning from their context, it is easy to see that the argument either rests on an equivocation or assumes the point at issue. The assertion that the world is outside the mind, being only a metaphorical expression of the plain man's view, should only mean that the world is something independent of the mind, as opposed to something inside the mind, in the sense of dependent upon it, or mental. But the assertion that, to be known, a reality must be inside the mind, if it is to be incontestably true, should only mean that a reality, to be apprehended, must really be object of apprehension. And in this case 'being inside the mind', since it only means 'being object of apprehension', is not the opposite of 'being outside the mind' in the previous assertion. Hence, on this interpretation, the second assertion is connected with the first only apparently and by an equivocation; there is really no argument at all. If, however, the equivocation is to be avoided, 'inside the mind' in the second assertion must be the opposite of 'outside the mind' in the first, and consequently the second must mean that a reality, to be known, must be dependent on the mind, or mental. But in that case the objection to the plain man's view is a *petitio principii*, and not an argument.

Nevertheless, the tendency to think that the only object or, at least, the only direct object of the mind is something mental still requires explanation. It seems due to a tendency to treat self-consciousness as

similar to consciousness of the world. When in reflection we turn our attention away from the world to the activity by which we come to know it, we tend to think of our knowledge of the world as a reality to be apprehended similar to the world which we apprehended prior to reflection. We thereby implicitly treat this knowledge as something which, like the world, merely *is* and is not the knowledge of anything; in other words, we imply that, so far from being knowledge, i. e. the knowing of a reality, it is precisely that which we distinguish from knowledge, viz. a reality to be known, although — since knowledge must be mental — we imply that it is a reality of the special kind called mental. But if the knowledge upon which we reflect is thus treated as consisting in a mental reality which merely *is*, it is implied that in this knowledge the world is not, at any rate directly, object of the mind, for *ex hypothesi* a reality which merely *is* and is not the knowledge of anything has no object. Hence it comes to be thought that the only object or, at least, the only direct object of the mind is this mental reality itself, which is the object of reflection; in other words, that the only immediate object of the mind comes to be thought of as its own idea. The root of the mistake lies in the initial supposition — which, it may be noted, seems to underlie the whole treatment of knowledge by empirical psychology — that knowledge can be treated as a reality to be apprehended, in the way in which any reality which is not knowledge is a reality to be apprehended.

We may now revert to that form of idealism which maintains that the essential relation of reality to the mind is that of *being known*, in order to consider two lines of argument by which it may be defended.

According to the first of these, the view of the plain man either is, or at least involves, materialism; and materialism is demonstrably absurd. The plain man's view involves the existence of the physical world prior to the existence of the knowledge of it, and therefore also prior to the existence of minds which know it, since it is impossible to separate the existence of a knowing mind from its actual knowledge. From this it follows that mere matter, having only the qualities considered by the physicist, must somehow have originated or produced knowing and knowing minds. But this production is plainly impossible. For matter, possessing solely, as it does, characteristics bound up with extension and motion, cannot possibly have originated activities of a wholly different kind, or beings capable of exercising them.

It may, however, be replied that the supposed consequence, though absurd, does not really follow from the plain man's realism. Doubtless, it would be impossible for a universe consisting solely of the physical world to originate thought or beings capable of thinking. But the real presupposition of the coming into existence of human knowledge at a certain stage in the process of the universe is to be found in the pre-existence, not of a mind or minds which always actually knew, but simply of a mind or minds in which, under certain conditions, knowledge is necessarily actualized. A mind cannot be the product of anything or, at any rate, of anything but a mind. It cannot be a new reality introduced at some time or other into a universe of realities of a wholly different order. Therefore, the presupposition of the present existence of knowledge is the pre-existence of a mind or minds; it is not implied that its or their knowledge must always have been actual. In other words, knowing implies the ultimate or unoriginated existence of beings possessed of the capacity to know. Otherwise, knowledge would be a merely derivative product, capable of being stated in terms of something else, and in the end in terms of matter and motion. This implication is, however, in no wise traversed by the plain man's realism. For that implies, not that the existence of the physical world is prior to the existence of a mind, but only that it is prior to a mind's actual knowledge of the world.

The second line of thought appeals to the logic of relation. It may be stated thus. If a term is relative, i. e. is essentially 'of' or relative to another, that other is essentially relative to it. Just as a doctor, for instance, is essentially a doctor of a patient, so a patient is essentially the patient of a doctor. As a ruler implies subjects, so subjects imply a ruler. As a line essentially has points at its ends, so points are essentially ends of a line. Now knowledge is essentially 'of' or relative to reality. Reality, therefore, is essentially relative to or implies the knowledge of it. And this correlativity of knowledge and reality finds linguistic confirmation in the terms 'subject' and 'object'. For, linguistically, just as a subject is always

the subject of an object, so an object is always the object of a subject.

Nevertheless, further analysis of the nature of relative terms, and in particular of knowledge, does not bear out this conclusion. To take the case of a doctor. It is true that if some one is healing, some one else is receiving treatment, i. e. is being healed; and 'patient' being the name for the recipient of treatment, we can express this fact by saying that a doctor is essentially the doctor of a patient. Further, it is true that a recipient of treatment implies a giver of it, as much as a giver of it implies a recipient. Hence we can truly say that since a doctor is the doctor of a patient, a patient is the patient of a doctor, meaning thereby that since that to which a doctor is relative is a patient, a patient must be similarly relative to a doctor. There is, however, another statement which can be made concerning a doctor. We can say that a doctor is a doctor of a human being who is ill, i. e. a sick man. But in this case we cannot go on to say that since a doctor is a doctor of a sick man, a sick man implies or is relative to a doctor. For we mean that the kind of reality capable of being related to a doctor as his patient is a sick man; and from this it does not follow that a reality of this kind does stand in this relation. Doctoring implies a sick man; a sick man does not imply that some one is treating him. We can only say that since a doctor is the doctor of a sick man, a sick man implies the possibility of doctoring. In the former case the terms, viz. 'doctor' and 'patient', are inseparable because they signify the relation in question in different aspects. The relation is one fact which has two inseparable 'sides', and, consequently, the terms must be inseparable which signify the relation respectively from the point of view of the one side and from the point of view of the other. Neither term signifies the nature of the elements which can stand in the relation. In the latter case, however, the terms, viz. 'doctor' and 'sick man', signify respectively the relation in question (in one aspect), and the nature of one of the elements capable of entering into it; consequently they are separable.

Now when it is said that knowledge is essentially knowledge of reality, the statement is parallel to the assertion that a doctor is essentially the doctor of a sick man, and not to the assertion that a doctor is essentially the doctor of a patient. It should mean that that which is capable of being related to a knower as his object is something which is or exists; consequently it cannot be said that since knowledge is of reality, reality must essentially be known. The parallel to the assertion that a doctor is the doctor of a patient is the assertion that knowledge is the knowledge of an object; for just as 'patient' means that which receives treatment from a doctor, so 'object' means that which is known. And here we *can* go on to make the further parallel assertion that since knowledge is essentially the knowledge of an object, an object is essentially an object of knowledge. Just as 'patient' means a recipient of treatment, or, more accurately, a sick man under treatment, so 'object' means something known, or, more accurately, a reality known. And 'knowledge' and 'object of knowledge', like 'doctor' and 'patient', indicate the same relation, though from different points of view, and, consequently, when we can use the one term, we can use the other. But to say that an object (i. e. a reality known) implies the knowledge of it is not to say that reality implies the knowledge of it, any more than to say that a patient implies a doctor is to say that a sick man implies a doctor.

But a doctor, it might be objected, is not a fair parallel to knowledge or a knower. A doctor, though an instance of a relative term, is only an instance of one kind of relative term, that in which the elements related are capable of existing apart from the relation, the relation being one in which they can come to stand and cease to stand. But there is another kind of relative term, in which the elements related presuppose the relation, and any thought of these elements involves the thought of the relation. A universal, e. g. whiteness, is always the universal of certain individuals, viz. individual whites; an individual, e. g. this white, is always an individual of a universal, viz. whiteness. A genus is the genus of a species, and vice versa. A surface is the surface of a volume, and a volume implies a surface. A point is the end of a line, and a line is bounded by points. In such cases the very being of the elements related involves the relation, and, apart from the relation, disappears. The difference between the two kinds of relative terms can be seen from the fact that only in the case of the former kind can two elements be found

of which we can say significantly that their relation is of the kind in question. We can say of two men that they are related as doctor and patient, or as father and son, for we can apprehend two beings as men without being aware of them as so related. But of no two elements is it possible to say that their relation is that of universal and individual, or of genus and species, or of surface and volume; for to apprehend elements which are so related we must apprehend them so related. To apprehend a surface is to apprehend a surface of a volume. To apprehend a volume is to apprehend a volume bounded by a surface. To apprehend a universal is to apprehend it as the universal of an individual, and vice versa. In the case of relations of this kind, the being of either element which stands in the relation is relative to that of the other; neither can be real without the other, as we see if we try to think of one without the other. And it is at least possible that knowledge and reality or, speaking more strictly, a knower and reality, are related in this way.

What is, however, at least a strong presumption against this view is to be found in the fact that while relations of the second kind are essentially non-temporal, the relation of knowing is essentially temporal. The relation of a universal and its individuals, or of a surface and the volume which it bounds, does not either come to be, or persist, or cease. On the other hand, it is impossible to think of a knowing which is susceptible of no temporal predicates and is not bound up with a process; and the thought of knowing as something which comes to be involves the thought that the elements which become thus related exist independently of the relation. Moreover, the real refutation of the view lies in the fact that, when we consider what we really think, we find that we think that the relation between a knower and reality is not of the second kind. If we consider what we mean by 'a reality', we find that we mean by it something which is not correlative to a mind knowing it. It does not mean something the thought of which disappears with the thought of a mind actually knowing it, but something which, though it can be known by a mind, need not be actually known by a mind. Again, just as we think of a reality as something which *can* stand as object in the relation of knowledge, without necessarily being in this relation, so, as we see when we reflect, we think of a knowing mind as something which *can* stand as subject in this relation without necessarily being in the relation. For though we think of the capacities which constitute the nature of a knowing mind as only recognized through their actualizations, i. e. through actual knowing, we think of the mind which is possessed of these capacities as something apart from their actualization.

It is now possible to direct attention to two characteristics of perception and knowledge with which Kant's treatment of space and time conflicts, and the recognition of which reveals his procedure in its true light.

It has been already urged that both knowledge and perception — which, though not identical with knowledge, is presupposed by it — are essentially of *reality*. Now, in the *first* place, it is thereby implied that the relation between the mind and reality in knowledge or in perception is essentially direct, i. e. that there is no *tertium quid* in the form of an 'idea' or a 'representation' between us as perceiving or knowing and what we perceive or know. In other words, it is implied that Locke's view is wrong in principle, and, in fact, the contrary of the truth. In the *second* place, it is implied that while the whole fact of perception includes the reality perceived and the whole fact of knowledge includes the reality known, since both perception and knowledge are 'of', and therefore inseparable from a reality, yet the reality perceived or known is essentially distinct from, and cannot be stated in terms of, the perception or the knowledge. Just as neither perception nor knowledge can be stated in terms of the reality perceived or known from which they are distinguished, so the reality perceived or known cannot be stated in terms of the perception or the knowledge. In other words, the terms 'perception' and 'knowledge' ought to stand for the activities of perceiving and knowing respectively, and not for the reality perceived or known. Similarly, the terms 'idea' and 'representation' — the latter of which has been used as a synonym for Kant's *Vorstellung* — ought to stand not for something thought of or represented, but for the act of thinking or representing.

Further, this second implication throws light on the proper meaning of the terms ‘form of perception’ and ‘form of knowledge or of thought’. For, in accordance with this implication, a ‘form of perception’ and a ‘form of knowledge’ ought to refer to the nature of our acts of perceiving and knowing or thinking respectively, and not to the nature of the realities perceived or known. Consequently, Kant was right in making the primary antithesis involved in the term ‘form of perception’ that between a way in which we perceive and a way in which things are, or, in other words, between a characteristic of our perceiving nature and a characteristic of the reality perceived. Moreover, Kant was also right in making this distinction a real antithesis and not a mere distinction within one and the same thing regarded from two points of view. That which is a form of perception cannot also be a form of the reality and vice versa. Thus we may illustrate a perceived form of perception by pointing out that our apprehension of the physical world (1) is a temporal process, and (2) is conditioned by perspective. Both the succession and the conditions of perspective belong to the act of perception, and do not form part of the nature of the world perceived. And it is significant that in our ordinary consciousness it never occurs to us to attribute either the perspective or the time to the reality perceived. Even if it be difficult in certain cases, as in that of colour, to decide whether something belongs to our act of perception or not, we never suppose that it can be *both* a form of perception *and* a characteristic of the reality perceived. We think that if it be the one, it cannot be the other.

Moreover, if we pass from perception to knowledge or thought — which in this context may be treated as identical — and seek to illustrate a form of knowledge or of thought, we may cite the distinction of logical subject and logical predicate of a judgement. The distinction as it should be understood — for it does not necessitate a difference of grammatical form — may be illustrated by the difference between the judgements ‘Chess is the *most trying of games*’ and ‘*Chess* is the most trying of games’. In the former case ‘chess’ is the logical subject, in the latter case it is the logical predicate. Now this distinction clearly does not reside in or belong to the reality about which we judge; it relates solely to the order of our approach in thought to various parts of its nature. For, to take the case of the former judgement, in calling ‘chess’ its subject, and ‘most trying of games’ its predicate, we are asserting that in this judgement we begin by apprehending the reality of which we are thinking as chess, and come to apprehend it as the most trying of games. In other words, the distinction relates solely to the order of our apprehension, and not to anything in the thing apprehended.

In view of the preceding, it is possible to make clear the nature of certain mistakes on Kant’s part. In the first place, space, and time also, so far as we are thinking of the world, and not of our apprehension of it, as undergoing a temporal process, are essentially characteristics not of perception but of the reality perceived, and Kant, in treating space, and time, so regarded, as forms of perception, is really transferring to the perceiving subject that which in the whole fact ‘perception of an object’ or ‘object perceived’ belongs to the object.

Again, if we go on to ask how Kant manages to avoid drawing the conclusion proper to this transference, viz. that space and time are not characteristics of any realities at all, but belong solely to the process by which we come to apprehend them, we see that he does so because, in effect, he contravenes both the characteristics of perception referred to. For, in the first place, although in conformity with his theory he almost always *speaks* of space and time in terms of perception, he consistently *treats* them as features of the reality perceived, i. e. of phenomena. Thus in arguing that space and time belong not to the understanding but to the sensibility, although he uniformly speaks of them as perceptions, his argument implies that they are objects of perception; for its aim, properly stated, is to show that space and time are not objects of thought but objects of perception. Consequently, in his treatment of space and time, he refers to what are both to him and in fact objects of perception in terms of perception, and thereby contravenes the second implication of perception to which attention has been drawn. Again, in the second place, if we go on to ask how Kant is misled into doing this, we see that it is because he contravenes the first

implication of perception. In virtue of his theory of perception he interposes a *tertium quid* between the reality perceived and the percipient, in the shape of an ‘appearance’. This *tertium quid* gives him something which can plausibly be regarded as at once a perception and something perceived. For, though from the point of view of the thing in itself an appearance is an appearance or a perception of it, yet, regarded from the point of view of what it is in itself, an appearance is a reality perceived of the kind called mental. Hence space and time, being characteristics of an appearance, can be regarded as at once characteristics of our perception of a reality, viz. of a thing in itself, and characteristics of a reality perceived, viz. an appearance. Moreover, there is another point of view from which the treatment of bodies in space as appearances or phenomena gives plausibility to the view that space, though a form of perception, is a characteristic of a reality. When Kant speaks of space as the form of phenomena the fact to which he refers is that all bodies are spatial. He means, not that space is a way in which we perceive something, but that it is a characteristic of things perceived, which he *calls* phenomena, and which *are* bodies. But, since in his statement of this fact he substitutes for bodies phenomena, which to him are perceptions, his statement can be put in the form ‘space is *the form of perceptions*’; and the statement in this form is verbally almost identical with the statement that space is *a form of perception*. Consequently, the latter statement, which *should* mean that space is a way in which we perceive things, is easily identified with a statement of which the meaning is that space is a characteristic of something perceived.

Again, Kant’s account of time will be found to treat something represented or perceived as also a perception. We find two consecutive paragraphs of which the aim is apparently to establish the contrary conclusions: (1) that time is only the form of our internal state and not of external phenomena, and (2) that time is the formal condition of all phenomena, external and internal.

To establish the first conclusion, Kant argues that time has nothing to do with shape or position, but, on the contrary, determines the relation of representations in our internal state. His meaning is that we have a succession of perceptions or representations of bodies in space, and that while the bodies perceived are not related temporally, our perceptions or representations of them are so related. Here ‘representations’ refers to our apprehension, and is distinguished from what is represented, viz. bodies in space.

How, then, does Kant reach the second result? He remembers that bodies in space are ‘phenomena’, i. e. representations. He is, therefore, able to point out that all representations belong, as determinations of the mind, to our internal state, whether they have external things, i. e. bodies in space, for their objects or not, and that, consequently, they are subject to time. Hence time is concluded to be the form of all phenomena. In this second argument, however, it is clear that Kant has passed from his previous treatment of bodies in space as something represented or perceived to the treatment of them as themselves representations or perceptions.

In conclusion, we may point out an insoluble difficulty in Kant’s account of time. His treatment of space and time as the forms of outer and inner sense respectively implies that, while spatial relations apply to the realities which we perceive, temporal relations apply solely to our perceptions of them. Unfortunately, however, as Kant in certain contexts is clearly aware, time also belongs to the realities perceived. The moon, for instance, moves round the earth. Thus there are what may be called real successions as well as successions in our perception. Further, not only are we aware of this distinction in general, but in particular cases we succeed in distinguishing a succession of the one kind from a succession of the other. Yet from Kant’s standpoint it would be impossible to distinguish them in particular cases, and even to be aware of the distinction in general. For the distinction is possible only so long as a distinction is allowed between our perceptions and the realities perceived. But for Kant this distinction has disappeared, for in the end the realities perceived are merely our perceptions; and time, if it be a characteristic of anything, must be a characteristic only of our perceptions.

CHAPTER VII. THE METAPHYSICAL DEDUCTION OF THE CATEGORIES

The aim of the *Aesthetic* is to answer the first question of the *Critique* propounded in the Introduction, viz. ‘How is pure mathematics possible?’ The aim of the *Analytic* is to answer the second question, viz. ‘How is pure natural science possible?’ It has previously been implied that the two questions are only verbally of the same kind. Since Kant thinks of the judgements of mathematics as self-evident, and therefore as admitting of no reasonable doubt, he takes their truth for granted. Hence the question, ‘How is pure mathematics possible?’ means ‘Granted the truth of mathematical judgements, what inference can we draw concerning the nature of the reality to which they relate?’; and the inference is to proceed from the truth of the judgements to the nature of the reality to which they relate. Kant, however, considers that the principles underlying natural science, of which the law of causality is the most prominent, are not self-evident, and consequently need proof. Hence, the question, ‘How is pure natural science possible?’ means ‘What justifies the assertion that the presuppositions of natural science are true?’ and the inference is to proceed from the nature of the objects of natural science to the truth of the *a priori* judgements which relate to them.

Again, as Kant rightly sees, the vindication of the presuppositions of natural science, to be complete, requires the discovery upon a definite principle of *all* these presuppositions. The clue to this discovery he finds in the view that, just as the perceptions of space and time originate in the sensibility, so the *a priori* conceptions and laws which underlie natural science originate in the understanding; for, on this view, the discovery of all the conceptions and laws which originate in the understanding will be at the same time the discovery of all the presuppositions of natural science.

Kant therefore in the *Analytic* has a twofold problem to solve. He has firstly to discover the conceptions and laws which belong to the understanding as such, and secondly to vindicate their application to individual things. Moreover, although it is obvious that the conceptions and the laws of the understanding must be closely related, he reserves them for separate treatment.

The *Analytic* is accordingly subdivided into the *Analytic of Conceptions* and the *Analytic of Principles*. The *Analytic of Conceptions*, again, is divided into the *Metaphysical Deduction of the Categories*, the aim of which is to discover the conceptions of the understanding, and the *Transcendental Deduction of the Categories*, the aim of which is to vindicate their validity, i. e. their applicability to individual things.

It should further be noticed that, according to Kant, it is the connexion of the *a priori* conceptions and laws underlying natural science with the *understanding* which constitutes the main difficulty of the vindication of their validity, and renders necessary an answer of a different kind to that which would have been possible, if the validity of mathematical judgements had been in question.

“We have been able above, with little trouble, to make comprehensible how the conceptions of space and time, although *a priori* knowledge, must necessarily relate to objects and render possible a synthetic knowledge of them independently of all experience. For since an object can appear to us, i. e. be an object of empirical perception, only by means of such pure forms of sensibility, space and time are pure perceptions, which contain *a priori* the condition of the possibility of objects as phenomena, and the synthesis in space and time has objective validity.”

“On the other hand, the categories of the understanding do not represent the conditions under which objects are given in perception; consequently, objects can certainly appear to us without their necessarily being related to functions of the understanding, and therefore without the understanding containing *a priori* the conditions of these objects. Hence a difficulty appears here, which we did not meet in the field of

sensibility, viz. how *subjective conditions of thought* can have *objective validity*, i. e. can furnish conditions of the possibility of all knowledge of objects; for phenomena can certainly be given us in perception without the functions of the understanding. Let us take, for example, the conception of cause, which indicates a peculiar kind of synthesis in which on A something entirely different B is placed according to a law. It is not *a priori* clear why phenomena should contain something of this kind ... and it is consequently doubtful *a priori*, whether such a conception is not wholly empty, and without any corresponding object among phenomena. For that objects of sensuous perception must conform to the formal conditions of the sensibility which lie *a priori* in the mind is clear, since otherwise they would not be objects for us; but that they must also conform to the conditions which the understanding requires for the synthetical unity of thought is a conclusion the cogency of which it is not so easy to see. For phenomena might quite well be so constituted that the understanding did not find them in conformity with the conditions of its unity, and everything might lie in such confusion that, e. g. in the succession of phenomena, nothing might present itself which would offer a rule of synthesis, and so correspond to the conception of cause and effect, so that this conception would be quite empty, null, and meaningless. Phenomena would none the less present objects to our perception, for perception does not in any way require the functions of thinking."

This passage, if read in connexion with that immediately preceding it, may be paraphrased as follows: 'The argument of the *Aesthetic* assumes the validity of mathematical judgements, which as such relate to space and time, and thence it deduces the phenomenal character of space and time, and of what is contained therein. At the same time the possibility of questioning the validity of the law of causality, and of similar principles, may lead us to question even the validity of mathematical judgements. In the case of mathematical judgements, however, in consequence of their relation to perception, an answer is readily forthcoming. We need only reverse the original argument and appeal directly to the phenomenal character of space and time and of what is contained in them. Objects in space and time, being appearances, must conform to the laws according to which we have appearances; and since space and time are only ways in which we perceive, or have appearances, mathematical laws, which constitute the general nature of space and time, are the laws according to which we have appearances. Mathematical laws, then, constitute the general structure of appearances, and, as such, enter into the very being of objects in space and time. But the case is otherwise with the conceptions and principles underlying natural science. For the law of causality, for instance, is a law not of our perceiving but of our thinking nature, and consequently it is not presupposed in the presentation to us of objects in space and time. Objects in space and time, being appearances, need conform only to the laws of our perceiving nature. We have therefore to explain the possibility of saying that a law of our thinking nature must be valid for objects which, as conditioned merely by our perceiving nature, are independent of the laws of our thinking; for phenomena might be so constituted as not to correspond to the necessities of our thought.'

No doubt Kant's *solution* of this problem in the *Analytic* involves an emphatic denial of the central feature of this statement of it, viz. that phenomena may be given in perception without any help from the activity of the understanding. Hence it may be urged that this passage merely expresses a temporary aberration on Kant's part, and should therefore be ignored. Nevertheless, in spite of this inconsistency, the view that phenomena may be given in perception without help from the activity of the understanding forms the basis of the difference of treatment which Kant thinks necessary for the vindication of the judgements underlying natural science and for that of the judgements of mathematics.

We may now consider how Kant 'discovers' the categories or conceptions which belong to the understanding as such. His method is sound in principle. He begins with an account of the understanding in general. He then determines its essential differentiations. Finally, he argues that each of these differentiations involves a special conception, and that therefore these conceptions taken together constitute an exhaustive list of the conceptions which belong to the understanding.

His account of the understanding is expressed thus: “The understanding was explained above only negatively, as a non-sensuous faculty of knowledge. Now, independently of sensibility, we cannot have any perception; consequently, the understanding is no faculty of perception. But besides perception there is no other kind of knowledge, except through conceptions. Consequently, the knowledge of every understanding, or at least of every human understanding, is a knowledge through conceptions, — not perceptive, but discursive. All perceptions, as sensuous, depend on affections; conceptions, therefore, upon functions. By the word function, I understand the unity of the act of arranging different representations under one common representation. Conceptions, then, are based on the spontaneity of thinking, as sensuous perceptions are on the receptivity of impressions. Now the understanding cannot make any other use of these conceptions than to judge by means of them. Since no representation, except only the perception, refers immediately to the object, a conception is never referred immediately to an object, but to some other representation thereof, be that a perception or itself a conception. A judgement, therefore, is the mediate knowledge of an object, consequently the representation of a representation of it. In every judgement there is a conception which is valid for many representations, and among these also comprehends a given representation, this last being then immediately referred to the object. For example, in the judgement ‘All bodies are divisible’, our conception of the divisible refers to various other conceptions; among these, however, it is herein particularly referred to the conception of body, and this conception of body is referred to certain phenomena which present themselves to us. These objects, therefore, are mediately represented by the conception of divisibility. Accordingly, all judgements are functions of unity in our representations, since, instead of an immediate, a higher representation, which comprehends this and several others, is used for the knowledge of the object, and thereby many possible items of knowledge are collected into one. But we can reduce all acts of the understanding to judgements, so that the *understanding* in general can be represented as a *faculty of judging*.”

It is not worth while to go into all the difficulties of this confused and artificial passage. Three points are clear upon the surface. In the first place, the account of the understanding now given differs from that given earlier in the *Critique* in that, instead of merely distinguishing, it separates the sensibility and the understanding, and treats them as contributing, not two inseparable factors involved in all knowledge, but two kinds of knowledge. In the second place, the guise of argument is very thin, and while Kant ostensibly *proves*, he really only *asserts* that the understanding is the faculty of judgement. In the third place, in describing judgement Kant is hampered by trying to oppose it as the mediate knowledge of an object to perception as the immediate knowledge of an object. A perception is said to relate immediately to an object; in contrast with this, a conception is said to relate immediately only to another conception or to a perception, and mediately to an object through relation to a perception, either directly or through another conception. Hence a judgement, as being the use of a conception, viz. the predicate of the judgement, is said to be the mediate knowledge of an object. But if this distinction be examined, it will be found that two kinds of immediate relation are involved, and that the account of perception is not really compatible with that of judgement. When a perception is said to relate immediately to an object, the relation in question is that between a sensation or appearance produced by an object acting upon or affecting the sensibility and the object which produces it. But when a conception is said to relate immediately to another conception or to a perception, the relation in question is that of universal and particular, i. e. that of genus and species or of universal and individual. For the conception is said to be ‘valid for’ (i. e. to ‘apply to’) and to ‘comprehend’ the conception or perception to which it is immediately related; and again, when a conception is said to relate mediately to an object, the relation meant is its ‘application’ to the object, even though in this case the application is indirect. Now if a perception to which a conception is related — either directly or indirectly through another conception — were an appearance produced by an object, the conception could never be related to the object in the sense required, viz. that it applies to it; for an appearance does not *apply to* but is *produced* by the object. Consequently, when Kant is

considering a conception, and therefore also when he is considering a judgement, which is the use of a conception, he is really thinking of the perception to which it is related as an *object of* perception, i. e. as a perceived individual, and he has ceased to think of a perception as an appearance produced by an object. Hence in considering Kant's account of a conception and of judgement, we should ignore his account of perception, and therefore also his statement that judgement is the mediate knowledge of an object.

If we do so, we see that Kant's account of judgement simply amounts to this: 'Judgement is the use of a conception or 'universal'; the use of a conception or universal consists in bringing under it corresponding individuals or species. Consequently, judgement is a function producing unity. If, for instance, we judge 'All bodies are divisible', we thereby unify 'bodies' with other kinds of divisible things by bringing them under the conception of divisibility; and if we judge 'This body is divisible' we thereby unify this divisible body with others by bringing it and them under the conception of divisibility.' Again, since 'the understanding in general can be represented as a *faculty of judging*', it follows that the activity of the understanding consists in introducing unity into our representations, by bringing individuals or species — both these being representations — under the corresponding universal or conception.

Having explained the nature of the understanding, Kant proceeds to take the next step. His aim being to connect the understanding with the categories, and the categories being a plurality, he has to show that the activity of judgement can be differentiated into several kinds, each of which must subsequently be shown to involve a special category. Hence, solely in view of the desired conclusion, and in spite of the fact that he has described the activity of judgement as if it were always of the same kind, he passes in effect from the singular to the plural and asserts that 'all the functions of the understanding can be discovered, when we can completely exhibit the functions of unity in judgements'. After this preliminary transition, he proceeds to assert that, if we abstract in general from all content of a judgement and fix our attention upon the mere form of the understanding, we find that the function of thinking in a judgement can be brought under four heads, each of which contains three subdivisions. These, which are borrowed with slight modifications from Formal Logic, are expressed as follows.

I. *Quantity.*
Universal
Particular
Singular.

II. *Quality.*
Affirmative
Negative
Infinite.

III. *Relation.*
Categorical
Hypothetical
Disjunctive.

IV. *Modality.*
Problematic
Assertoric

Apodeictic.

These distinctions, since they concern only the form of judgements, belong, according to Kant, to the activity of judgement as such, and in fact constitute its essential differentiations.

Now, before we consider whether this is really the case, we should ask what answer Kant's account of judgement would lead us to expect to the question 'What are all the functions of unity in judgement?' The question must mean 'What are the kinds of unity produced by judgement?' To this question three alternative answers are prima facie possible. (1) There is only one kind of unity, that of a group of particulars unified through relation to the corresponding universal. The special unity produced will differ for different judgements, since it will depend upon the special universal involved. The kind or form of unity, however, will always be the same, viz. that of particulars related through the corresponding universal. For instance, 'plants' and 'trees' are unified respectively by the judgements 'This body is a plant' and 'This body is a tree'; for 'this body' is in the one case related to other 'plants' and in the other case to other 'trees'. And though the unity produced is different in each case, the kind of unity is the same; for plants and trees are, as members of a kind, unities of a special kind distinct from unities of another kind, such as the parts of a spatial or numerical whole. (2) There are as many kinds of unity as there are universals. Every group of particulars forms a unity of a special kind through relation to the corresponding universal. (3) There are as many kinds of unity as there are highest universals or *summa genera*. These *summa genera* are the most general sources of unity through which individuals are related in groups, directly or indirectly. The kinds of unity are therefore in principle the Aristotelian categories, i. e. the highest forms of being under which all individuals fall.

Nevertheless, it is easy to see that the second and third answers should be rejected in favour of the first. For though, according to Kant, a judgement unifies particulars by bringing them under a universal, the special universal involved in a given judgement belongs not to the judgement as such, but to the particulars unified. What belongs to the judgement as such is simply the fact that the particulars are brought under a universal. In other words, the judgement as such determines the kind of unity but not the particular unity. The judgements 'Gold is a metal' and 'Trees are green', considered merely as judgements and not as the particular judgements which they are, involve the same kind of unity, viz. that of particulars as particulars of a universal; for the distinction between 'metal' and 'green' is a distinction not of kinds of unity but of unities. Moreover, to anticipate the discussion of Kant's final conclusion, the moral is that Kant's account of judgement should have led him to recognize that judgement involves the reality, not of any special universals or — in Kant's language — conceptions, but of universality or conception as such. In other words, on his view of judgement the activity of the understanding implies simply that there *are* universals or conceptions; it does not imply the existence of special conceptions which essentially belong to the understanding, e. g. that of 'cause' or 'plurality'.

If we now turn to the list of the activities of thought in judgement, borrowed from Formal Logic, we shall see that it is not in any way connected with Kant's account of judgement. For if the kinds of judgement distinguished by Formal Logic are to be regarded as different ways of unifying, the plurality unified must be allowed to be not a special kind of group of particulars, but the two conceptions which constitute the terms of the judgement; and the unity produced must be allowed to be in no case a special form of the unity of particulars related through the corresponding universal. Thus the particular judgement 'Some coroners are doctors' must be said to unify the conceptions of 'coroner' and of 'doctor', and presumably by means of the conception of 'plurality'. Again, the hypothetical judgement 'If it rains, the ground will be wet' must be said to unify the judgements 'It rains' and 'The ground will be wet', and presumably by means of the conception of 'reason and consequence'. In neither case can the act of unification be considered a special form of the act of recognizing particulars as particulars of the corresponding universal. The fact is that the distinctions drawn by Formal Logic are based on a view of

judgement which is different from, and even incompatible with, Kant's, and they arise from the attempt to solve a different problem. The problem before Kant in describing judgement is to distinguish the understanding from the sensibility, i. e. thought from perception. Hence he regards judgement as the act of unifying a manifold given in perception, directly, or indirectly by means of a conception. But this is not the problem with which Formal Logic is occupied. Formal Logic assumes judgement to be an act which relates material given to it in the shape of 'conceptions' or 'judgements' by analysis of this material, and seeks to discover the various modes of relation thereby effected. The work of judgement, however, cannot consist *both* in relating particulars through a conception *and* in relating two conceptions or judgements.

It may be urged that this criticism only affects Kant's argument, but not his conclusion. Possibly, it may be said, the list of types of judgement borrowed from Formal Logic really expresses the essential differentiations of judgement, and, in that case, Kant's only mistake is that he bases them upon a false or at least inappropriate account of judgement. Moreover, since this list furnishes Kant with the 'clue' to the categories, provided that it expresses the essential differentiations of judgement, the particular account of judgement upon which it is based is a matter of indifference.

This contention leads us to consider the last stage of Kant's argument, in which he deduces the categories in detail from his list of the forms of judgement. For it is clear that unless the forms of judgement severally involve the categories, it will not matter whether these forms are or are not the essential differentiations of judgement.

Kant's mode of connecting the categories in detail with the forms of judgement discovered by Formal Logic is at least as surprising as his mode of connecting the latter with the nature of judgement in general. Since the twelve distinctions within the form of judgement are to serve as a clue to the conceptions which belong to the understanding, we naturally expect that each distinction will be found directly to involve a special conception or category, and that therefore, to discover the categories, we need only look for the special conception involved in each form of judgement. Again, since the plurality unified in a judgement of each form is the two conceptions or judgements which form the matter of the judgement, we should expect the conception involved in each form of judgement to be merely the type of relationship established between these conceptions or judgements. This expectation is confirmed by a cursory glance at the table of categories.

I. *Of Quantity.*
Unity
Plurality
Totality.

II. *Of Quality.*
Reality
Negation
Limitation.

III. *Of Relation.*
Inherence and Subsistence (*Substantia et Accidens*)
Causality and Dependence (*Cause and Effect*)
Community (*Reciprocity between the agent and patient.*)

IV. *Of Modality.*

Possibility — Impossibility
Existence — Non-existence
Necessity — Contingence.

If we compare the first division of these categories with the first division of judgements we naturally think that Kant conceived singular, particular, and universal judgements to unify their terms by means of the conceptions of ‘one’, of ‘some’, and of ‘all’ respectively; and we form corresponding, though less confident, expectations in the case of the other divisions.

Kant, however, makes no attempt to show that each form of judgement distinguished by Formal Logic involves a special conception. In fact, his view is that the activities of thought studied by Formal Logic do not originate or use any special conceptions at all. For his actual deduction of the categories is occupied in showing that although thought, when exercised under the conditions under which it is studied by Formal Logic, does not originate and use conceptions of its own, it is able under certain other conditions to originate and use such conceptions, i. e. categories. Hence if we attend only to the professed procedure of the deduction, we are compelled to admit that the deduction not only excludes any use of the ‘clue’ to the categories, supposed to be furnished by Formal Logic, but even fails to deduce them at all. For it does not even nominally attempt to discover the categories in detail, but reverts to the prior task of showing merely that there are categories. Doubtless Kant thinks that the forms of judgement formulated by Formal Logic in some way *suggest* the conceptions which become operative in thought under these other conditions. Nevertheless, it is impossible to see how these forms of judgement can suggest these conceptions, unless they actually presuppose them.

It is clear, however, that the professed link between the forms of judgement and the categories does not represent the actual process by which Kant reached his list of categories; for he could never have reached any list of categories by an argument which was merely directed to show that there are categories. Moreover, an inspection of the list shows that he actually reached it partly by noticing the conceptions which the forms of judgement seemed to presuppose, and partly by bearing in mind the general conceptions underlying physics which it was his ultimate aim to vindicate. Since this is the case, and since the categories can only be connected with the forms of judgement by showing that they are presupposed in them, the proper question to be considered from the point of view of the metaphysical deduction is simply whether the forms of judgement really presuppose the categories.

If, however, we examine the forms of judgement distinguished by Formal Logic, we find that they do not presuppose the categories. To see this, it is only necessary to examine the four main divisions of judgement *seriatim*.

The first division of judgements is said to be a division in respect of quantity into singular, particular, and universal. So stated, the division is numerical. It is a division of judgements according as they make an assertion about one, more than one, or all the members of a kind. Each species may be said to presuppose (1) the conception of quantity, and (2) a conception peculiar to itself: the first presupposing the conception of one member of a kind, the second that of more than one but less than all members of a kind, the third that of all members of a kind. Moreover, a judgement of each kind may perhaps be said to relate the predicate conception to the subject conception by means of one of these three conceptions.

The fundamental division, however, into which universal and singular judgements enter is not numerical at all, and ignores particular judgements altogether. It is that between such judgements as ‘Three-sided figures, as such, are three-angled’ and ‘This man is tall’. The essential distinction is that in the universal judgement the predicate term is apprehended to belong to the subject through our insight that it is necessitated by the nature of the subject term, while in the singular judgement our apprehension that the predicate term belongs to the subject is based upon the perception or experience of the coexistence of predicate and subject terms in a common subject. In other words, it is the distinction between an *a priori*

judgement and a judgement of perception. The merely numerically universal judgement, and the merely numerically particular judgement are simply aggregates of singular judgements, and therefore are indistinguishable in principle from the singular judgement. If then we ask what conceptions are really presupposed by the kinds of judgement which Kant seeks to distinguish in the first division, we can only reply that the universal judgement presupposes the conception of a connected or systematic whole of attributes, and that the singular judgement presupposes the conception of the coexistence of two attributes in a common subject. Neither kind of judgement presupposes the conception of quantity or the conceptions of unity, plurality, and totality.

The second division of judgements is said to be a division in respect of quality into affirmative, negative, and infinite, i. e. into species which may be illustrated by the judgements, ‘A college is a place of education,’ ‘A college is not a hotel,’ and ‘A college is a not-hotel’. The conceptions involved are said to be those of reality, of negation, and of limitation respectively. The conception of limitation may be ignored, since the infinite judgement said to presuppose it is a fiction. On the other hand, the conceptions of reality and negation, even if their existence be conceded, cannot be allowed to be the conceptions presupposed. For when we affirm or deny, we affirm or deny of something not mere being, but being of a particular kind. The conceptions presupposed are rather those of identity and difference. It is only because differences fall within an identity that we can affirm, and it is only because within an identity there are differences that we can deny.

The third division of judgements is said to be in respect of relation into categorical, hypothetical, and disjunctive judgements. Here, again, the conclusion which Kant desires is clearly impossible. The categorical judgement may be said to presuppose the conception of subject and attribute, but not that of substance and accident. The hypothetical judgement may be conceded to presuppose the conception of reason and consequence, but it certainly does not presuppose the conception of cause and effect. Lastly, while the disjunctive judgement may be said to presuppose the conception of mutually exclusive species of a genus, it certainly does not presuppose the conception of reciprocal action between physical things.

The fourth division of judgement is said to be in respect of modality into assertoric, problematic, and apodeictic, the conceptions involved being respectively those of possibility and impossibility, of actuality and non-actuality, and of necessity and contingence. Now, from the point of view of Kant’s argument, these conceptions, like those which he holds to be involved in the other divisions of judgement, must be considered to relate to reality and not to our attitude towards it. Considered in this way, they resolve themselves into the conceptions of —

(1) the impossible (impossibility);

(2) the possible but not actual (possibility, nonexistence);

(3) the actual but not necessary (existence, contingence);

(4) the necessary (necessity).

But since it must, in the end, be conceded that all fact is necessary, it is impossible to admit the reality of the conception of the possible but not actual, and of the actual but not necessary. There remain, therefore, only the conceptions of the necessary and of the impossible. In fact, however, the distinctions between the assertoric, the problematic, and the apodeictical judgement relate to our attitude to reality and not to reality, and therefore involve no different conceptions relating to reality. It must, therefore, be admitted that the ‘metaphysical’ deduction of the categories breaks down doubly. Judgement, as Kant describes it, does not involve the forms of judgement borrowed from Formal Logic as its essential differentiations; and these forms of judgement do not involve the categories.

CHAPTER VIII. THE TRANSCENDENTAL DEDUCTION OF THE CATEGORIES

The aim of the *Transcendental Deduction* is to show that the categories, though *a priori* as originating in the understanding, are valid, i. e. applicable to individual things. It is the part of the *Critique* which has attracted most attention and which is the most difficult to follow. The difficulty of interpretation is increased rather than diminished by the complete rewriting of this portion in the second edition. For the second version, though it does not imply a change of view, is undoubtedly even more obscure than the first. It indeed makes one new contribution to the subject by adding an important link in the argument, but the importance of the link is nullified by the fact that it is not really the link which it professes to be. The method of treatment adopted here will be to consider only the minimum of passages necessary to elucidate Kant's meaning and to make use primarily of the first edition.

It is necessary, however, first to consider the passage in the *Metaphysical Deduction* which nominally connects the list of categories with the list of forms of judgement. For its real function is to introduce a new and third account of knowledge, which forms the keynote of the *Transcendental Deduction*.

In this passage, the meaning of which it is difficult to state satisfactorily, Kant's thought appears to be as follows: 'The activity of thought studied by Formal Logic relates by way of judgement conceptions previously obtained by an analysis of perceptions. For instance, it relates the conceptions of body and of divisibility, obtained by analysis of perceptions of bodies, in the judgement 'Bodies are divisible'. It effects this, however, merely by analysis of the conception 'body'. Consequently, the resulting knowledge or judgement, though *a priori*, is only analytic, and the conceptions involved originate not from thought but from the manifold previously analysed. But besides the conceptions obtained by analysis of a given manifold, there are others which belong to thought or the understanding as such, and in virtue of which thought originates synthetic *a priori* knowledge, this activity of thought being that studied by Transcendental Logic. Two questions therefore arise. Firstly, how do these conceptions obtain a matter to which they can apply and without which they would be without content or empty? And, secondly, how does thought in virtue of these conceptions originate synthetic *a priori* knowledge? The first question is easily answered, for the manifolds of space and time, i. e. individual spaces and individual times, afford matter of the kind needed to give these conceptions content. As perceptions (i. e. as objects of perception), they are that to which a conception can apply, and as pure or *a priori* perceptions, they are that to which those conceptions can apply which are pure or *a priori*, as belonging to the understanding. The second question can be answered by considering the process by which this pure manifold of space and time enters into knowledge. All synthetic knowledge, whether empirical or *a priori*, requires the realization of three conditions. In the first place, there must be a manifold given in perception. In the second place, this manifold must be 'gone through, taken up, and combined'. In other words, if synthesis be defined as 'the act of joining different representations to one another and of including their multiplicity in one knowledge', the manifold must be subjected to an act of synthesis. This is effected by the imagination. In the third place, this synthesis produced by the imagination must be brought to a conception, i. e. brought under a conception which will constitute the synthesis a unity. This is the work of the understanding. The realization of *a priori* knowledge, therefore, will require the realization of the three conditions in a manner appropriate to its *a priori* character. There must be a pure or *a priori* manifold; this is to be found in individual spaces and individual times. There must be an act of pure synthesis of this manifold; this is effected by the pure imagination. Finally, this pure synthesis must be brought under a conception. This is effected by the pure understanding by means of its pure or a priori conceptions, i. e. the categories. This, then, is the process by which *a priori* knowledge is originated. The activity of

thought or understanding, however, which unites two conceptions in a judgement by analysis of them — this being the act studied by Formal Logic — is the same as that which gives unity to the synthesis of the pure manifold of perception — this being the act studied by Transcendental Logic. Consequently, 'the same understanding, and indeed by the same activities whereby in dealing with conceptions it unifies them in a judgement by an act of analysis, introduces by means of the synthetical unity which it produces in the pure manifold of perception a content into its own conceptions, in consequence of which these conceptions are called pure conceptions of the understanding,' and we are entitled to say *a priori* that these conceptions apply to objects because they are involved in the process by which we acquire *a priori* knowledge of objects.'

A discussion of the various difficulties raised by the general drift of this passage, as well as by its details, is unnecessary, and would anticipate discussion of the *Transcendental Deduction*. But it is necessary to draw attention to three points.

In the first place, as has been said, Kant here introduces — and introduces without warning — a totally new account of knowledge. It has its origin in his theory of perception, according to which knowledge begins with the production of sensations in us by things in themselves. Since the spatial world which we come to know consists in a multiplicity of related elements, it is clear that the isolated data of sensation have somehow to be combined and unified, if we are to have this world before us or, in other words, to know it. Moreover, since these empirical data are subject to space and time as the forms of perception, individual spaces and individual times, to which the empirical data will be related, have also to be combined and unified. On this view, the process of knowledge consists in combining certain data into an individual whole and in unifying them through a principle of combination. If the data are empirical, the resulting knowledge will be empirical; if the data are *a priori*, i. e. individual spaces and individual times, the resulting knowledge will be *a priori*. This account of knowledge is new, because, although it treats knowledge as a process or act of unifying a manifold, it describes a different act of unification. As Kant first described the faculty of judgement, it unifies a group of particulars through relation to the corresponding universal. As Formal Logic, according to Kant, treats the faculty of judgement, it unifies two conceptions or two prior judgements into a judgement. As Kant now describes the faculty of judgement or thought, it unifies an empirical or an *a priori* manifold of perception combined into an individual whole, through a conception which constitutes a principle of unity. The difference between this last account and the others is also shown by the fact that while the first two kinds of unification are held to be due to mere analysis of the material given to thought, the third kind of unification is held to be superinduced by thought, and to be in no way capable of being extracted from the material by analysis. Further, this new account of knowledge does not replace the others, but is placed side by side with them. For, according to Kant, there exist *both* the activity of thought which relates two conceptions in a judgement, *and* the activity by which it introduces a unity of its own into a manifold of perception. Nevertheless, this new account of knowledge, or rather this account of a new kind of knowledge, must be the important one; for it is only the process now described for the first time which produces synthetic as opposed to analytic knowledge.

In the second place, the passage incidentally explains why, according to Kant, the forms of judgement distinguished by Formal Logic do not involve the categories. For its doctrine is that while thought, if exercised under the conditions under which it is studied by Formal Logic, can only analyse the manifold given to it, and so has, as it were, to borrow from the manifold the unity through which it relates the manifold, yet if an *a priori* manifold be given to it, it can by means of a conception introduce into the manifold a unity of its own which could not be discovered by analysis of the manifold. Thus thought as studied by Formal Logic merely analyses and consequently does not and cannot make use of conceptions of its own; it can use conceptions of its own only when an *a priori* manifold is given to it to deal with.

In the third place, there is great difficulty in following the part in knowledge assigned to the

understanding. The synthesis of the manifold of perception is assigned to the imagination, a faculty which, like the new kind of knowledge, is introduced without notice. The business of the understanding is to 'bring this synthesis to conceptions' and thereby to 'give unity to the synthesis'. Now the question arises whether 'the activity of giving unity to the synthesis' really means what it says, i. e. an activity which *unifies* or *introduces a unity into* the synthesis, or whether it only means an activity which *recognizes* a unity already given to the synthesis by the imagination. Prima facie Kant is maintaining that the understanding really unifies, or introduces the principle of unity. For the twice-repeated phrase 'give unity to the synthesis' seems unmistakable in meaning, and the important rôle in knowledge is plainly meant to be assigned to the understanding. Kant's language, however, is not decisive; for he speaks of the synthesis of the manifold as that which 'first produces a knowledge which indeed at first may be crude and confused and therefore needs *analysis*', and he says of the conceptions which give unity to the synthesis that 'they consist solely in the *representation* of this necessary synthetical unity'. Again, 'to bring the synthesis to a conception' may well be understood to mean 'to recognize the synthesis as an instance of the conception'; and, since Kant is speaking of knowledge, 'to give unity to the synthesis' may only mean 'to give unity to the synthesis *for us*', i. e. 'to make us aware of its unity'. Moreover, consideration of what thought can possibly achieve with respect to a synthesis presented to it by the imagination renders it necessary to hold that the understanding only recognizes the unity of the synthesis. For if a synthesis has been effected, it must have been effected in accordance with a principle of construction or synthesis, and therefore it would seem that the only work left for the understanding is to discover the principle latent in the procedure of the imagination. At any rate, if the synthesis does not involve a principle of synthesis, it is impossible to see how thought can subsequently introduce a principle. The imagination, then, must be considered to have already introduced the principle of unity into the manifold by combining it in accordance with a conception or principle of combination, and the work of the understanding must be considered to consist in recognizing that the manifold has been thereby combined and unified through the conception. We are therefore obliged to accept one of two alternatives. *Either* the understanding merely renders the mind conscious of the procedure of a faculty different from itself, viz. the imagination, in which case the important rôle in knowledge, viz. the effecting of the synthesis according to a principle, is played by a faculty different from the understanding; *or* the imagination is the understanding working unreflectively, and the subsequent process of bringing the synthesis to a conception is merely a process by which the understanding becomes conscious of its own procedure. Moreover, it is the latter alternative which we must accept as more in accordance with the general tenor of Kant's thought. For the synthesis of the imagination is essentially the outcome of activity or spontaneity, and, as such, it belongs to the understanding rather than to the sensibility; in fact we find Kant in one place actually saying that 'it is one and the same spontaneity which at one time under the name of imagination, at another time under that of understanding, introduces connexion into the manifold of perception'. Further, it should be noted that since the imagination must be the understanding working unreflectively, and since it must be that which introduces unity into the manifold, there is some justification for his use of language which implies that the understanding is the source of the unity, though it will not be so in the sense in which the passage under discussion might at first sight lead us to suppose.

We can now turn to the argument of the *Transcendental Deduction* itself. Kant introduces it in effect by raising the question, 'How is it that, beginning with the isolated data of sense, we come to acquire knowledge?' His aim is to show (1) that knowledge requires the performance of certain operations by the mind upon the manifold of sense; (2) that this process is a condition not merely of knowledge, but also of self-consciousness; and (3) that, since the manifold is capable of entering into knowledge, and since we are capable of being self-conscious, the categories, whose validity is implied by this process, are valid.

Kant begins by pointing out that all knowledge, *a priori* as well as empirical, requires the manifold, produced successively in the mind, to be subjected to three operations.

1. Since the elements of the manifold are as given mere isolated units, and since knowledge is the apprehension of a unity of connected elements, the mind must first run through the multiplicity of sense and then grasp it together into a whole, i. e. into an image. This act is an act of synthesis; it is called 'the synthesis of apprehension' and is ascribed to the imagination. It must be carried out as much in respect of the pure or *a priori* elements of space and time as in respect of the manifold of sensation, for individual spaces and times contain a multiplicity which, to be apprehended, must be combined. The necessity of this act of synthesis is emphasized in the second edition. "We cannot represent anything as combined in the object without having previously combined it ourselves. Of all representations, *combination* is the only one which cannot be given through objects, but can be originated only by the subject itself because it is an act of its own activity."

2. Since the data of perception are momentary, and pass away with perception, the act of grasping them together requires that the mind shall reproduce the past data in order to combine them with the present datum. "It is plain that if I draw a line in thought, or wish to think of the time from one midday to another, or even to represent to myself a certain number, I must first necessarily grasp in thought these manifold representations one after another. But if I were continually to lose from my thoughts the preceding representations (the first parts of the line, the preceding parts of time or the units successively represented), and were not to reproduce them, while I proceeded to the succeeding parts, there could never arise a complete representation, nor any of the thoughts just named, not even the first and purest fundamental representations of space and time." This act of reproduction is called 'the synthesis of reproduction in the imagination'.

Further, the necessity of reproduction brings to light a characteristic of the synthesis of apprehension. "It is indeed only an empirical law, according to which representations which have often followed or accompanied one another in the end become associated, and so form a connexion, according to which, even in the absence of the object, one of these representations produces a transition of the mind to another by a fixed rule. But this law of reproduction presupposes that phenomena themselves are actually subject to such a rule, and that in the manifold of their representations there is a concomitance or sequence, according to a fixed rule; for, without this, our empirical imagination would never find anything to do suited to its capacity, and would consequently remain hidden within the depths of the mind as a dead faculty, unknown to ourselves. If cinnabar were now red, now black, now light, now heavy, if a man were changed now into this, now into that animal shape, if our fields were covered on the longest day, now with fruit, now with ice and snow, then my empirical faculty of imagination could not even get an opportunity of thinking of the heavy cinnabar when there occurred the representation of red colour; or if a certain name were given now to one thing, now to another, or if the same thing were called now by one and now by another name, without the control of some rule, to which the phenomena themselves are already subject, no empirical synthesis of reproduction could take place."

"There must then be something which makes this very reproduction of phenomena possible, by being the *a priori* foundation of a necessary synthetical unity of them. But we soon discover it, if we reflect that phenomena are not things in themselves, but the mere play of our representations, which in the end resolve themselves into determinations of our internal sense. For if we can prove that even our purest *a priori* perceptions afford us no knowledge, except so far as they contain such a combination of the manifold as renders possible a thoroughgoing synthesis of reproduction, then this synthesis of imagination is based, even before all experience, on *a priori* principles, and we must assume a pure transcendental synthesis of the imagination which lies at the foundation of the very possibility of all experience (as that which necessarily presupposes the reproducibility of phenomena)."

In other words, the faculty of reproduction, if it is to get to work, presupposes that the elements of the manifold are parts of a necessarily related whole; or, as Kant expresses it later, it presupposes the *affinity* of phenomena; and this affinity in turn presupposes that the synthesis of apprehension by combining the

elements of the manifold on certain principles makes them parts of a necessarily related whole.

3. Kant introduces the third operation, which he calls ‘the synthesis of recognition in the conception’, as follows:

“Without consciousness that what we are thinking is identical with what we thought a moment ago, all reproduction in the series of representations would be in vain. For what we are thinking would be a new representation at the present moment, which did not at all belong to the act by which it was bound to have been gradually produced, and the manifold of the same would never constitute a whole, as lacking the unity which only consciousness can give it. If in counting I forget that the units which now hover before my mind have been gradually added by me to one another, I should not know the generation of the group through this successive addition of one to one, and consequently I should not know the number, for this conception consists solely in the consciousness of this unity of the synthesis.”

“The word ‘conception’ might itself lead us to this remark. For it is this *one* consciousness which unites the manifold gradually perceived and then also reproduced into one representation. This consciousness may often be only weak, so that we connect it with the production of the representation only in the result but not in the act itself, i. e. immediately; but nevertheless there must always be one consciousness, although it lacks striking clearness, and without it conceptions, and with them knowledge of objects, are wholly impossible.”

Though the passage is obscure and confused, its general drift is clear. Kant, having spoken hitherto only of the operation of the imagination in apprehension and reproduction, now wishes to introduce the understanding. He naturally returns to the thought of it as that which recognizes a manifold as unified by a conception, the manifold, however, being not a group of particulars unified through the corresponding universal or conception, but the parts of an individual image, e. g. the parts of a line or the constituent units of a number, and the conception which unifies it being the principle on which these parts are combined. His main point is that it is not enough for knowledge that we should combine the manifold of sense into a whole in accordance with a specific principle, but we must also be in some degree conscious of our continuously identical act of combination, this consciousness being at the same time a consciousness of the special unity of the manifold. For the conception which forms the principle of the combination has necessarily two sides; while from our point of view it is the principle according to which we combine and which makes our combining activity one, from the point of view of the manifold it is the special principle by which the manifold is made *one*. If I am to count a group of five units, I must not only add them, but also be conscious of my continuously identical act of addition, this consciousness consisting in the consciousness that I am successively taking units up to, and only up to, five, and being at the same time a consciousness that the units are acquiring the unity of being a group of five. It immediately follows, though Kant does not explicitly say so, that all knowledge implies self-consciousness. For the consciousness that we have been combining the manifold on a certain definite principle is the consciousness of our identity throughout the process, and, from the side of the manifold, it is just that consciousness of the manifold as unified by being brought under a conception which constitutes knowledge. Even though it is Kant’s view that the self-consciousness need only be weak and need only arise after the act of combination, when we are aware of its result, still, without it, there will be no consciousness of the manifold as unified through a conception and therefore no knowledge. Moreover, if the self-consciousness be weak, the knowledge will be weak also, so that if it be urged that knowledge in the strictest sense requires the full consciousness that the manifold is unified through a conception, it must be allowed that knowledge in this sense requires a full or clear self-consciousness.

As is to be expected, however, the passage involves a difficulty concerning the respective functions of the imagination and the understanding. Is the understanding represented as only recognizing a principle of unity introduced into the manifold by the imagination, or as also for the first time introducing a principle of unity? At first sight the latter alternative may seem the right interpretation. For he says that unless we

were conscious that what we are thinking is identical with what we thought a moment ago, ‘what we are thinking would *be* a new representation which *did not at all belong* to the act by which it was bound to have been gradually produced, and the manifold of the same *would never* constitute a whole, as lacking the unity which only *consciousness can give it*.’ Again, in speaking of a conception — which of course implies the understanding — he says that ‘it is this one consciousness which *unites* the manifold gradually perceived and then reproduced into *one* representation’. But these statements are not decisive, for he uses the term ‘recognition’ in his formula for the work of the understanding, and he illustrates its work by pointing out that in counting we must *remember* that we have added the units. Moreover, there is a consideration which by itself makes it necessary to accept the former interpretation. The passage certainly represents the understanding as recognizing the identical action of the mind in combining the manifold on a principle, whether or not it also represents the understanding as the source of this activity. But if it were the understanding which combined the manifold, there would be no synthesis which the imagination could be supposed to have performed, and therefore it could play no part in knowledge at all, a consequence which must be contrary to Kant’s meaning. Further if, as the general tenor of the deduction shows, the imagination is really only the understanding working unreflectively, we are able to understand why Kant should for the moment cease to distinguish between the imagination and the understanding, and consequently should use language which implies that the understanding both combines the manifold on a principle and makes us conscious of our activity in so doing. Hence we may say that the real meaning of the passage should be stated thus: ‘Knowledge requires one consciousness which, as imagination, combines the manifold on a definite principle constituted by a conception, and, as understanding, is to some extent conscious of its identical activity in so doing, this self-consciousness being, from the side of the whole produced by the synthesis, the consciousness of the conception by which the manifold is unified.’

Hitherto there has been no mention of an *object* of knowledge, and since knowledge is essentially knowledge of an object, Kant’s next task is to give such an account of an object of knowledge as will show that the processes already described are precisely those which give our representations, i. e. the manifold of sense, relation to an object, and consequently yield knowledge.

He begins by raising the question, ‘What do we mean by the phrase ‘an object of representations’?’ He points out that a phenomenon, since it is a mere sensuous representation, and not a thing in itself existing independently of the faculty of representations, is just not an object. To the question, therefore, ‘What is meant by an object corresponding to knowledge and therefore distinct from it?’ we are bound to answer from the point of view of the distinction between phenomena and things in themselves, that the object is something in general = *x*, i. e. the thing in itself of which we know only *that* it is and not *what* it is. There is, however, another point of view from which we can say something more about an object of representations and the correspondence of our representations to it, viz. that from which we consider what is involved in the thought of the relation of knowledge or of a representation to its object. “We find that our thought of the relation of all knowledge to its object carries with it something of necessity, since its object is regarded as that which prevents our cognitions being determined at random or capriciously, and causes them to be determined *a priori* in a certain way, because in that they are to relate to an object, they must necessarily also, in relation to it, agree with one another, that is to say, they must have that unity which constitutes the conception of an object.”

Kant’s meaning seems to be this: ‘If we think of certain representations, e. g. certain lines or the representations of extension, impenetrability, and shape, as related to an object, e. g. to an individual triangle or an individual body, we think that they must be mutually consistent or, in other words, that they must have the unity of being parts of a necessarily related whole or system, this unity in fact constituting the conception of an object in general, in distinction from the conception of an object of a particular kind. The latter thought in turn involves the thought of the object of representations as that which prevents them

being anything whatever and in fact makes them parts of a system. The thought therefore of representations as related to an object carries with it the thought of a certain necessity, viz. the necessary or systematic unity introduced into the representations by the object. Hence by an object of representations we mean something which introduces into the representations a systematic unity which constitutes the nature of an object in general, and the relatedness of representations to, or their correspondence with, an object involves their systematic unity.'

Certain points, however, should be noticed. In the *first* place, Kant is for the moment tacitly ignoring his own theory of knowledge, in accordance with which the object proper, i. e. the thing in itself, is unknowable, and is reverting to the ordinary conception of knowledge as really *knowledge* of its object. For the elements which are said, in virtue of being related to an object, to agree and to have the unity which constitutes the conception of an object must be elements of an object which we know; for if the assertion that they agree is to be significant, they must be determinate parts or qualities of the object, e. g. the sides of an individual triangle or the impenetrability or shape of an individual body, and therefore it is implied that we know that the object has these parts or qualities. In the *second* place, both the problem which Kant raises and the clue which he offers for its solution involve an impossible separation of knowledge or a representation from its object. Kant begins with the thought of a phenomenon as a mere representation which, as mental, and as the representation of an object, is just not an object, and asks, 'What is meant by the object of it?' He finds the clue to the answer in the thought that though a representation or idea when considered in itself is a mere mental modification, yet, when considered as related to an object, it is subject to a certain necessity. In fact, however, an idea or knowledge is essentially an idea or knowledge of an object, and we are bound to think of it as such. There is no meaning whatever in saying that the thought of an idea as related to an object carries with it something of necessity, for to say so implies that it is possible to think of it as unrelated to an object. Similarly there is really no meaning in the question, 'What is meant by an object corresponding to knowledge or to an idea?' for this in the same way implies that we can first think of an idea as unrelated to an object and then ask, 'What can be meant by an object corresponding to it?' In the *third* place, Kant only escapes the absurdity involved in the thought of a mere idea or a mere representation by treating representations either as parts or as qualities of an object. For although he speaks of our cognitions, i. e. of our representations, as being determined by the object, he says that they must agree, i. e. they must have that unity which constitutes the conception of an object, and he illustrates representations by the sides of an individual triangle and the impenetrability and shape of an individual body, which are just as 'objective' as the objects to which they relate. The fact is that he really treats a representation not as his problem requires that it should be treated, i. e. as a representation of something, but as something represented, i. e. as something of which we are aware, viz. a part or a quality of an object. In the *fourth* place, not only is that which Kant speaks of as related to an object really not a representation, but also — as we see if we consider the fact which Kant has in mind — that to which he speaks of it as related is really not *an* object but *one and the same object to which another so-called representation is related*. For what Kant says is that representations as related to an object must agree among themselves. But this statement, to be significant, implies that the object to which various representations are related is *one and the same*. Otherwise why should the representations agree? In view, therefore, of these last two considerations we must admit that the real thought underlying Kant's statement should be expressed thus: 'We find that the thought that *two or more parts or qualities of an object* relate to *one and the same object* carries with it a certain necessity, since this object is considered to be that which *prevents these parts or qualities which we know it to possess* from being determined at random, because by being related to *one and the same object*, they must agree among themselves.' The importance of the correction lies in the fact that what Kant is stating is not what he thinks he is stating. He is really stating the implication of the thought that two or more qualities or parts of some object or other, which, as such, already relate to an object, relate to one and the same object. He

thinks he is stating the implication of the thought that a representation which in itself has no relation to an object, has relation to an object. And since his problem is simply to determine what constitutes the relatedness to an object of that which in itself is a mere representation, the distinction is important; for it shows that he really elucidates it by an implication respecting something which already has relation to an object and is not a mental modification at all, but a quality or a part of an object.

Kant continues thus: "But it is clear that, since we have to do only with the manifold of our representations, and the *x*, which corresponds to them (the object), since it is to be something distinct from all our representations, is for us nothing, the unity which the object necessitates can be nothing else than the formal unity of consciousness in the synthesis of the manifold of representations." [I. e. since the object which produces systematic unity in our representations is after all only the unknown thing in itself, viz. *x*, any of the parts or qualities of which it is impossible to know, that to which it gives unity can be only our representations and not its own parts or qualities. For, since we do not know any of its parts or qualities, these representations cannot be its parts or qualities. Consequently, the unity produced by this *x* can only be the formal unity of the combination of the manifold in consciousness.] "Then and then only do we say that we know the object," [i. e. we know that the manifold relates to an object] "if we have produced synthetical unity in the manifold of perception. But this unity would be impossible, if the perception could not be produced by means of such a function of synthesis according to a rule as renders the reproduction of the manifold a priori necessary, and a conception in which the manifold unifies itself possible. Thus we think a triangle as an object, in that we are conscious of the combination of three straight lines in accordance with a rule by which such a perception can at any time be presented. This *unity of the rule* determines all the manifold and limits it to conditions which make the unity of apperception possible, and the conception of this unity is the representation of the object=*x*, which I think through the aforesaid predicates of a triangle." [I. e., apparently, 'to conceive this unity of the rule is to represent to myself the object *x*, i. e. the thing in itself, of which I come to think by means of the rule of combination.']

In this passage several points claim attention. In the *first* place, it seems impossible to avoid the conclusion that in the second sentence the argument is exactly reversed. Up to this point, it is the thing in itself which produces unity in our representations. Henceforward it is we who produce the unity by our activity of combining the manifold. The discrepancy cannot be explained away, and its existence can only be accounted for by the exigencies of Kant's position. When he is asking 'What is meant by the object (beyond the mind) corresponding to our representations?' he has to think of the unity of the representations as due to the object. But when he is asking 'How does the manifold of sense become unified?' his view that all synthesis is due to the mind compels him to hold that the unity is produced by us. In the *second* place, the passage introduces a second object in addition to the thing in itself, viz. the phenomenal object, e. g. a triangle considered as a whole of parts unified on a definite principle. It is this object which, as the object that we know, is henceforward prominent in the first edition, and has exclusive attention in the second. The connexion between this object and the thing in itself appears to lie in the consideration that we are only justified in holding that the manifold of sense is related to a thing in itself when we have unified it and therefore know it to be a unity, and that to know it to be a unity is *ipso facto* to be aware of it as related to a phenomenal object; in other words, the knowledge that the manifold is related to an object beyond consciousness is acquired through our knowledge of its relatedness to an object within consciousness. In the *third* place, in view of Kant's forthcoming vindication of the categories, it is important to notice that the process by which the manifold is said to acquire relation to an object is illustrated by a synthesis on a particular principle which constitutes the phenomenal object an object of a particular kind. The synthesis which enables us to recognize three lines as an object is not a synthesis based on general principles constituted by the categories, but a synthesis based on the particular principle that the three lines must be so put together as to form an enclosed space. Moreover, it should be noticed

that the need of a particular principle is really inconsistent with his view that relation to an object gives the manifold the systematic unity which constitutes the conception of an object, or that at least a [Greek: hysteron proteron] is involved. For if the knowledge that certain representations form a systematic unity justifies our holding that they relate to an object, it would seem that in order to know that they relate to an object we need not know the special character of their unity. Yet, as Kant states the facts, we really have to know the special character of their unity in order to know that they possess systematic unity in general. *Lastly*, it is easy to see the connexion of this account of an object of representations with the preceding account of the synthesis involved in knowledge. Kant had said that knowledge requires a synthesis of the imagination in accordance with a definite principle, and the recognition of the principle of the synthesis by the understanding. From this point of view it is clear that the aim of the present passage is to show that this process yields knowledge of an object; for it shows that this process yields knowledge of a phenomenal object of a particular kind, e. g. of a triangle or of a body, and that this object as such refers to what after all is *the* object, viz. the thing in itself.

The position reached by Kant so far is this. Knowledge, as being knowledge of an object, consists in a process by which the manifold of perception acquires relation to an object. This process again is a process of combination of the manifold into a systematic whole upon a definite principle, accompanied by the consciousness in some degree of the act of combination, and therefore also of the acquisition by the manifold of the definite unity which forms the principle of combination. In virtue of this process there is said to be 'unity of consciousness in the synthesis of the manifold', a phrase which the context justifies us in understanding as a condensed expression for a situation in which (1) the manifold of sense is a unity of necessarily related parts, (2) there is *consciousness* of this unity, and (3) the consciousness which combines and is conscious of combining the manifold, as being necessarily one and the same throughout this process, is itself a unity.

Kant then proceeds to introduce what he evidently considers the keystone of his system, viz. 'transcendental apperception.'

"There is always a transcendental condition at the basis of any necessity. Hence we must be able to find a transcendental ground of the unity of consciousness in the synthesis of the manifold of all our perceptions, and therefore also of the conceptions of objects in general, consequently also of all objects of experience, a ground without which it would be impossible to think any object for our perceptions; for this object is no more than that something, the conception of which expresses such a necessity of synthesis."

"Now this original and transcendental condition is no other than *transcendental apperception*. The consciousness of self according to the determinations of our state in internal sense-perception is merely empirical, always changeable; there can be no fixed or permanent self in this stream of internal phenomena, and this consciousness is usually called *internal sense* or *empirical apperception*. That which is *necessarily* to be represented as numerically identical cannot be thought as such by means of empirical data. The condition which is to make such a transcendental presupposition valid must be one which precedes all experience, and makes experience itself possible."

"Now no cognitions can occur in us, no combination and unity of them with one another, without that unity of consciousness which precedes all data of perception, and by relation to which alone all representation of objects is possible. This pure original unchangeable consciousness I shall call *transcendental apperception*. That it deserves this name is clear from the fact that even the purest objective unity, viz. that of *a priori* conceptions (space and time) is only possible by relation of perceptions to it. The numerical unity of this apperception therefore forms the *a priori* foundation of all conceptions, just as the multiplicity of space and time is the foundation of the perceptions of the sensibility."

The argument is clearly meant to be 'transcendental' in character; in other words, Kant continues to

argue from the existence of knowledge to the existence of its presuppositions. We should therefore expect the passage to do two things: firstly, to show what it is which is presupposed by the ‘unity of consciousness in the synthesis of the manifold’; and secondly, to show that this presupposition deserves the title ‘transcendental apperception’. Unfortunately Kant introduces ‘transcendental apperception’ after the manner in which he introduced the ‘sensibility’, the ‘imagination’ and the ‘understanding’, as if it were a term with which every one is familiar, and which therefore needs little explanation. To interpret the passage, it seems necessary to take it in close connexion with the preceding account of the three ‘syntheses’ involved in knowledge, and to bear in mind that, as a comparison of passages will show, the term ‘apperception’, which Kant borrows from Leibniz, always has for Kant a reference to consciousness of self or self-consciousness. If this be done, the meaning of the passage seems to be as follows:

‘To vindicate the existence of a self which is necessarily one and the same throughout its representations, and which is capable of being aware of its own identity throughout, it is useless to appeal to that consciousness of ourselves which we have when we reflect upon our successive states. For, although in being conscious of our states we are conscious of ourselves we are not conscious of ourselves as unchanging. The self as going through successive states is changing, and even if in fact its states did not change, its identity would be only contingent; it need not continue unchanged. Consequently, the only course possible is to show that the self-consciousness in question is presupposed in any experience or knowledge. Now it is so presupposed. For, as we have already shown, the relation of representations to an object presupposes one consciousness which combines and unifies them, and is at the same time conscious of the identity of its own action in unifying them. This consciousness is the ground of the unity of consciousness in the synthesis of the manifold. It may fairly be called transcendental, because even a conception which relates to space or time, and therefore is the most remote from sensation, presupposes one consciousness which combines and unifies the manifold of space and time through the conception, and is conscious of the identity of its own action in so doing. It may, therefore, be regarded as the presupposition of *all* conceiving or bringing a manifold under a conception, and therefore of all knowledge. Consequently, since knowledge is possible, i. e. since the manifold of representations can be related to an object, there must be one self capable of being aware of its own identity throughout its representations.’

At this point of Kant’s argument, however, there seems to occur an inversion of the thought. Hitherto, Kant has been arguing from the possibility of knowledge to the possibility of the consciousness of our own identity. But in the next paragraph he appears to reverse this procedure and to argue from the possibility of self-consciousness to the possibility of knowledge.

“But it is just this transcendental unity of apperception which forms, from all possible phenomena which can be together in one experience, a connexion of them according to laws. For this unity of consciousness would be impossible, if the mind in the knowledge of the manifold could not become conscious of the identity of the function whereby it unites the manifold synthetically in one knowledge. Consequently, the original and necessary consciousness of the identity of oneself is at the same time a consciousness of an equally necessary unity of the synthesis of all phenomena according to conceptions, i. e. according to rules which not only make them necessarily reproducible, but thereby determine an object for their perception, i. e. determine the conception of something in which they are necessarily connected. For the mind could not possibly think the identity of itself in the manifold of its representations, and this indeed *a priori*, if it had not before its eyes the identity of its action which subjects all synthesis of apprehension (which is empirical) to a transcendental unity, and first makes possible its connexion according to rules.”

The argument seems indisputably to be as follows: ‘The mind is necessarily able to be aware of its own identity throughout its manifold representations. To be aware of this, it must be aware of the identity of the activity by which it combines the manifold of representations into a systematic whole. Therefore it

must be capable of combining, and of being conscious of its activity in combining, all phenomena which can be its representations into such a whole. But this process, from the point of view of the representations combined, is the process by which they become related to an object and so enter into knowledge. Therefore, since we are capable of being conscious of our identity with respect to all phenomena which can be our representations, the process of combination and consciousness of combination which constitutes knowledge must be possible with respect to them.' Thus the thought of this and the preceding paragraph seems to involve a circle. First the possibility of self-consciousness is deduced from the possibility of knowledge, and then the possibility of knowledge is deduced from the possibility of self-consciousness.

An issue therefore arises, the importance of which can be seen by reference to the final aim of the 'deduction', viz. the vindication of the categories. The categories are 'fundamental conceptions which enable us to think objects in general for phenomena'; in other words, they are the principles of the synthesis by which the manifold of sense becomes related to an object. Hence, if this be granted, the proof that the categories are applicable to objects consists in showing that the manifold can be subjected to this synthesis. The question therefore arises whether Kant's real starting-point for establishing the possibility of this synthesis and therefore the applicability of the categories, is to be found in the possibility of knowledge, or in the possibility of self-consciousness, or in both. In other words, does Kant start from the position that all representations must be capable of being related to an object, or from the position that we must be capable of being conscious of our identity with respect to all of them, or from both?

Prima facie the second position is the more plausible basis for the desired conclusion. On the one hand, it does not seem obvious that the manifold *must* be capable of being related to an object; for even if it be urged that otherwise we should have only 'a random play of representations, less than a dream', it may be replied, that this might be or might come to be the case. On the other hand, the fact that our representations are ours necessarily seems to presuppose that we are identical subjects of these representations, and recognition of this fact is the consciousness of our identity.

If we turn to the text for an answer to this question, we find that Kant seems not only to use both starting-points, but even to regard them as equivalents. Thus in introducing the categories Kant begins by appealing to the necessity for knowledge that representations should relate to an object.

"Unity of synthesis according to empirical conceptions would be purely contingent, and were these not based on a transcendental ground of unity, it would be possible for a confused crowd of phenomena to fill our soul, without the possibility of experience ever arising therefrom. But then also all relation of knowledge to objects would fall away, because knowledge would lack connexion according to universal and necessary laws; it would be thoughtless perception but never knowledge, and therefore for us as good as nothing."

"The *a priori* conditions of any possible experience whatever are at the same time conditions of the possibility of the objects of experience. Now I assert that the above mentioned *categories* are nothing but *the conditions of thinking in any possible experience*, just as *space and time* are the *conditions of perception* requisite for the same. The former therefore are also fundamental conceptions by which we think objects in general for phenomena, and are therefore objectively valid *a priori* — which is exactly what we wished to know."

The next sentence, however, bases the necessity of the categories on the possibility of self-consciousness, without giving any indication that a change of standpoint is involved.

"But the possibility, nay, even the necessity, of these categories rests on the relation which the whole sensibility, and with it also all possible phenomena, have to original apperception, a relation which forces everything to conform to the conditions of the thoroughgoing unity of self-consciousness, i. e. to stand under universal functions of synthesis, i. e. of synthesis according to conceptions, as that wherein alone apperception can prove *a priori* its thorough-going and necessary identity."

Finally, the conclusion of the paragraph seems definitely to treat both starting-points as really the same. "Thus the conception of a cause is nothing but a synthesis (of the consequent in the time series with other phenomena) *according to conceptions*; and without such a unity, which has its *a priori* rule and subjects phenomena to itself, thorough-going and universal and therefore necessary unity of consciousness in the manifold of sense-perceptions would not be met with. But then also these perceptions would belong to no experience, consequently they would have no object, and would be nothing but a blind play of representations, less than a dream."

The fact is that since for Kant the synthesis of representations in accordance with the categories, accompanied by the consciousness of it, is at once the necessary and sufficient condition of the relatedness of representations to an object and of the consciousness of our identity with respect to them, it seems to him to be one and the same thing whether, in vindicating the synthesis, we appeal to the possibility of knowledge or to the possibility of self-consciousness, and it even seems possible to argue, *via* the synthesis, from knowledge to self-consciousness and vice versa.

Nevertheless, it remains true that the vindication of the categories is different, according as it is based upon the possibility of relating representations to an object or upon the possibility of becoming self-conscious with respect to them. It also remains true that Kant vindicates the categories in both ways. For while, in expounding the three so-called syntheses involved in knowledge, he is vindicating the categories from the point of view of knowledge, when he comes to speak of transcendental apperception, of which the central characteristic is the consciousness of self involved, there is a shifting of the centre of gravity. Instead of treating representations as something which can become related to an object, he now treats them as something of which, as belonging to a self, the self must be capable of being conscious as its own, and argues that a synthesis in accordance with the categories is required for this self-consciousness. It must be admitted then — and the admission is only to be made with reluctance — that when Kant reaches transcendental apperception, he really adopts a new starting-point, and that the passage which introduces transcendental apperception by showing it to be implied in knowledge only serves to conceal from Kant the fact that, from the point of view of the deduction of the categories, he is really assuming without proof the possibility of self-consciousness with respect to all our representations, as a new basis for argument.

The approach to the categories from the side of self-consciousness is, however, more prominent in the second edition, and consequently we naturally turn to it for more light on this side of Kant's position. There Kant vindicates the necessity of the synthesis from the side of self-consciousness as follows:

" It must be possible that the 'I think' should accompany all my representations; for otherwise something would be represented in me which could not be thought; in other words, the representation would be either impossible or at least for me nothing. That representation which can be given before all thought is called *perception*. All the manifold of perception has therefore a necessary relation to the 'I think' in the same subject in which this manifold is found. But this representation [i. e. the 'I think'] is an act of *spontaneity*, i. e. it cannot be regarded as belonging to sensibility. I call it *pure apperception*, to distinguish it from *empirical apperception*, or *original apperception* also, because it is that self-consciousness which, while it gives birth to the representation 'I think', which must be capable of accompanying all others and is one and the same in all consciousness, cannot itself be accompanied by any other. I also call the unity of it the *transcendental* unity of self-consciousness, in order to indicate the possibility of *a priori* knowledge arising from it. For the manifold representations which are given in a perception would not all of them be *my* representations, if they did not all belong to one self-consciousness, that is, as my representations (even though I am not conscious of them as such), they must necessarily conform to the condition under which alone they *can* stand together in a universal self-consciousness, because otherwise they would not all belong to me. From this original connexion much can be concluded."

"That is to say, this thorough-going identity of the apperception of a manifold given in perception

contains a synthesis of representations, and is possible only through the consciousness of this synthesis. For the empirical consciousness which accompanies different representations is in itself fragmentary, and without relation to the identity of the subject. This relation, therefore, takes place not by my merely accompanying every representation with consciousness, but by my *adding* one representation to another, and being conscious of the synthesis of them. Consequently, only because I can connect a manifold of given representations *in one consciousness*, is it possible for me to represent to myself the *identity of consciousness in these representations*; i. e. the *analytical* unity of apperception is possible only under the presupposition of a *synthetical* unity. The thought, 'These representations given in perception belong all of them to me' is accordingly just the same as, 'I unite them in one self-consciousness, or at least can so unite them;' and although this thought is not itself as yet the consciousness of the *synthesis* of representations, it nevertheless presupposes the possibility of this synthesis; that is to say, it is only because I can comprehend the manifold of representations in one consciousness, that I call them all *my* representations; for otherwise I should have as many-coloured and varied a self as I have representations of which I am conscious. Synthetical unity of the manifold of perceptions, as given *a priori*, is therefore the ground of the identity of apperception itself, which precedes *a priori* all *my* determinate thinking. But connexion does not lie in the objects, nor can it be borrowed from them through perception and thereby first taken up into the understanding, but it is always an operation of the understanding which itself is nothing more than the faculty of connecting *a priori*, and of bringing the manifold of given representations under the unity of apperception, which principle is the highest in all human knowledge."

"Now this principle of the necessary unity of apperception is indeed an identical, and therefore an analytical, proposition, but nevertheless it declares a synthesis of the manifold given in a perception to be necessary, without which the thorough-going identity of self-consciousness cannot be thought. For through the Ego, as a simple representation, is given no manifold content; in perception, which is different from it, a manifold can only be given, and through *connexion* in one consciousness it can be thought. An understanding, through whose self-consciousness all the manifold would *eo ipso* be given, would *perceive*; our understanding can only *think* and must seek its perception in the senses. I am, therefore, conscious of the identical self, in relation to the manifold of representations given to me in a perception, because I call all those representations *mine*, which constitute *one*. But this is the same as to say that I am conscious *a priori* of a necessary synthesis of them, which is called the original synthetic unity of apperception, under which all representations given to me stand, but also under which they must be brought through a synthesis."

Though this passage involves many difficulties, the main drift of it is clear. Kant is anxious to establish the fact that the manifold of sense must be capable of being combined on principles, which afterwards turn out to be the categories, by showing this to be involved in the fact that we must be capable of being conscious of ourselves as the identical subject of all our representations. To do this, he seeks to prove in the first paragraph that self-consciousness in this sense must be possible, and in the second that this self-consciousness presupposes the synthesis of the manifold.

Examination of the argument, however, shows that the view that self-consciousness must be possible is, so far as Kant is concerned, an assumption for which Kant succeeds in giving no reason at all, and that even if it be true, it cannot form a basis from which to deduce the possibility of the synthesis.

Before, however, we attempt to prove this, it is necessary to draw attention to three features of the argument. In the *first* place, it implies a somewhat different account of self-consciousness to that implied in the passages of the first edition which we have already considered. Self-consciousness, instead of being the consciousness of the identity of our activity in combining the manifold, is now primarily the consciousness of ourselves as identical subjects of all our representations, i. e. it is what Kant calls the analytical unity of apperception; and consequently it is somewhat differently related to the activity of synthesis involved in knowledge. Instead of being regarded as the consciousness of this activity, it is

regarded as presupposing the consciousness of the product of this activity, i. e. of the connectedness of the manifold produced by the activity, this consciousness being what Kant calls the synthetical unity of apperception. In the *second* place, it is plain that Kant's view is not that self-consciousness involves the consciousness of our representations as a connected whole, but that it involves the consciousness of them as capable of being connected by a synthesis. Yet, if it is only because I can connect (and therefore apprehend as connected) a manifold of representations in one consciousness, that I can represent to myself the identity of consciousness in these representations, self-consciousness really requires the consciousness of our representations as *already* connected; the mere consciousness of our representations as *capable* of being connected would not be enough. The explanation of the inconsistency seems to lie in the fact that the synthetic unity of which Kant is thinking is the unity of nature. For, as Kant of course was aware, in our ordinary consciousness we do not apprehend the interconnexion of the parts of nature in detail, but only believe that there is such an interconnexion; consequently he naturally weakened the conclusion which he ought to have drawn, viz. that self-consciousness presupposes consciousness of the synthesis, in order to make it conform to the facts of our ordinary consciousness. Yet, if his *argument* is to be defended, its conclusion must be taken in the form that self-consciousness presupposes consciousness of the actual synthesis or connexion and not merely of the possibility of it. In the *third* place, Kant twice in this passage definitely makes the act of synthesis, which his argument maintains to be the condition of *consciousness of the identity* of ourselves, the condition of the *identity* of ourselves. The fact is that, on Kant's view, the act of synthesis of the representations is really a condition of their belonging to one self, the self being presupposed to be a self capable of self-consciousness.

We may now turn to the first of the two main points to be considered, viz. the reason given by Kant for holding that self-consciousness must be possible. In the first paragraph (§§ 1-4) Kant appears twice to state a reason, viz. in §§ 1 and 4. What is meant by the first sentence, "It must be possible that the 'I think' should accompany all my representations; for otherwise something would be represented in me which could not be thought; in other words, the representation would either be impossible or at least for me nothing"? It is difficult to hold that 'my representations' here means objects of which I am aware, and that the thesis to be established is that I must be capable of being conscious of my own identity throughout all awareness or thought of objects. For the next sentence refers to perceptions as representations which can be given previously to all thought, and therefore, presumably, as something of which I am not necessarily aware. Again, the ground adduced for the thesis would be in part a mere restatement of it, and in part nonsense. It would be 'otherwise something would be apprehended with respect to which I could not be aware that I was apprehending it; in other words, I could not apprehend it [since otherwise I could be aware that I was apprehending it]', the last words being incapable of any interpretation. It is much more probable that though Kant is leading up to self-consciousness, the phrase 'I think' here refers not to 'consciousness that I am thinking', but to 'thinking'. He seems to mean 'It must be possible to apprehend all my 'affections' (i. e. sensations or appearances in me), for otherwise I should have an affection of which I could not be aware; in other words, there could be no such affection, or at least it would be of no possible importance to me.' And on this interpretation self-consciousness is not introduced till § 3, and then only surreptitiously. On neither interpretation, however, does Kant give the vestige of a *reason* for the possibility of self-consciousness. Again, it seems clear that in § 4 'my representations', and 'representations which belong to me' mean objects of which I am aware (i. e. something presented); for he says of my representations, not that I may not be conscious of them — which he should have said if 'my representations' meant my mental affections of which I could become conscious — but that I may not be conscious of them as my representations. Consequently in § 4 he is merely asserting that I must be able to be conscious of my identity throughout my awareness of objects. So far, then, we find merely the *assertion* that self-consciousness must be possible.

In the next paragraph — which is clearly meant to be the important one — Kant, though he can hardly

be said to be aware of it, seems to *assume* that it is the very nature of a knowing self, not only to be identical throughout its thoughts or apprehendings, but to be capable of being conscious of its own identity. § 6 runs: “The empirical consciousness which accompanies different representations is in itself fragmentary, and without relation to the identity of the subject.” Kant is saying that if there existed merely a consciousness of A which was not at the same time a consciousness of B and a consciousness of B which was not at the same time a consciousness of A, these consciousnesses would not be the consciousnesses belonging to one self. But this is only true, if the one self to which the consciousness of A and the consciousness of B are to belong must be capable of being aware of its own identity. Otherwise it might be one self which apprehended A and then, forgetting A, apprehended B. No doubt in that case the self could not be aware of its own identity in apprehending A and in apprehending B, but none the less it would *be* identical in so doing. We reach the same conclusion if we consider the concluding sentence of § 10. “It is only because I can comprehend the manifold of representations in one consciousness, that I call them all my representations; for otherwise I should have as many-coloured and varied a self as I have representations of which I am conscious.” Doubtless if I am to *be aware of* myself as the same in apprehending A and B, then, in coming to apprehend B, I must continue to apprehend A, and therefore must apprehend A and B as related; and such a consciousness on Kant’s view involves a synthesis. But if I am merely to *be* the same subject which apprehends A and B, or rather if the apprehension of A and that of B are merely to *be* apprehensions on the part of one and the same subject, no such consciousness of A and B as related and, therefore, no synthesis is involved.

Again, the third paragraph assumes the possibility of self-consciousness as the starting-point for argument. The thought seems to be this: ‘For a self to be aware of its own identity, there must be a manifold in relation to which it can apprehend itself as one and the same throughout. An understanding which was perceptive, i. e. which originated objects by its own act of thinking, would necessarily by its own thinking originate a manifold in relation to which it could be aware of its own identity in thinking, and therefore its self-consciousness would need no synthesis. But our understanding, which is not perceptive, requires a manifold to be given to it, in relation to which it can be aware of its own identity by means of a synthesis of the manifold.’ If this be the thought, it is clearly presupposed that *any* understanding must be capable of being conscious of its own identity.

Further, it is easy to see how Kant came to take for granted the possibility of self-consciousness, in the sense of the consciousness of ourselves as the identical subject of all our representations. He approaches self-consciousness with the presupposition derived from his analysis of knowledge that our apprehension of a manifold does not consist in separate apprehensions of its elements, but is one apprehension or consciousness of the elements as related. He thinks of this as a general presupposition of all apprehension of a manifold, and, of course, to discover this presupposition is to be self-conscious. To recognize the oneness of our apprehension is to be conscious of our own identity.

Again, to pass to the second main point to be considered, Kant has no justification for arguing from the possibility of self-consciousness to that of the synthesis. This can be seen from the mere form of his argument. Kant, as has been said, seems first to establish the possibility of self-consciousness, and thence to conclude that a synthesis must be possible. But if, as it is his point to urge, consciousness of our identity only takes place through consciousness of the synthesis, this method of argument must be invalid. It would clearly be necessary to know that the synthesis is possible, *before* and *in order that* we could know that self-consciousness is possible. An objector has only to urge that the manifold might be such that it could not be combined into a systematic whole, in order to secure the admission that in that case self-consciousness would not be possible.

Nevertheless, the passage under consideration may be said to lay bare an important presupposition of self-consciousness. It is true that self-consciousness would be impossible, if we merely apprehended the parts of the world in isolation. To be conscious that I who am perceiving C perceived B and A, I must be

conscious at once of A, B, and C, in one act of consciousness or apprehension. To be conscious separately of A and B and C is not to be conscious of A and B and C. And, to be conscious of A and B and C in one act of consciousness, I must apprehend A, B, and C as related, i. e. as forming parts of a whole or system. Hence it is only because our consciousness of A, B, and C is never the consciousness of a mere A, a mere B, and a mere C, but is always the consciousness of A B C as elements in one world that we can be conscious of our identity in apprehending A, B, and C. If *per impossibile* our apprehension be supposed to cease to be an apprehension of a plurality of objects in relation, self-consciousness must be supposed to cease also. At the same time, it is impossible to argue from the consciousness of our identity in apprehending to the consciousness of what is apprehended as a unity, and thence to the existence of that unity. For, apart from the consideration that in fact all thinking presupposes the relatedness or — what is the same thing — the necessary relatedness of objects to one another, and that therefore any assertion to the contrary is meaningless, the consciousness of objects as a unity is a condition of the consciousness of our identity, and therefore any doubt that can be raised in regard to the former can be raised equally with regard to the latter.

We may now pass to the concluding portion of the deduction. For the purpose of considering it, we may sum up the results of the preceding discussion by saying that Kant establishes the synthesis of the manifold on certain principles by what are really two independent lines of thought. The manifold may be regarded either as something which, in order to enter into knowledge, must be given relation to an object, or as something with respect to which self-consciousness must be possible. Regarded in either way, the manifold, according to Kant, involves a process of synthesis on certain principles, which makes it a systematic unity. Now Kant introduces the categories by maintaining that they are the principles of synthesis in question. “I assert that the above mentioned *categories* are nothing but the *conditions of thinking in a possible experience*.... They are fundamental conceptions by which we think objects in general for phenomena.” A synthesis according to the categories is ‘that wherein alone apperception can prove *a priori* its thorough-going and necessary identity’. In the first edition this identification is simply asserted, but in the second Kant offers a proof.

Before, however, we consider the proof, it is necessary to refer to a difficulty which seems to have escaped Kant altogether. The preceding account of the synthesis involved in knowledge and in self-consciousness implies, as his illustrations conclusively show, that the synthesis requires a particular principle which constitutes the individual manifold a whole of a particular kind. But, if this be the case, it is clear that the categories, which are merely conceptions of an object in general, and are consequently quite general, cannot possibly be sufficient for the purpose. And since the manifold in itself includes no synthesis and therefore no principle of synthesis, Kant fails to give any account of the source of the particular principles of synthesis required for particular acts of knowledge. This difficulty — which admits of no solution — is concealed from Kant in two ways. In the first place, when he describes what really must be stated as the process by which parts or qualities of an object become related to an object of a particular kind, he thinks that he is describing a process by which representations become related to an object in general. Secondly, he thinks of the understanding as the source of general principles of synthesis, individual syntheses and the particular principles involved being attributed to the imagination; and so, when he comes to consider the part played in knowledge by the understanding, he is apt to ignore the need of particular principles. Hence, Kant’s proof that the categories are the principles of synthesis can at best be taken only as a proof that the categories, though not sufficient for the synthesis, are involved in it.

The proof runs thus:

“I could never satisfy myself with the definition which logicians give of a judgement in general. It is, according to them, the representation of a relation between two conceptions....”

“But if I examine more closely the relation of given representations in every judgement, and distinguish it, as belonging to the understanding, from their relation according to the laws of the reproductive

imagination (which has only subjective validity), I find that a judgement is nothing but the mode of bringing given representations under the *objective* unity of apperception. This is what is intended by the term of relation 'is' in judgements, which is meant to distinguish the objective unity of given representations from the subjective. For this term indicates the relation of these representations to the original apperception, and also their *necessary unity*, even though the judgement itself is empirical, and therefore contingent, e. g. 'Bodies are heavy.' By this I do not mean that these representations *necessarily* belong *to each other* in empirical perception, but that they belong to each other *by means of the necessary unity* of apperception in the synthesis of perceptions, that is, according to principles of the objective determination of all our representations, in so far as knowledge can arise from them, these principles being all derived from the principle of the transcendental unity of apperception. In this way alone can there arise from this relation *a judgement*, that is, a relation which is *objectively valid*, and is adequately distinguished from the relation of the very same representations which would be only subjectively valid, e. g. according to laws of association. According to these laws, I could only say, 'If I carry a body, I feel an impression of weight', but not 'It, the body, *is* heavy'; for this is tantamount to saying, 'These two representations are connected in the object, that is, without distinction as to the condition of the subject, and are not merely connected together in the perception, however often it may be repeated.'"

This ground for the identification of the categories with the principles of synthesis involved in knowledge may be ignored, as on the face of it unsuccessful. For the argument is that since the activity by which the synthesis is affected is that of judgement, the conceptions shown by the *Metaphysical Deduction* to be involved in judgement must constitute the principles of synthesis. But it is essential to this argument that the present account of judgement and that which forms the basis of the *Metaphysical Deduction* should be the same; and this is plainly not the case. Judgement is now represented as an act by which we relate the manifold of sense in certain necessary ways as parts of the physical world, whereas in the *Metaphysical Deduction* it was treated as an act by which we relate conceptions; and Kant now actually says that this latter account is faulty. Hence even if the metaphysical deduction had successfully derived the categories from the account of judgement which it presupposed, the present argument would not justify the identification of the categories so deduced with the principles of synthesis. The fact is that Kant's vindication of the categories is in substance independent of the *Metaphysical Deduction*. Kant's real thought, as opposed to his formal presentation of it, is simply that when we come to consider what are the principles of synthesis involved in the reference of the manifold to an object, we find that they are the categories. The success, then, of this step in Kant's vindication of the categories is independent of that of the metaphysical deduction, and depends solely upon the question whether the principles of synthesis involved in knowledge are in fact the categories.

The substance of Kant's vindication of the categories may therefore be epitomized thus: 'We may take either of two starting-points. On the one hand, we may start from the fact that our experience is no mere dream, but an intelligent experience in which we are aware of a world of individual objects. This fact is conceded even by those who, like Hume, deny that we are aware of any necessity of relation between these objects. We may then go on to ask how it comes about that, beginning as we do with a manifold of sense given in succession, we come to apprehend this world of individual objects. If we do so, we find that there is presupposed a synthesis on our part of the manifold upon principles constituted by the categories. To deny, therefore, that the manifold is so connected is implicitly to deny that we have an apprehension of objects at all. But the existence of this apprehension is plainly a fact which even Hume did not dispute. On the other hand, we may start with the equally obvious fact that we must be capable of apprehending our own identity throughout our apprehension of the manifold of sense, and look for the presupposition of this fact. If we do this, we again find that there is involved a combination of the manifold according to the categories.'

In conclusion, attention may be drawn to two points. In the first place, Kant completes his account by at once emphasizing and explaining the paradoxical character of his conclusion. “Accordingly, the order and conformity to law in the phenomena which we call *nature* we ourselves introduce, and we could never find it there, if we, or the nature of our mind, had not originally placed it there.” “However exaggerated or absurd then it may sound to say that the understanding itself is the source of the laws of nature and consequently of the formal unity of nature, such an assertion is nevertheless correct and in accordance with the object, i. e. with experience.” The explanation of the paradox is found in the fact that objects of nature are phenomena. “But if we reflect that this nature is in itself nothing else than a totality of phenomena and consequently no thing in itself but merely a number of representations of the mind, we shall not be surprised that only in the radical faculty of all our knowledge, viz. transcendental apperception, do we see it in that unity through which alone it can be called object of all possible experience, i. e. nature.” “It is no more surprising that the laws of the phenomena in nature must agree with the understanding and with its *a priori* form, that is, its faculty of connecting the manifold in general, than that the phenomena themselves must agree with the *a priori* form of our sensuous perception. For laws exist in the phenomena as little as phenomena exist in themselves; on the contrary, laws exist only relatively to the subject in which the phenomena inhere, so far as it has understanding, just as phenomena exist only relatively to the subject, so far as it has senses. To things in themselves their conformity to law would necessarily also belong independently of an understanding which knows them. But phenomena are only representations of things which exist unknown in respect of what they may be in themselves. But, as mere representations, they stand under no law of connexion except that which the connecting faculty prescribes.”

In the second place, this last paragraph contains the real reason from the point of view of the deduction of the categories for what may be called the negative side of his doctrine, viz. that the categories only apply to objects of experience and not to things in themselves. According to Kant, we can only say that certain principles of connexion apply to a reality into which we introduce the connexion. Things in themselves, if connected, are connected in themselves and apart from us. Hence there can be no guarantee that any principles of connexion which we might assert them to possess are those which they do possess.

CHAPTER IX. GENERAL CRITICISM OF THE TRANSCENDENTAL DEDUCTION OF THE CATEGORIES

The preceding account of Kant's vindication of the categories has included much criticism. But the criticism has been as far as possible restricted to details, and has dealt with matters of principle only so far as has been necessary in order to follow Kant's thought. We must now consider the position as a whole, even though this may involve some repetition. The general difficulties of the position may be divided into two kinds, (1) difficulties involved in the working out of the theory, even if its main principles are not questioned, and (2) difficulties involved in accepting its main principles at all.

The initial difficulty of the first kind, which naturally strikes the reader, concerns the possibility of performing the synthesis. The mind has certain general ways of combining the manifold, viz. the categories. But on general grounds we should expect the mind to possess only one mode of combining the manifold. For the character of the manifold to be combined cannot affect the mind's power of combination, and, if the power of the mind consists in combining, the combining should always be of the same kind. Thus, suppose the manifold given to the mind to be combined consisted of musical notes, we could think of the mind's power of combination as exercised in combining the notes by way of succession, *provided that* this be regarded as the only mode of combination. But if the mind were thought also capable of combining notes by way of simultaneity, we should at once be confronted with the insoluble problem of determining why the one mode of combination was exercised in any given case rather than the other. If, several kinds of synthesis being allowed, this difficulty be avoided by the supposition that, not being incompatible, they are all exercised together, we have the alternative task of explaining how the same manifold can be combined in each of these ways. As a matter of fact, Kant thinks of manifolds of different kinds as combined or related in different ways; thus events are related causally and quantities quantitatively. But since, on Kant's view, the manifold as given is unrelated and all combination comes from the mind, the mind should not be held capable of combining manifolds of different kinds differently. Otherwise the manifold would in its own nature imply the need of a particular kind of synthesis, and would therefore not be unrelated.

Suppose, however, we waive the difficulty involved in the plurality of the categories. There remains the equally fundamental difficulty that any single principle of synthesis contains in itself no ground for the different ways of its application. Suppose it to be conceded that in the apprehension of definite shapes we combine the manifold in accordance with the conception of figure, and, for the purpose of the argument, that the conception of figure can be treated as equivalent to the category of quantity. It is plain that we apprehend different shapes, e. g. lines and triangles, of which, if we take into account differences of relative length of sides, there is an infinite variety, and houses, which may also have an infinite variety of shape. But there is nothing in the mind's capacity of relating the manifold by way of figure to determine it to combine a given manifold into a figure of one kind rather than into a figure of any other kind; for to combine the manifold into a particular shape, there is needed not merely the thought of a figure in general, but the thought of a definite figure. No 'cue' can be furnished by the manifold itself, for any such cue would involve the conception of a particular figure, and would therefore imply that the particular synthesis was implicit in the manifold itself, in which case it would not be true that all synthesis comes from the mind.

This difficulty takes a somewhat different form in the case of the categories of relation. To take the case of cause and effect, the conception of which, according to Kant, is involved in our apprehension of a succession, Kant's view seems to be that we become aware of two elements of the manifold A B as a succession of events in the world of nature by combining them as necessarily successive in a causal order,

in which the state of affairs which precedes B and which contains A contains something upon which B must follow (i. e. a cause of B), which therefore makes it necessary that B must follow A. But if we are to do this, we must in some way succeed in selecting or picking out from among the elements of the manifold that element A which is to be thus combined with B. We therefore need something more than the category. It is not enough that we should think that B has a cause; we must think of something in particular as the cause of B, and we must think of it either as coexistent with, or as identical with, A.

Kant fails to notice this second difficulty, and up to a certain point avoids it owing to his distinction between the imagination and the understanding. For he thinks of the understanding as the source of general principles of synthesis, viz. the categories, and attributes individual syntheses to the imagination. Hence the individual syntheses, which involve particular principles, are already effected before the understanding comes into play. But to throw the work of effecting individual syntheses upon the imagination is only to evade the difficulty. For in the end, as has been pointed out, the imagination must be the understanding working unreflectively, and, whether this is so or not, some account must be given of the way in which the imagination furnishes the particular principles of synthesis required.

The third and last main difficulty of the first kind concerns the relation of the elements of the manifold and the kinds of synthesis by which they are combined. This involves the distinction between relating in general and terms to be related. For to perform a synthesis is in general to relate, and the elements to be combined are the terms to be related. Now it is only necessary to take instances to realize that the possibility of relating terms in certain ways involves two presuppositions, which concern respectively the general and the special nature of the terms to be related.

In the first place, it is clear that the general nature of the terms must correspond with or be adapted to the general nature of the relationship to be effected. Thus if two terms are to be related as more or less loud, they must be sounds, since the relation in question is one in respect of sound and not, e. g., of time or colour or space. Similarly, terms to be related as right and left must be bodies in space, right and left being a spatial relation. Again, only human beings can be related as parent and child. Kant’s doctrine, however, does not conform to this presupposition. For the manifold to be related consists solely of sensations, and of individual spaces, and perhaps individual times, as elements of pure perception; and such a manifold is not of the kind required. Possibly individual spaces may be regarded as adequate terms to be related or combined into geometrical figures, e. g. into lines or triangles. But a house as a synthesis of a manifold cannot be a synthesis of spaces, or of times, or of sensations. Its parts are bodies, which, whatever they may be, are neither sensations nor spaces nor times, nor combinations of them. In reality they are substances of a special kind. Again, the relation of cause and effect is not a relation of sensations or spaces or times, but of successive states of physical things or substances, the relation consisting in the necessity of their succession.

In the second place, it is clear that the special nature of the relation to be effected presupposes a special nature on the part of the terms to be related. If one sound is to be related to another by way of the octave, that other must be its octave. If one quantity is to be related to another as the double of it, that quantity must be twice as large as the other. In the same way, proceeding to Kant’s instances, we see that if we are to combine or relate a manifold into a triangle, and therefore into a triangle of a particular size and shape, the elements of the manifold must be lines, and lines of a particular size. If we are to combine a manifold into a house, and therefore into a house of a certain shape and size, the manifold must consist of bodies of a suitable shape and size. If we are to relate a manifold by way of necessary succession, the manifold must be such that it can be so related; in other words, if we are to relate an element X of the manifold with some other Y as the necessary antecedent of X, there must be some definite element Y which is connected with, and always occurs along with, X. To put the matter generally, we may say that the manifold must be adapted to or ‘fit’ the categories not only, as has been pointed out, in the sense that it must be of the right kind, but also in the sense that its individual elements must have that orderly character

which enables them to be related according to the categories.

Now it is plain from Kant's vindication of what he calls the affinity of phenomena, that he recognizes the existence of this presupposition. But the question arises whether this vindication can be successful. For since the manifold is originated by the thing in itself, it seems prima facie impossible to prove that the elements of the manifold must have affinity, and so be capable of being related according to the categories. Before, however, we consider the chief passage in which Kant tries to make good his position, we may notice a defence which might naturally be offered on his behalf. It might be said that he establishes the conformity of the manifold to the categories at least hypothetically, i. e. upon the supposition that the manifold is capable of entering into knowledge, and also upon the supposition that we are capable of being conscious of our identity with respect to it; for upon either supposition any element of the manifold must be capable of being combined with all the rest into one world of nature. Moreover, it might be added that these suppositions are justified, for our experience is not a mere dream, but is throughout the consciousness of a world, and we are self-conscious throughout our experience; and therefore it is clear that the manifold does in fact 'fit' the categories. But the retort is obvious. Any actual conformity of the manifold to the categories would upon this view be at best but an empirical fact, and, although, if the conformity ceased, we should cease to be aware of a world and of ourselves, no reason has been or can be given why the conformity should not cease.

The passage in which Kant vindicates the affinity of phenomena in the greatest detail is the following:

"We will now try to exhibit the necessary connexion of the understanding with phenomena by means of the categories, by beginning from below, i. e. from the empirical end. The first that is given us is a phenomenon, which if connected with consciousness is called perception.... But because every phenomenon contains a manifold, and consequently different perceptions are found in the mind scattered and single, a connexion of them is necessary, which they cannot have in mere sense. There is, therefore, in us an active power of synthesis of this manifold, which we call imagination, and the action of which, when exercised immediately upon perceptions, I call apprehension. The business of the imagination, that is to say, is to bring the manifold of intuition into an *image*; it must, therefore, first receive the impressions into its activity, i. e. apprehend them."

"But it is clear that even this apprehension of the manifold would not by itself produce an image and a connexion of the impressions, unless there were a subjective ground in virtue of which one perception, from which the mind has passed to another, is summoned to join that which follows, and thus whole series of perceptions are presented, i. e. a reproductive power of imagination, which power, however, is also only empirical."

"But if representations reproduced one another at haphazard just as they happened to meet together, once more no determinate connexion would arise, but merely chaotic heaps of them, and consequently no knowledge would arise; therefore the reproduction of them must have a rule, according to which a representation enters into connexion with this rather than with another in the imagination. This subjective and *empirical* ground of reproduction according to rules is called the *association* of representations."

"But now, if this unity of association had not also an objective ground, so that it was impossible that phenomena should be apprehended by the imagination otherwise than under the condition of a possible synthetic unity of this apprehension, it would also be a pure accident that phenomena were adapted to a connected system of human knowledge. For although we should have the power of associating perceptions, it would still remain wholly undetermined and accidental whether they were associable; and in the event of their not being so, a multitude of perceptions and even perhaps a whole sensibility would be possible, in which much empirical consciousness would be met with in my mind, but divided and without belonging to *one* consciousness of myself, which however is impossible. For only in that I ascribe all perceptions to one consciousness (the original apperception) can I say of all of them that I am conscious of them. There must therefore be an objective ground, i. e. a ground to be recognized *a priori*

before all empirical laws of the imagination, on which rests the possibility, nay even the necessity, of a law which extends throughout all phenomena, according to which we regard them without exception as such data of the senses, as are in themselves associable and subjected to universal rules of a thoroughgoing connexion in reproduction. This objective ground of all association of phenomena I call the *affinity* of phenomena. But we can meet this nowhere else than in the principle of the unity of apperception as regards all cognitions which are to belong to me. According to it, all phenomena without exception must so enter into the mind or be apprehended as to agree with the unity of apperception, which agreement would be impossible without synthetical unity in their connexion, which therefore is also objectively necessary."

"The objective unity of all (empirical) consciousness in one consciousness (the original apperception) is therefore the necessary condition even of all possible perception, and the affinity of all phenomena (near or remote) is a necessary consequence of a synthesis in the imagination, which is *a priori* founded upon rules."

"The imagination is therefore also a power of *a priori* synthesis, for which reason we give it the name of the productive imagination; and so far as it, in relation to all the manifold of the phenomenon, has no further aim than the necessary unity in the synthesis of the phenomenon, it can be called the transcendental function of the imagination. It is therefore strange indeed, but nevertheless clear from the preceding, that only by means of this transcendental function of the imagination does even the affinity of phenomena, and with it their association and, through this, lastly their reproduction according to laws, and consequently experience itself become possible, because without it no conceptions of objects would ever come together into one experience."

If it were not for the last two paragraphs, we should understand this difficult passage to be substantially identical in meaning with the defence of the affinity of phenomena just given. We should understand Kant to be saying (1) that the synthesis which knowledge requires presupposes not merely a faculty of association on our part by which we reproduce elements of the manifold according to rules, but also an affinity on the part of the manifold to be apprehended, which enables our faculty of association to get to work, and (2) that this affinity can be vindicated as a presupposition at once of knowledge and of self-consciousness.

In view, however, of the fact that, according to the last two paragraphs, the affinity is due to the imagination, it seems necessary to interpret the passage thus:

'Since the given manifold of sense consists of isolated elements, this manifold, in order to enter into knowledge, must be combined into an image. This combination is effected by the imagination, which however must first apprehend the elements one by one.'

'But this apprehension of the manifold by the imagination could produce no image, unless the imagination also possessed the power of reproducing past elements of the manifold, and, if knowledge is to arise, of reproducing them according to rules. This faculty of reproduction by which, on perceiving the element A, we are led to think of or reproduce a past element B — B being reproduced according to some rule — rather than C or D is called the faculty of association; and since the rules according to which it works depend on empirical conditions, and therefore cannot be anticipated *a priori*, it may be called the subjective ground of reproduction.'

'But if the image produced by association is to play a part in knowledge, the empirical faculty of reproduction is not a sufficient condition or ground of it. A further condition is implied, which may be called objective in the sense that it is *a priori* and prior to all empirical laws of imagination. This condition is that the act by which the data of sense enter the mind or are apprehended, i. e. the act by which the imagination *apprehends and combines* the data of sense into a sensuous image, must *make* the elements such that they have affinity, and therefore such that they can subsequently be recognized as parts of a necessarily related whole. Unless this condition is satisfied, even if we possessed the faculty of

association, our experience would be a chaos of disconnected elements, and we could not be self-conscious, which is impossible. Starting, therefore, with the principle that we must be capable of being self-conscious with respect to all the elements of the manifold, we can lay down *a priori* that this condition is a fact.'

'It follows, then, that the affinity or connectedness of the data of sense presupposed by the *re*production which is presupposed in knowledge, is actually produced by the *pro*ductive faculty of imagination, which, in combining the data into a sensuous image, gives them the unity required.'

If, as it seems necessary to believe, this be the correct interpretation of the passage, Kant is here trying to carry out to the full his doctrine that *all* unity or connectedness comes from the mind's activity. He is maintaining that the imagination, acting *pro*ductively on the data of sense and thereby combining them into an image, gives the data a connectedness which the understanding can subsequently recognize. But to maintain this is, of course, only to throw the problem one stage further back. If reproduction, in order to enter into knowledge, implies a manifold which has such connexion that it is capable of being reproduced according to rules, so the production of sense-elements into a coherent image in turn implies sense-elements capable of being so combined. The act of combination cannot confer upon them or introduce into them a unity which they do not already possess.

The fact is that this step in Kant's argument exhibits the final breakdown of his view that all unity or connectedness or relatedness is conferred upon the data of sense by the activity of the mind. Consequently, this forms a convenient point at which to consider what seems to be the fundamental mistake of this view. The mistake stated in its most general form appears to be that, misled by his theory of perception, he regards 'terms' as given by things in themselves acting on the sensibility, and 'relations' as introduced by the understanding, whereas the fact is that in the sense in which terms can be said to be given, relations can and must also be said to be given.

To realize that this is the case, we need only consider Kant's favourite instance of knowledge, the apprehension of a straight line. According to him, this presupposes that there is given to us a manifold, which — whether he admits it or not — must really be parts of the line, and that we combine this manifold on a principle involved in the nature of straightness. Now suppose that the manifold given is the parts AB, BC, CD, DE of the line AE. It is clearly only possible to recognize AB and BC as contiguous parts of a straight line, if we immediately apprehend that AB and BC form one line of which these parts are identical in direction. Otherwise, we might just as well join AB and BC at a right angle, and in fact at any angle; we need not even make AB and BC contiguous. Similarly, the relation of BC to CD and of CD to DE must be just as immediately apprehended as the parts themselves. Is there, however, any relation of which it could be said that it is not given, and to which therefore Kant's doctrine might seem to apply? There is. Suppose AB, BC, CD to be of such a size that, though we can see AB and BC, or BC and CD, together, we cannot see AB and CD together. It is clear that in this case we can only learn that AB and CD are parts of the same straight line through an inference. We have to infer that, because each is in the same straight line with BC, the one is in the same straight line with the other. Here the fact that AB and CD are in the same straight line is not immediately apprehended. This relation, therefore, may be said not to be given; and, from Kant's point of view, we could say that we introduce this relation into the manifold through our activity of thinking, which combines AB and CD together in accordance with the principle that two straight lines which are in the same line with a third are in line with one another. Nevertheless, this case is no exception to the general principle that relations must be given equally with terms; for we only become aware of the relation between AB and CD, which is not given, because we are already aware of other relations, viz. those between AB and BC, and BC and CD, which are given. Relations then, or, in Kant's language, particular syntheses must be said to be given, in the sense in which the elements to be combined can be said to be given.

Further, we can better see the nature of Kant's mistake in this respect, if we bear in mind that Kant

originally and rightly introduced the distinction between the sensibility and the understanding as that between the passive faculty by which an individual is given or presented to us and the active faculty by which we bring an individual under, or recognize it as an instance of a universal. For we then see that Kant in the *Transcendental Deduction*, by treating what is given by the sensibility as terms and what is contributed by the understanding as relations, is really confusing the distinction between a relation and its terms with that between universal and individual; in other words, he says of terms what ought to be said of individuals, and of relations what ought to be said of universals. That the confusion is a confusion, and not a legitimate identification, it is easy to see. For, on the one hand, a relation between terms is as much an individual as either of the terms. That a body A is to the right of a body B is as much an individual fact as either A or B. And if terms, as being individuals, belong to perception and are given, in the sense that they are in an immediate relation to us, relations, as being individuals, equally belong to perception and are given. On the other hand, individual terms just as much as individual relations imply corresponding universals. An individual body implies 'bodiness', just as much as the fact that a body A is to the right of a body B implies the relationship of 'being to the right of something'. And if, as is the case, thinking or conceiving in distinction from perceiving, is that activity by which we recognize an individual, given in perception, as one of a kind, conceiving is involved as much in the apprehension of a term as in the apprehension of a relation. The apprehension of 'this red body' as much involves the recognition of an individual as an instance of a kind, i. e. as much involves an act of the understanding, as does the apprehension of the fact that it is brighter than some other body.

Kant has failed to notice this confusion for two reasons. In the first place, beginning in the *Analytic* with the thought that the thing in itself, by acting on our sensibility, produces isolated sense data, he is led to adopt a different view of the understanding from that which he originally gave, and to conceive its business as consisting in relating these data. In the second place, by distinguishing the imagination from the understanding, he is able to confine the understanding to being the source of universals or principles of relation in distinction from individual relations. Since, however, as has been pointed out, and as Kant himself sees at times, the imagination is the understanding working unreflectively, this limitation cannot be successful.

There remain for consideration the difficulties of the second kind, i. e. the difficulties involved in accepting its main principles at all. These are of course the most important. Throughout the deduction Kant is attempting to formulate the nature of knowledge. According to him, it consists in an activity of the mind by which it combines the manifold of sense on certain principles and is to some extent aware that it does so, and by which it thereby gives the manifold relation to an object. Now the fundamental and final objection to this account is that what it describes is not knowledge at all. The justice of this objection may be seen by considering the two leading thoughts underlying the view, which, though closely connected, may be treated separately. These are the thought of knowledge as a process by which representations acquire relation to an object, and the thought of knowledge as a process of synthesis.

It is in reality meaningless to speak of 'a process by which representations or ideas acquire relation to an object'. The phrase must mean a process by which a mere apprehension, which, as such, is not the apprehension of an object, becomes the apprehension of an object. Apprehension, however, is essentially and from the very beginning the apprehension of an object, i. e. of a reality apprehended. If there is no object which the apprehension is 'of', there is no apprehension. It is therefore wholly meaningless to speak of a process by which an apprehension *becomes* the apprehension of an object. If when we reflected we were not aware of an object, i. e. a reality apprehended, we could not be aware of our apprehension; for our apprehension is the apprehension of it, and is itself only apprehended in relation to, though in distinction from, it. It is therefore impossible to suppose a condition of mind in which, knowing what 'apprehension' means, we proceed to ask, 'What is meant by an object of it?' and 'How does an apprehension become related to an object?'; for both questions involve the thought of a mere

representation, i. e. of an apprehension which as yet is not the apprehension of anything.

These questions, when their real nature is exhibited, are plainly absurd. Kant's special theory, however, enables him to evade the real absurdity involved. For, according to his view, a representation is the representation or apprehension of something only from the point of view of the thing in itself. As an appearance or perhaps more strictly speaking as a sensation, it has also a being of its own which is not relative; and from this point of view it *is* possible to speak of 'mere' representations and to raise questions which presuppose their reality.

But this remedy, if remedy it can be called, is at least as bad as the disease. For, in the first place, the change of standpoint is necessarily illegitimate. An appearance or sensation is not from any point of view a representation in the proper sense, i. e. a representation or apprehension of something. It is simply a reality to be apprehended, of the special kind called mental. If it be called a representation, the word must have a new meaning; it must mean something represented, or presented, i. e. object of apprehension, with the implication that what is presented, or is object of apprehension, is mental or a modification of the mind. Kant therefore only avoids the original absurdity by an illegitimate change of standpoint, the change being concealed by a tacit transition in the meaning of representation. In the second place, the change of standpoint only saves the main problem from being absurd by rendering it insoluble. For if a representation be taken to be an appearance or a sensation, the main problem becomes that of explaining how it is that, beginning with the apprehension of mere appearances or sensations, we come to apprehend an object, in the sense of an object in nature, which, as such, is not an appearance or sensation but a part of the physical world. But if the immediate object of apprehension were in this way confined to appearances, which are, to use Kant's phrase, determinations of our mind, our apprehension would be limited to these appearances, and any apprehension of an object in nature would be impossible. In fact, it is just the view that the immediate object of apprehension consists in a determination of the mind which forms the basis of the solipsist position. Kant's own solution involves an absurdity at least as great as that involved in the thought of a mere representation, in the proper sense of representation. For the solution is that appearances or sensations become related to an object, in the sense of an object in nature, by being combined on certain principles. Yet it is plainly impossible to combine appearances or sensations into an object in nature. If a triangle, or a house, or 'a freezing of water' is the result of any process of combination, the elements combined must be respectively lines, and bricks, and physical events; these are objects in the sense in which the whole produced by the combination is an object, and are certainly not appearances or sensations. Kant conceals the difficulty from himself by the use of language to which he is not entitled. For while his instances of objects are always of the kind indicated, he persists in calling the manifold combined 'representations', i. e. presented mental modifications. This procedure is of course facilitated for him by his view that nature is a phenomenon or appearance, but the difficulty which it presents to the reader culminates when he speaks of the very same representations as having both a subjective and an objective relation, i. e. as being both modifications of the mind and parts of nature.

We may now turn to Kant's thought of knowledge as a process of synthesis. When Kant speaks of synthesis, the kind of synthesis of which he usually is thinking is that of spatial elements into a spatial whole; and although he refers to other kinds, e. g. of units into numbers, and of events into a temporal series, nevertheless it is the thought of spatial synthesis which guides his view. Now we must in the end admit that the spatial synthesis of which he is thinking is really the *construction* or *making* of spatial objects in the literal sense. It would be rightly illustrated by making figures out of matches or spelicans, or by drawing a circle with compasses, or by building a house out of bricks. Further, if we extend this view of the process of which Kant is thinking, we have to allow that the process of synthesis in which, according to Kant, knowledge consists is that of making or constructing parts of the physical world, and in fact the physical world itself, out of elements given in perception. The deduction throughout presupposes that the synthesis is really *manufacture*, and Kant is at pains to emphasize the fact. "The order and

conformity to law in the phenomena which we call *nature* we ourselves introduce, and we could not find it there, if we or the nature of our mind had not originally placed it there." He naturally rejoices in the manufacture, because it is just this which makes the categories valid. If knowing is really making, the principles of synthesis must apply to the reality known, because it is by these very principles that the reality is made. Moreover, recognition of this fact enables us to understand certain features of his view which would otherwise be inexplicable. For if the synthesis consists in literal construction, we are able to understand why Kant should think (1) that in the process of knowledge the mind *introduces* order into the manifold, (2) that the mind is limited in its activity of synthesis by having to conform to certain principles of construction which constitute the nature of the understanding, and (3) that the manifold of phenomena must possess affinity. If, for example, we build a house, it can be said (1) that we introduce into the materials a plan or principle of arrangement which they do not possess in themselves, (2) that the particular plan is limited by, and must conform to, the laws of spatial relation and to the general presuppositions of physics, such as the uniformity of nature, and (3) that only such materials are capable of the particular combination as possess a nature suitable to it. Moreover, if, for Kant, knowing is really making, we are able to understand two other prominent features of his view. We can understand why Kant should lay so much stress upon the 'recognition' of the synthesis, and upon the self-consciousness involved in knowledge. For if the synthesis of the manifold is really the making of an object, it results merely in the existence of the object; knowledge of it is still to be effected. Consequently, knowledge of the object only finds a place in Kant's view by the *recognition* (on the necessity of which he insists) of the manifold as combined on a principle. This recognition, which Kant considers only an element in knowledge, is really the knowledge itself. Again, since the reality to be known is a whole of parts which we construct on a principle, we know that it is such a whole, and therefore that 'the manifold is related to one object', because, and only because, we know that we have combined the elements on a principle. Self-consciousness therefore *must* be inseparable from consciousness of an object.

The fundamental objection to this account of knowledge seems so obvious as to be hardly worth stating; it is of course that knowing and making are not the same. The very nature of knowing presupposes that the thing known is already made, or, to speak more accurately, already exists. In other words, knowing is essentially the discovery of what already is. Even if the reality known happens to be something which we make, e. g. a house, the knowing it is distinct from the making it, and, so far from being identical with the making, presupposes that the reality in question is already made. Music and poetry are, no doubt, realities which in some sense are 'made' or 'composed', but the apprehension of them is distinct from and presupposes the process by which they are composed.

How difficult it is to resolve knowing into making may be seen by consideration of a difficulty in the interpretation of Kant's phrase 'relation of the manifold to an object', to which no allusion has yet been made. When it is said that a certain manifold is related to, or stands in relation to, an object, does the relatedness referred to consist in the fact that the manifold is combined into a whole, or in the fact that we are conscious of the combination, or in both? If we accept the first alternative we must allow that, while relatedness to an object implies a process of synthesis, yet the relatedness, and therefore the synthesis, have nothing to do with knowledge. For the relatedness of the manifold to an object will be the combination of the elements of the manifold as parts of an object constructed, and the process of synthesis involved will be that by which the object is constructed. This process of synthesis will have nothing to do with knowledge; for since it is merely the process by which the object is constructed, knowledge so far is not effected at all, and no clue is given to the way in which it comes about. If, however, we accept the second alternative, we have to allow that while relatedness to an object has to do with knowledge, yet it in no way implies a process of synthesis. For since in that case it consists in the fact that we are conscious of the manifold as together forming an object, it in no way implies that the object has been produced by a process of synthesis. Kant, of course, would accept the third alternative. For, firstly, since it is

knowledge which he is describing, the phrase ‘relatedness to an object’ cannot refer simply to the *existence* of a combination of the manifold, and of a process by which it has been produced; its meaning must include *consciousness* of the combination. In the second place, it is definitely his view that we cannot represent anything as combined in the object without having previously combined it ourselves. Moreover, it is just with respect to this connexion between the synthesis and the consciousness of the synthesis that his reduction of knowing to making helps him; for to make an object, e. g. a house, is to make it consciously, i. e. to combine materials on a principle of which we are aware. Since, then, the combining of which he speaks is really making, it seems to him impossible to combine a manifold without being aware of the nature of the act of combination, and therefore of the nature of the whole thereby produced. But though this is clearly Kant’s view, it is not justified. In the first place, ‘relatedness of the manifold to an object’ ought not to refer *both* to its combination in a whole *and* to our consciousness of the combination; and in strictness it should refer to the former only. For as referring to the former it indicates a relation of the manifold *to the object*, as being the parts of the object, and as referring to the latter it indicates a relation of the manifold *to us*, as being apprehended by us as the parts of the object. But two relations which, though they are of one and the same thing, are nevertheless relations of it to two different things, should not be referred to by the same phrase. Moreover, since the relatedness is referred to as relatedness to an object, the phrase properly indicates the relation of the manifold to an object, and not to us as apprehending it. Again, in the second place, Kant cannot successfully maintain that the phrase is primarily a loose expression for our consciousness of the manifold as related to an object, and that since this implies a process of synthesis, the phrase may fairly include in its meaning the thought of the combination of the manifold by us into a whole. For although Kant asserts — and with some plausibility — that we can only apprehend as combined what we have ourselves combined, yet when we consider this assertion seriously we see it to be in no sense true.

The general conclusion, therefore, to be drawn is that the process of synthesis by which the manifold is said to become related to an object is a process not of knowledge but of construction in the literal sense, and that it leaves knowledge of the thing constructed still to be effected. But if knowing is obviously different from making, why should Kant have apparently felt no difficulty in resolving knowing into making? Three reasons may be given.

In the first place, the very question, ‘What does the process of knowing consist in?’ at least suggests that knowing can be resolved into and stated in terms of something else. In this respect it resembles the modern phrase ‘*theory* of knowledge’. Moreover, since it is plain that in knowing we are active, the question is apt to assume the form, ‘What do we *do* when we know or think?’ and since one of the commonest forms of doing something is to perform a physical operation on physical things, whereby we effect a recombination of them on some plan, it is natural to try to resolve knowing into this kind of doing, i. e. into making in a wide sense of the word.

In the second place, Kant never relaxed his hold upon the thing in itself. Consequently, there always remained for him a reality which existed in itself and was not made by us. This was to him the fundamental reality, and the proper object of knowledge, although unfortunately inaccessible to *our* faculties of knowing. Hence to Kant it did not seriously matter that an inferior reality, viz. the phenomenal world, was made by us in the process of knowing.

In the third place, it is difficult, if not impossible, to read the *Deduction* without realizing that Kant failed to distinguish knowing from that formation of mental imagery which accompanies knowing. The process of synthesis, if it is even to seem to constitute knowledge and to involve the validity of the categories, must really be a process by which we construct, and recognize our construction of, an individual reality in nature out of certain physical data. Nevertheless, it is plain that what Kant normally describes as the process of synthesis is really the process by which we construct an imaginary picture of a reality in nature not present to perception, i. e. by which we imagine to ourselves what it would look like

if we were present to perceive it. This is implied by his continued use of the terms ‘reproduction’ and ‘imagination’ in describing the synthesis. To be aware of an object of past perception, it is necessary, according to him, that the object should be *re*produced. It is thereby implied that the object of our present awareness is not the object of past perception, but a mental image which copies or reproduces it. The same implication is conveyed by his use of the term ‘imagination’ to describe the faculty by which the synthesis is effected; for ‘imagination’ normally means the power of making a mental image of something not present to perception, and this interpretation is confirmed by Kant’s own description of the imagination as ‘the faculty of representing an object even without its presence in perception’. Further, that Kant really fails to distinguish the construction of mental imagery from literal construction is shown by the fact that, although he insists that the formation of an image and reproduction are both necessary for knowledge, he does not consistently adhere to this. For his general view is that the elements combined and recognized as combined are the original data of sense, and not reproductions of them which together form an image, and his instances imply that the elements retained in thought, i. e. the elements of which we are aware subsequently to perception, are the elements originally perceived, e. g. the parts of a line or the units counted. Moreover, in one passage Kant definitely describes certain *objects* of *perception* taken together as an *image* of that ‘kind’ of which, when taken together, they are an instance. “If I place five points one after another, ... this is an image of the number five.” Now, if it be granted that Kant has in mind normally the process of imagining, we can see why he found no difficulty in the thought of knowledge as construction. For while we cannot reasonably speak of making *an object of knowledge*, we can reasonably speak of making *a mental image* through our own activity, and also of making it in accordance with the categories and the empirical laws which presuppose them. Moreover, the ease with which it is possible to take the imagining which accompanies knowing for knowing — the image formed being taken to be the object known and the forming it being taken to be the knowing it — renders it easy to transfer the thought of construction to the knowledge itself. The only defect, however, under which the view labours is the important one that, whatever be the extent to which imagination must accompany knowledge, it is distinct from knowledge. To realize the difference we have only to notice that the process by which we present to ourselves in imagination realities not present to perception presupposes, and is throughout guided by, the knowledge of them. It should be noted, however, that, although the process of which Kant is normally thinking is doubtless that of constructing mental imagery, his real view must be that knowledge consists in constructing a world out of the data of sense, or, more accurately, as his instances show, out of the objects of isolated perceptions, e. g. parts of a line or units to be counted. Otherwise the final act of recognition would be an apprehension not of the world of nature, but of an image of it.

‘This criticism,’ it may be said, ‘is too sweeping. It may be true that the process which Kant describes is really making in the literal sense and not knowing, but Kant’s mistake may have been merely that of thinking of the wrong kind of synthesis. For both ordinary language and that of philosophical discussion imply that synthesis plays some part in knowledge. Thus we find in ordinary language the phrases ‘*putting* 2 and 2 *together*’ and ‘2 and 2 *make* 4’. Even in philosophical discussions we find it said that a complex conception, e. g. gold, is a *synthesis* of simple conceptions, e. g. yellowness, weight, &c.; that in judgement we *relate* or *refer* the predicate to the subject; and that in inference we *construct* reality, though only mentally or ideally. Further, in any case it is by thinking or knowing that the world comes to be *for us*; the more we think, the more of reality there is for us. Hence at least the world *for us* or *our* world is due to our activity of knowing, and so is in some sense made by us, i. e. by our relating activity.’

This position, however, seems in reality to be based on a simple but illegitimate transition, viz. the transition to the assertion that in knowing we relate, or combine, or construct from the assertion that in knowing we recognize as related, or combined, or constructed — the last two terms being retained to preserve the parallelism. While the latter assertion may be said to be true, although the terms ‘combined’

and ‘constructed’ should be rejected as misleading, the former assertion must be admitted to be wholly false, i. e. true in no sense whatever. Moreover, the considerations adduced in favour of the position should, it seems, be met by a flat denial of their truth or, if not, of their relevance. For when it is said that *our* world, or the world *for us*, is due to our activity of thinking, and so is in some sense *made* by us, all that should be meant is that our *apprehending* the world as whatever we apprehend it to be *presupposes* activity on our part. But since the activity is after all only the activity itself of apprehending or knowing, this assertion is only a way of saying that apprehending or knowing is not a condition of mind which can be produced in us *ab extra*, but is something which we have to do for ourselves. Nothing is implied to be made. If anything is to be said to be made, it must be not our world but our activity of apprehending the world; but even we and our activity of apprehending the world are not related as maker and thing made. Again, to speak of a complex conception, e. g. gold, and to say that it involves a synthesis of simple conceptions by the mind is mere ‘conceptualism’. If, as we ought to do, we replace the term ‘conception’ by ‘universal’, and speak of gold as a synthesis of universals, any suggestion that the mind performs the synthesis will vanish, for a ‘synthesis of universals’ will mean simply a connexion of universals. All that is mental is our apprehension of their connexion. Again, in judgement we cannot be said to *relate* predicate to subject. Such an assertion would mean either that we relate a conception to a conception, or a conception to a reality, or a reality to a reality; and, on any of these interpretations, it is plainly false. To retain the language of ‘relation’ or of ‘combination’ at all, we must say that in judgement we recognize real elements as related or combined. Again, when we infer, we do not construct, ideally or otherwise. ‘Ideal construction’ is a contradiction in terms, unless it refers solely to mental imagining, in which case it is not inference. Construction which is not ‘ideal’, i. e. literal construction, plainly cannot constitute the nature of inference; for inference would cease to be inference, if by it we made, and did not apprehend, a necessity of connexion. Again, the phrase ‘2 and 2 *make* 4’ does not justify the view that in some sense we ‘make’ reality. It of course suggests that 2 and 2 are not 4 until they are added, i. e. that the addition makes them 4. But the language is only appropriate when we are literally making a group of 4 by physically placing 2 pairs of bodies in one group. Where we are counting, we should say merely that 2 and 2 *are* 4. Lastly, it must be allowed that the use of the phrase ‘putting two and two together’, to describe an inference from facts not quite obviously connected, is loose and inexact. If we meet a dog with a blood-stained mouth and shortly afterwards see a dead fowl, we may be said to put two and two together and to conclude thereby that the dog killed the fowl. But, strictly speaking, in drawing the inference we do not put anything together. We certainly do not put together the facts that the mouth of the dog is blood-stained and that the fowl has just been killed. We do not even put the premises together, i. e. our apprehensions of these facts. What takes place should be described by saying simply that seeing that the fowl is killed, we also remember that the dog’s mouth was stained, and then apprehend a connexion between these facts.

The fact seems to be that the thought of synthesis in no way helps to elucidate the nature of knowing, and that the mistake in principle which underlies Kant’s view lies in the implicit supposition that it is possible to elucidate the nature of knowledge by means of something other than itself. Knowledge is *sui generis* and therefore a ‘theory’ of it is impossible. Knowledge is simply knowledge, and any attempt to state it in terms of something else must end in describing something which is not knowledge.

CHAPTER X. THE SCHEMATISM OF THE CATEGORIES

As has already been pointed out, the *Analytic* is divided into two parts, the *Analytic of Conceptions*, of which the aim is to discover and vindicate the validity of the categories, and the *Analytic of Principles*, of which the aim is to determine the use of the categories in judgement. The latter part, which has now to be considered, is subdivided into two. It has, according to Kant, firstly to determine the sensuous conditions under which the categories are used, and secondly to discover the *a priori* principles involved in the categories, as exercised under these sensuous conditions, such, for instance, as the law that all changes take place according to the law of cause and effect. The first problem is dealt with in the chapter on the 'schematism of the pure conceptions of the understanding', the second in the chapter on the 'system of all principles of the pure understanding'.

We naturally feel a preliminary difficulty with respect to the existence of this second part of the *Analytic* at all. It seems clear that if the first part is successful, the second must be unnecessary. For if Kant is in a position to lay down that the categories must apply to objects, no special conditions of their application need be subsequently determined. If, for instance, it can be laid down that the category of quantity must apply to objects, it is implied either that there are no special conditions of its application, or that they have already been discovered and shown to exist. Again, to assert the applicability of the categories is really to assert the existence of principles, and in fact of just those principles which it is the aim of the *System of Principles* to prove. Thus to assert the applicability of the categories of quantity and of cause and effect is to assert respectively the principles that all objects of perception are extensive quantities, and that all changes take place according to the law of cause and effect. The *Deduction of the Categories* therefore, if successful, must have already proved the principles now to be vindicated; and it is a matter for legitimate surprise that we find Kant in the *System of Principles* giving proofs of these principles which make no appeal to the *Deduction of the Categories*. On the other hand, for the existence of the account of the schematism of the categories Kant has a better show of reason. For the conceptions derived in the *Metaphysical Deduction* from the nature of formal judgement are in themselves too abstract to be the conceptions which are to be shown applicable to the sensible world, since all the latter involve the thought of time. Thus, the conception of cause and effect derived from the nature of the hypothetical judgement includes no thought of time, while the conception of which he wishes to show the validity is that of necessary succession in time. Hence the conceptions discovered by analysis of formal judgement have in some way to be rendered more concrete in respect of time. The account of the schematism, therefore, is an attempt to get out of the false position reached by appealing to Formal Logic for the list of categories. Nevertheless, the mention of a sensuous condition under which alone the categories can be employed should have suggested to Kant that the transcendental deduction was defective, and, in fact, in the second version of the transcendental deduction two paragraphs are inserted which take account of this sensuous condition.

The beginning of Kant's account of schematism may be summarized thus: 'Whenever we subsume an individual object of a certain kind, e. g. a plate, under a conception, e. g. a circle, the object and the conception must be homogeneous, that is to say, the individual must possess the characteristic which constitutes the conception, or, in other words, must be an instance of it. Pure conceptions, however, and empirical perceptions, i. e. objects of empirical perception, are quite heterogeneous. We do not, for instance, perceive cases of cause and effect. Hence the problem arises, 'How is it possible to subsume objects of empirical perception under pure conceptions?' The possibility of this subsumption presupposes a *tertium quid*, which is homogeneous both with the object of empirical perception and with the conception, and so makes the subsumption mediately possible. This *tertium quid* must be, on the one side,

intellectual and, on the other side, sensuous. It is to be found in a ‘transcendental determination of time’, i. e. a conception involving time and involved in experience. For in the first place this is on the one side intellectual and on the other sensuous, and in the second place it is so far homogeneous with the category which constitutes its unity that it is universal and rests on an *a priori* rule, and so far homogeneous with the phenomenon that all phenomena are in time. Such transcendental determinations of time are the schemata of the pure conceptions of the understanding.’ Kant continues as follows:

“The schema is in itself always a mere product of the imagination. But since the synthesis of the imagination has for its aim no single perception, but merely unity in the determination of the sensibility, the schema should be distinguished from the image. Thus, if I place five points one after another, ... this is an image of the number five. On the other hand, if I only just think a number in general — no matter what it may be, five or a hundred — this thinking is rather the representation of a method of representing in an image a group (e. g. a thousand), in conformity with a certain conception, than the image itself, an image which, in the instance given, I should find difficulty in surveying and comparing with the conception. Now this representation of a general procedure of the imagination to supply its image to a conception, I call the schema of this conception.”

“The fact is that it is not images of objects, but schemata, which lie at the foundation of our pure sensuous conceptions. No image could ever be adequate to our conception of a triangle in general. For it would not attain the generality of the conception which makes it valid for all triangles, whether right-angled, acute-angled, &c., but would always be limited to one part only of this sphere. The schema of the triangle can exist nowhere else than in thought, and signifies a rule of the synthesis of the imagination in regard to pure figures in space. An object of experience or an image of it always falls short of the empirical conception to a far greater degree than does the schema; the empirical conception always relates immediately to the schema of the imagination as a rule for the determination of our perception in conformity with a certain general conception. The conception of ‘dog’ signifies a rule according to which my imagination can draw the general outline of the figure of a four-footed animal, without being limited to any particular single form which experience presents to me, or indeed to any possible image that I can represent to myself *in concreto*. This schematism of our understanding in regard to phenomena and their mere form is an art hidden in the depths of the human soul, whose true modes of action we are not likely ever to discover from Nature and unveil. Thus much only can we say: the *image* is a product of the empirical faculty of the productive imagination, while the *schema* of sensuous conceptions (such as of figures in space) is a product and, as it were, a monogram of the pure *a priori* imagination, through which, and according to which, images first become possible, though the images must be connected with the conception only by means of the schema which they express, and are in themselves not fully adequate to it. On the other hand, the schema of a pure conception of the understanding is something which cannot be brought to an image; on the contrary, it is only the pure synthesis in accordance with a rule of unity according to conceptions in general, a rule of unity which the category expresses, and it is a transcendental product of the imagination which concerns the determination of the inner sense in general according to conditions of its form (time) with reference to all representations, so far as these are to be connected *a priori* in one conception according to the unity of apperception.”

Now, in order to determine whether schemata can constitute the desired link between the pure conceptions or categories and the manifold of sense, it is necessary to follow closely this account of a schema. Kant unquestionably in this passage treats as a mental image related to a conception what really is, and what on his own theory ought to have been, an individual object related to a conception, i. e. an instance of it. In other words, he takes a mental image of an individual for the individual itself. On the one hand, he treats a schema of a conception throughout as the thought of a procedure of the imagination to present to the conception its *image*, and he opposes schemata not to objects but to *images*; on the other hand, his problem concerns subsumption under a conception, and what is subsumed must be an instance of

the conception, i. e. an individual object of the kind in question. Again, in asserting that if I place five points one after another, ... this is an image of the number five, he is actually saying that an individual group of five points is an image of a group of five in general. Further, if the process of schematizing is to enter — as it must — into knowledge of the phenomenal world, what Kant here speaks of as the images related to a conception must be taken to be individual instances of the conception, whatever his language may be. For, in order to enter into knowledge, the process referred to must be that by which *objects of experience* are constructed. Hence the passage should be interpreted as if throughout there had been written for ‘image’ ‘individual instance’ or more simply ‘instance’. Again, the process of schematizing, although *introduced* simply as a process by which an individual is to be subsumed indirectly under a conception, is assumed in the passage quoted to be a process of *synthesis*. Hence we may say that the process of schematizing is a process by which we combine the manifold of perception into an individual whole in accordance with a conception, and that the schema of a conception is the thought of the rule of procedure on our part by which we combine the manifold in accordance with the conception, and so bring the manifold under the conception. Thus the schema of the conception of 100 is the thought of a process of synthesis by which we combine say 10 groups of 10 units into 100, and the schematizing of the conception of 100 is the process by which we do so. Here it is essential to notice three points. In the first place, the schema is a conception which relates not to the reality apprehended but to us. It is the thought of a rule of procedure on our part by which an instance of a conception is constructed, and not the thought of a characteristic of the reality constructed. For instance, the thought of a rule by which we can combine points to make 100 is a thought which concerns us and not the points; it is only the conception corresponding to this schema, viz. the thought of 100, which concerns the points. In the second place, although the thought of time is involved in the schema, the succession in question lies not in the object, but in our act of construction or apprehension. In the third place, the schema presupposes the corresponding conception and the process of schematizing directly brings the manifold of perception under the conception. Thus the thought of combining 10 groups of 10 units to make 100 presupposes the thought of 100, and the process of combination brings the units under the conception of 100.

If, however, we go on to ask what is required of schemata and of the process of schematizing, if they are to enable the manifold to be subsumed under the categories, we see that each of these three characteristics makes it impossible for them to fulfil this purpose. For firstly, an individual manifold A has to be brought under a category B. Since *ex hypothesi* this cannot be effected directly, there is needed a mediating conception C. C, therefore, it would seem, must be at once a species of B and a conception of which A is an instance. In any case C must be a conception relating to the reality to be known, and not to any process of knowing on our part, and, again, it must be more concrete than B. This is borne out by the list of the schemata of the categories. But, although a schema may be said to be more concrete than the corresponding conception, in that it presupposes the conception, it neither is nor involves a more concrete conception of an *object* and in fact, as has been pointed out, relates not to the reality to be known but to the process on our part by which we construct or apprehend it. In the second place, the time in respect of which the category B has to be made more concrete must relate to the object, and not to the successive process by which we apprehend it, whereas the time involved in a schema concerns the latter and not the former. In the third place, from the point of view of the categories, the process of schematizing should be a process whereby we combine the manifold into a whole A in accordance with the conception C, and thereby render *possible* the subsumption of A under the category B. If it be a process which actually subsumes the manifold under B, it will *actually* perform that, the very impossibility of which has made it necessary to postulate such a process at all. For, according to Kant, it is just the fact that the manifold cannot be subsumed directly under the categories that renders schematism necessary. Yet, on Kant’s general account of a schema, the schematizing must actually bring a manifold under the corresponding conception. If we present to ourselves an individual triangle by successively joining three

lines according to the conception of a triangle, i. e. so that they enclose a space, we are directly bringing the manifold, i. e. the lines, under the conception of a triangle. Again, if we present to ourselves an instance of a group of 100 by combining 10 groups of 10 units of any kind, we are directly bringing the units under the conception of 100. If this consideration be applied to the schematism of a category, we see that the process said to be necessary because a certain other process is impossible is the very process said to be impossible.

If, therefore, Kant succeeds in finding schemata of the categories in detail in the sense in which they are required for the solution of his problem, i. e. in the sense of more concrete conceptions involving the thought of time and relating to objects, we should expect either that he ignores his general account of a schema, or that if he appeals to it, the appeal is irrelevant. This we find to be the case. His account of the first two transcendental schemata makes a wholly irrelevant appeal to the temporal process of synthesis on our part, while his account of the remaining schemata makes no attempt to appeal to it at all.

"The pure *schema* of *quantity*, as a conception of the understanding, is *number*, a representation which comprises the successive addition of one to one (homogeneous elements). Accordingly, number is nothing else than the unity of the synthesis of the manifold of a homogeneous perception in general, in that I generate time itself in the apprehension of the perception."

It is clear that this passage, whatever its precise interpretation may be, involves a confusion between the thought of counting and that of number. The thought of number relates to objects of apprehension and does not involve the thought of time. The thought of counting, which presupposes the thought of number, relates to our apprehension of objects and involves the thought of time; it is the thought of a successive process on our part by which we count the number of units contained in what we already know to consist of units. Now we must assume that the schema of quantity is really what Kant says it is, viz. number, or to express it more accurately, the thought of number, and not the thought of counting, with which he wrongly identifies it. For his main problem is to find conceptions which at once are more concrete than the categories and, at the same time, like the categories, relate to objects, and the thought of counting, though more concrete than that of number, does not relate to objects. Three consequences follow. In the first place, although the schema of quantity, i. e. the thought of number, is more concrete than the thought of quantity, it is not, as it should be, more concrete in respect of time; for the thought of number does not include the thought of time. Secondly, the thought of time is only introduced into the schema of quantity irrelevantly by reference to the temporal process of *counting*, by which we come to apprehend the number of a given group of units. Thirdly, the schema of quantity is only in appearance connected with the nature of a schema in general, as Kant describes it, by a false identification of the thought of number with the thought of the process on our part by which we count groups of units, i. e. numbers.

The account of the schema of reality, the second category, runs as follows: "Reality is in the pure conception of the understanding that which corresponds to a sensation in general, that therefore of which the conception in itself indicates a being (in time), while negation is that of which the conception indicates a not being (in time). Their opposition, therefore, arises in the distinction between one and the same time as filled or empty. Since time is only the form of perception, consequently of objects as phenomena, that which in objects corresponds to sensation is the transcendental matter of all objects as things in themselves (thinghood, reality). Now every sensation has a degree or magnitude by which it can fill the same time, i. e. the internal sense, in respect of the same representation of an object, more or less, until it vanishes into nothing (= 0 = *negatio*). There is, therefore, a relation and connexion between reality and negation, or rather a transition from the former to the latter, which makes every reality representable as a *quantum*; and the schema of a reality, as the quantity of something so far as it fills time, is just this continuous and uniform generation of the reality in time, as we descend in time from the sensation which has a certain degree, down to the vanishing thereof, or gradually ascend from negation to the magnitude thereof."

This passage, if it be taken in connexion with the account of the anticipations of perception, seems to have the following meaning: ‘In thinking of something as a reality, we think of it as that which corresponds to, i. e. produces, a sensation, and therefore as something which, like the sensation, is in time; and just as every sensation, which, as such, occupies time, has a certain degree of intensity, so has the reality which produces it. Now to produce for ourselves an instance of a reality in this sense, we must add units of reality till a reality of the required degree is produced, and the thought of this method on our part of constructing an individual reality is the schema of reality.’ But if this represents Kant’s meaning, the schema of reality relates only to our process of apprehension, and therefore is not a conception which relates to objects and is more concrete than the corresponding category in respect of time. Moreover, it is matter for surprise that in the case of this category Kant should have thought schematism necessary, for time is actually included in his own statement of the category.

The account of the schemata of the remaining categories need not be considered. It merely *asserts* that certain conceptions relating to objects and involving the thought of time are the schemata corresponding to the remaining categories, without any attempt to connect them with the nature of a schema. Thus, the schema of substance is asserted to be the *permanence* of the real *in time*, that of cause the *succession* of the manifold, in so far as that succession is subjected to a rule, that of interaction the *coexistence* of the determinations or accidents of one substance with those of another according to a universal rule. Again, the schemata of possibility, of actuality and of necessity are said to be respectively the accordance of the synthesis of representations with the conditions of time in general, existence in a determined time, and existence of an object in all time.

The main confusion pervading the chapter is of course that between temporal relations which concern the process of apprehension and temporal relations which concern the realities apprehended. Kant is continually referring to the former as if they were the latter. The cause of this confusion lies in Kant’s reduction of physical realities to representations. Since, according to him, these realities are only our representations, all temporal relations are really relations of our representations, and these relations have to be treated at one time as relations of our apprehensions, and at another as relations of the realities apprehended, as the context requires.

CHAPTER XI. THE MATHEMATICAL PRINCIPLES

As has been pointed out, the aim of the second part of the *Analytic of Principles* is to determine the *a priori* principles involved in the use of the categories under the necessary sensuous conditions. These principles Kant divides into four classes, corresponding to the four groups of categories, and he calls them respectively ‘axioms of perception’, ‘anticipations of sense-perception’, ‘analogies of experience’, and ‘postulates of empirical thought’. The first two and the last two classes are grouped together as ‘mathematical’ and ‘dynamical’ respectively, on the ground that the former group concerns the perception of objects, i. e. their nature apprehended in perception, while the latter group concerns their existence, and that consequently, since assertions concerning the existence of objects presuppose the realization of empirical conditions which assertions concerning their nature do not, only the former possesses an absolute necessity and an immediate evidence such as is found in mathematics. These two groups of principles are not, as their names might suggest, principles within mathematics and physics, but presuppositions of mathematics and physics respectively. Kant also claims appropriateness for the special terms used of each minor group to indicate the kind of principles in question, viz. ‘axioms’, ‘anticipations’, ‘analogies’, ‘postulates’. But it may be noted as an indication of the artificiality of the scheme that each of the first two groups contains only one principle, although Kant refers to them in the plural as axioms and anticipations respectively, and although the existence of three categories corresponding to each group would suggest the existence of three principles.

The axiom of perception is that ‘All perceptions are extensive quantities’. The proof of it runs thus:

“An extensive quantity I call that in which the representation of the parts renders possible the representation of the whole (and therefore necessarily precedes it). I cannot represent to myself any line, however small it may be, without drawing it in thought, that is, without generating from a point all its parts one after another, and thereby first drawing this perception. Precisely the same is the case with every, even the smallest, time.... Since the pure perception in all phenomena is either time or space, every phenomenon as a perception is an extensive quantity, because it can be known in apprehension only by a successive synthesis (of part with part). All phenomena, therefore, are already perceived as aggregates (groups of previously given parts), which is not the case with quantities of every kind, but only with those which are represented and apprehended by us as *extensive*.”

Kant opposes an extensive quantity to an intensive quantity or a quantity which has a degree. “That quantity which is apprehended only as unity and in which plurality can be represented only by approximation to negation = 0, I call *intensive quantity*.” The aspect of this ultimate distinction which underlies Kant’s mode of stating it is that only an extensive quantity is a whole, i. e. something made up of parts. Thus a mile can be said to be made up of two half-miles, but a velocity of one foot per second, though comparable with a velocity of half a foot per second, cannot be said to be made up of two such velocities; it is essentially one and indivisible. Hence, from Kant’s point of view, it follows that it is only an extensive magnitude which can, and indeed must, be apprehended through a successive synthesis of the parts. The proof of the axiom seems to be simply this: ‘All phenomena as objects of perception are subject to the forms of perception, space and time. Space and time are [homogeneous manifolds, and therefore] extensive quantities, only to be apprehended by a successive synthesis of the parts. Hence phenomena, or objects of experience, must also be extensive quantities, to be similarly apprehended.’ And Kant goes on to add that it is for this reason that geometry and pure mathematics generally apply to objects of experience.

We need only draw attention to three points. Firstly, no justification is given of the term ‘axiom’. Secondly, the argument does not really appeal to the doctrine of the categories, but only to the character

of space and time as forms of perception. Thirdly, it need not appeal to space and time as forms of perception in the proper sense of ways in which we apprehend objects, but only in the sense of ways in which objects are related; in other words, it need not appeal to Kant's theory of knowledge. The conclusion follows simply from the nature of objects as spatially and temporally related, whether they are phenomena or not. It may be objected that Kant's thesis is that *all* objects of perception are extensive quantities, and that unless space and time are allowed to be ways in which *we must perceive* objects, we cannot say that all objects will be spatially and temporally related, and so extensive quantities. But to this it may be replied that it is only true that all objects of perception are extensive quantities if the term 'object of perception' be restricted to parts of the physical world, i. e. to just those realities which Kant is thinking of as spatially and temporally related, and that this restriction is not justified, since a sensation or a pain which has only intensive quantity is just as much entitled to be called an object of perception.

The anticipation of sense-perception consists in the principle that 'In all phenomena, the real, which is an object of sensation, has intensive magnitude, i. e. a degree'. The proof is stated thus:

"Apprehension merely by means of sensation fills only one moment (that is, if I do not take into consideration the succession of many sensations). Sensation, therefore, as that in the phenomenon the apprehension of which is not a successive synthesis advancing from parts to a complete representation, has no extensive quantity; the lack of sensation in one and the same moment would represent it as empty, consequently = 0. Now that which in the empirical perception corresponds to sensation is reality (*realitas phaenomenon*); that which corresponds to the lack of it is negation = 0. But every sensation is capable of a diminution, so that it can decrease and thus gradually vanish. Therefore, between reality in the phenomenon and negation there exists a continuous connexion of many possible intermediate sensations, the difference of which from each other is always smaller than that between the given sensation and zero, or complete negation. That is to say, the real in the phenomenon has always a quantity, which, however, is not found in apprehension, since apprehension takes place by means of mere sensation in one moment and not by a successive synthesis of many sensations, and therefore does not proceed from parts to the whole. Consequently, it has a quantity, but not an extensive quantity."

"Now that quantity which is apprehended only as unity, and in which plurality can be represented only by approximation to negation = 0, I call an *intensive quantity*. Every reality, therefore, in a phenomenon has intensive quantity, that is, a degree."

In other words, 'We can lay down *a priori* that all sensations have a certain degree of intensity, and that between a sensation of a given intensity and the total absence of sensation there is possible an infinite number of sensations varying in intensity from nothing to that degree of intensity. Therefore the real, which corresponds to sensation, can also be said *a priori* to admit of an infinite variety of degree.'

Though the principle established is of little intrinsic importance, the account of it is noticeable for two reasons. In the first place, although Kant clearly means by the 'real corresponding to sensation' a body in space, and regards it as a phenomenon, it is impossible to see how he can avoid the charge that he in fact treats it as a thing in itself. For the correspondence must consist in the fact that the real causes or excites sensation in us, and therefore the real, i. e. a body in space, is implied to be a thing in itself. In fact, Kant himself speaks of considering the real in the phenomenon as the cause of sensation, and, in a passage added in the second edition, after proving that sensation must have an intensive quantity, he says that, corresponding to the intensive quantity of sensation, an intensive quantity, i. e. *a degree of influence on sense*, must be attributed to all objects of sense-perception. The difficulty of consistently maintaining that the real, which corresponds to sensation, is a phenomenon is, of course, due to the impossibility of distinguishing between reality and appearance within phenomena.

In the second place, Kant expressly allows that in this anticipation we succeed in discovering *a priori* a characteristic of sensation, although sensation constitutes that empirical element in phenomena, which on Kant's general view cannot be apprehended *a priori*.

“Nevertheless, this anticipation of sense-perception must always be somewhat surprising to an inquirer who is used to transcendental reflection, and is thereby rendered cautious. It leads us to feel some misgiving as to whether the understanding can anticipate such a synthetic proposition as that respecting the degree of all that is real in phenomena, and consequently respecting the possibility of the internal distinction of sensation itself, if we abstract from its empirical quality. There remains, therefore, a problem not unworthy of solution, viz. ‘How can the understanding pronounce synthetically and *a priori* upon phenomena in this respect, and thus anticipate phenomena even in that which is specially and merely empirical, viz. that which concerns sensations?’” But although Kant recognizes that the anticipation is surprising, he is not led to revise his general theory, as being inconsistent with the existence of the anticipation. He indeed makes an attempt to deal with the difficulty; but his solution consists not in showing that the anticipation is consistent with his general theory — as he should have done, if the theory was to be retained — but in showing that, in the case of the degree of sensation, we do apprehend the nature of sensation *a priori*.

Strangely enough, Hume finds himself face to face with what is in principle the same difficulty, and treats it in a not dissimilar way. “There is, however, one contradictory phenomenon, which may prove, that ’tis not absolutely impossible for ideas to go before their correspondent impressions. I believe it will readily be allow’d, that the several distinct ideas of colours, which enter by the eyes, or those of sounds, which are convey’d by the hearing, are really different from each other, tho’ at the same time resembling. Now if this be true of different colours, it must be no less so of the different shades of the same colour, that each of them produces a distinct idea, independent of the rest. For if this shou’d be deny’d, ’tis possible, by the continual gradation of shades, to run a colour insensibly into what is most remote from it; and if you will not allow any of the means to be different, you cannot without absurdity deny the extremes to be the same. Suppose therefore a person to have enjoyed his sight for thirty years, and to have become perfectly well acquainted with colours of all kinds, excepting one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that colour, except that single one, be plac’d before him, descending gradually from the deepest to the lightest; ’tis plain that he will perceive a blank, where that shade is wanting, and will be sensible, that there is a greater distance in that place betwixt the contiguous colours, than in any other. Now I ask, whether ’tis possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, tho’ it had never been conveyed to him by his senses? I believe there are few but will be of opinion that he can; and this may serve as a proof, that the simple ideas are not always derived from the correspondent impressions; tho’ the instance is so particular and singular, that ’tis scarce worth our observing, and does not merit that for it alone we should alter our general maxim.”

CHAPTER XII. THE ANALOGIES OF EXPERIENCE

Each of the three categories of relation, i. e. those of substance and accident, of cause and effect, and of interaction between agent and patient involves, according to Kant, a special principle, and these special principles he calls ‘analogies of experience’. They are stated thus: (1) In all changes of phenomena the substance is permanent, and its quantity in nature is neither increased nor diminished. (2) All changes take place according to the law of the connexion of cause and effect. (3) All substances, so far as they can be perceived in space as coexistent, are in complete interaction. The justification of the term *analogy* of experience is as follows. In mathematics an analogy is a formula which asserts the equality of two *quantitative* relations, and is such that, if three of the terms are given, we can discover the fourth, e. g. if we know that $a : b = c : d$, and that $a = 2$, $b = 4$, $c = 6$ we can discover that $d = 12$. But in philosophy an analogy is the assertion of the equality of two *qualitative* relations and is such that, if three of the terms are given, we can discover, not the fourth, but only the relation of the third to the fourth, though at the same time we are furnished with a clue whereby to search for the fourth in experience. In this philosophical sense, the principles involved in the categories of relation are analogies. For instance, the principles of causality can be stated in the form ‘Any known event *X* is to *some other* event *Y*, whatever it be, as effect to cause’; so stated, it clearly informs us not of the character of *Y* but only of the fact that there must be a *Y*, i. e. a necessary antecedent, though at the same time this knowledge enables us to search in experience for the special character of *Y*.

The principles to be established relate to the two kinds of temporal relation apprehended in the world of nature, viz. coexistence and succession. The *method* of proof, which is to be gathered from the proofs themselves rather than from Kant’s general remarks on the subject, is the same in each case. Kant expressly rejects any proof which is ‘dogmatical’ or ‘from conceptions’, e. g. any attempt to show that the very conception of change presupposes the thought of an identical subject of change. The proof is transcendental in character, i. e. it argues that the principle to be established is a condition of the possibility of *apprehending* the temporal relation in question, e. g. that the existence of a permanent subject of change is presupposed in any *apprehension* of change. It assumes that we become aware of sequences and coexistences in the world of nature by a process which begins with a succession of mere perceptions, i. e. perceptions which are so far not the perceptions of a sequence or of a coexistence or indeed of anything; and it seeks to show that this process involves an appeal to one of the principles in question — the particular principle involved depending on the temporal relation apprehended — and consequently, that since we do apprehend this temporal relation, which, as belonging to the world of nature, must be distinct from any temporal relation of our perceptions, the principle appealed to is valid.

The proof of the first analogy is given somewhat differently in the first edition, and in a passage added in the second. The earlier version, which is a better expression of the attitude underlying Kant’s general remarks on the analogy, is as follows:

“Our *apprehension* of the manifold of a phenomenon is always successive, and is therefore always changing. By it alone, therefore, we can never determine whether this manifold, as an object of experience, is coexistent or successive, unless there lies at the base of it something that exists *always*, that is, something *enduring* and *permanent*, of which all succession and coexistence are nothing but so many ways (*modi* of time) in which the permanent exists. Only in the permanent, then, are time relations possible (for simultaneity and succession are the only relations in time); i. e. the permanent is the *substratum* of the empirical representation of time itself, in which alone all time-determination is possible. Permanence expresses in general time, as the persisting correlate of all existence of phenomena, of all change, and of all concomitance.... Only through the permanent does *existence* in different parts of

the successive series of time gain a *quantity* which we call *duration*. For, in mere succession, existence is always vanishing and beginning, and never has the least quantity. Without this permanent, then, no time relation is possible. Now, time in itself cannot be perceived; consequently this permanent in phenomena is the substratum of all time-determination, and therefore also the condition of the possibility of all synthetic unity of sense-perceptions, that is, of experience, and in this permanent all existence and all change in time can only be regarded as a mode of the existence of that which endures and is permanent. Therefore in all phenomena the permanent is the object itself, i. e. the substance (*phenomenon*); but all that changes or can change belongs only to the way in which this substance or substances exist, consequently to their determinations." "Accordingly since substance cannot change in existence, its quantity in nature can neither be increased nor diminished." The argument becomes plainer if it be realized that in the interval between the two editions, Kant came to think that the permanent in question was matter or bodies in space. "We find that in order to give something *permanent* in perception corresponding to the conception of *substance* (and thereby to exhibit the objective reality of this conception), we need a perception *in space* (of matter), because space alone has permanent determinations, while time, and consequently everything which is in the internal sense, is continually flowing."

Kant's thought appears to be as follows: 'Our apprehension of the manifold consists of a series of successive acts in which we apprehend its elements one by one and in isolation. This apprehension, therefore, does not enable us to determine that its elements are temporally related either as successive or as coexistent. In order to determine this, we must apprehend the elements of the manifold as related to something permanent. For a succession proper, i. e. a change, is a succession of states or determinations of something permanent or unchanging. A mere succession which is not a succession of states of something which remains identical is an unconnected series of endings and beginnings, and with respect to it, 'duration', which has meaning with regard to changes, i. e. successions proper, has no meaning at all. Similarly, coexistence is a coexistence of states of two permanents. Hence, to apprehend elements of the manifold as successive or coexistent, we must apprehend them in relation to a permanent or permanents. Therefore, to apprehend a coexistence or a succession, we must perceive something permanent. But this permanent something cannot be time, for time cannot be perceived. It must therefore be a permanent in phenomena; and this must be the object itself or the substance of a phenomenon, i. e. the substratum of the changes which it undergoes, or that of which the elements of the manifold are states or modifications. Consequently, there must be a permanent substance of a phenomenon, and the quantity of substances taken together must be constant.'

Now, if Kant's thought has been here represented fairly, it is open to the following comments. In the first place, even if his position be right in the main, Kant should not introduce the thought of the *quantity* of substance, and speak of the quantity as constant. For he thereby implies that in a plurality of substances — if such a plurality can in the end be admitted — there may be total extinction of, or partial loss in, some, if only there be a corresponding compensation in others; whereas such extinction and creation would be inconsistent with the nature of a substance. Even Kant himself speaks of having established the impossibility of the origin and extinction of substance.

In the second place, it is impossible to see how it can be legitimate for Kant to speak of a permanent substratum of change at all. For phenomena or appearances neither are nor imply the substratum of which Kant is thinking. They might be held to imply ourselves as the identical substratum of which they are successive states, but this view would be irrelevant to, if not inconsistent with, Kant's doctrine. It is all very well to *say* that the substratum is to be found in matter, i. e. in bodies in space, but the assertion is incompatible with the phenomenal character of the world; for the sensations or appearances produced in us by the thing in itself cannot be successive states of bodies in space. In the third place, in spite of Kant's protests against any proof which is 'dogmatical' or 'from conceptions', such a proof really forms the basis of his thought. For if the argument is to proceed not from the nature of change as such but from the

possibility of perceiving change, it must not take into account any implications of the possibility of perceiving change which rest upon implications of the nature of change as such. Yet this is what the argument does. For the reason really given for the view that the apprehension of change involves the apprehension of the manifold as related to a permanent substratum is that a change, as such, implies a permanent substratum. It is only because change is held to imply a substratum that we are said to be able to apprehend a change only in relation to a substratum. Moreover, shortly afterwards, Kant, apparently without realizing what he is doing, actually uses what is, on the very face of it, the dogmatic method, and in accordance with it develops the implications of the perception of change. "Upon this permanence is based the justification of the conception of *change*. Coming into being and perishing are not changes of that which comes to be or perishes. Change is but a mode of existence, which follows on another mode of existence of the same object. Hence everything which changes *endures* and only its *condition changes*.... Change, therefore, can be perceived only in substances, and absolute coming to be or perishing, which does not concern merely a determination of the permanent, cannot be a possible perception." Surely the fact that Kant is constrained in spite of himself to use the dogmatic method is some indication that it is the right method. It is in reality impossible to make any discoveries about change, or indeed about anything, except by consideration of the nature of the thing itself; no study of the conditions under which it can be apprehended can throw any light upon its nature. Lastly, although the supposition is not so explicit as the corresponding supposition made in the case of the other analogies, Kant's argument really assumes, and assumes wrongly, the existence of a process by which, starting with the successive apprehension of elements of the manifold in isolation, we come to apprehend them as temporally related.

The deduction of the second and third analogies argues that the principles of causality and reciprocal action are involved respectively in the processes by which we become aware of successions and of coexistences in the world of nature. From this point of view it would seem that the first analogy is a presupposition of the others, and that the process which involves the first is presupposed by the process which involves the others. It would seem that it is only upon the conclusion of a process by which, beginning with the successive apprehension of elements of the manifold in isolation, we come to apprehend them as *either* successive or coexistent elements in the world of nature, that there can arise a process by which we come to decide *whether* the specific relation is that of succession or of coexistence. For if the latter process can take place independently of the former, i. e. if it can start from the successive apprehension of the manifold, the former process will be unnecessary, and in that case the vindication of the first analogy will be invalid. It is necessary, however, to distinguish between Kant's nominal and his actual procedure. Though he nominally regards the first analogy as the presupposition of the others, he really does not. For he does not in fact treat the process which involves the validity of the first analogy as an antecedent condition of the processes which involve the validity of the others. On the contrary, the latter processes begin *ab initio* with the mere successive apprehension of the manifold, i. e. they begin at a stage where we are not aware of any relation in the physical world at all; and Kant, in his account of them, nowhere urges that they involve the first analogy.

Moreover, just because Kant does not face the difficulties involved in the thought of a process which begins in this way until he comes to vindicate causality, it is only when we come to this vindication that we realize the real nature of his deduction of the analogies, and, in particular, of that of the first.

Kant, prompted no doubt by his desire to answer Hume, treats the principle of causality very fully. The length of the discussion, however, is due not so much to the complication of the argument as to Kant's desire to make his meaning unmistakable; his account consists mainly in a repetition of what is substantially the same argument no less than five times. Hence it will suffice to consider those passages which best express Kant's meaning. At the same time, the prominence of the principle of causality in Kant's theory, and in the history of philosophy generally, and also the way in which Kant's treatment of it reveals the true nature of his general position, makes it necessary to consider these passages in some

detail.

Hume had denied that we are justified in asserting any causal connexion, i. e. any necessity of succession in the various events which we perceive, but even this denial presupposed that we do apprehend particular sequences in the world of nature, and therefore that we succeed in distinguishing between a sequence of events in nature and a mere sequence of perceptions, such as is also to be found when we apprehend a coexistence of bodies in space. Kant urges, in effect, that this denial renders it impossible to explain, as we should be able to do, the possibility of making the distinction in question, which even the denial itself presupposes that we make. Holding, with Hume, that in all cases of perception what we are directly aware of is a succession of perceptions, he contends that it is necessary to explain how in certain cases we succeed in passing from the knowledge of our successive perceptions to the knowledge of a succession in what we perceive. How is it that we know, when, as we say, we see a boat going down stream, that there is a succession in what we perceive, and not merely a succession in our perception of it, as is the case when, as we say, we see the parts of a house? Hume, according to Kant, cannot answer this question; he has only the right to say that in all cases we have a succession of perceptions; for in reality an answer to the question will show that the acquisition of this knowledge involves an appeal to the principle of causality. Since, then, we do in fact, as even Hume implicitly allowed, succeed in distinguishing between a succession in objects in nature and a succession in our apprehension of them, the law of causality must be true. “It is only under this presupposition (i. e. of causality) that even the experience of an event is possible.”

Kant begins his proof as follows: “Our apprehension of the manifold of a phenomenon is always successive. The representations of the parts succeed one another. Whether they succeed one another in the object also is a second point for reflection which is not contained in the first.” But, before he can continue, the very nature of these opening sentences compels him to consider a general problem which they raise. The distinction referred to between a succession in our apprehensions or representations and a succession in the object implies an object distinct from the apprehensions or representations. What, then, can be meant by such an object? For prima facie, if we ignore the thing in itself as unknowable, there is no object; there are only representations. But, in that case, what can be meant by a succession in the object? Kant is therefore once more forced to consider the question ‘What is meant by object of representations?’ although on this occasion with special reference to the meaning of a succession in the object; and the vindication of causality is bound up with the answer. The answer is stated thus:

“Now we may certainly give the name of object to everything, and even to every representation, so far as we are conscious thereof; but what this word may mean in the case of phenomena, not in so far as they (as representations) are objects, but in so far as they only indicate an object, is a question requiring deeper consideration. So far as they, as representations only, are at the same time objects of consciousness, they are not to be distinguished from apprehension, i. e. reception into the synthesis of imagination, and we must therefore say, ‘The manifold of phenomena is always produced successively in the mind’. If phenomena were things in themselves, no man would be able to infer from the succession of the representations of their manifold how this manifold is connected in the object. For after all we have to do only with our representations; how things may be in themselves, without regard to the representations through which they affect us, is wholly outside the sphere of our knowledge. Now, although phenomena are not things in themselves, and are nevertheless the only thing which can be given to us as data for knowledge, it is my business to show what kind of connexion in time belongs to the manifold in phenomena themselves, while the representation of this manifold in apprehension is always successive. Thus, for example, the apprehension of the manifold in the phenomenon of a house which stands before me is successive. Now arises the question, whether the manifold of this house itself is in itself also successive, which of course no one will grant. But, so soon as I raise my conceptions of an object to the transcendental meaning thereof, the house is not a thing in itself, but only a phenomenon, i. e. a

representation, the transcendental object of which is unknown. What, then, am I to understand by the question, ‘How may the manifold be connected in the phenomenon itself (which is nevertheless nothing in itself)?’ Here that which lies in the successive apprehension is regarded as representation, while the phenomenon which is given me, although it is nothing more than a complex of these representations, is regarded as the object thereof, with which my conception, drawn from the representations of apprehension, is to agree. It is soon seen that, since agreement of knowledge with the object is truth, we can ask here only for the formal conditions of empirical truth, and that the phenomenon, in opposition to the representations of apprehension, can only be represented as the object of the same, distinct therefrom, if it stands under a rule, which distinguishes it from every other apprehension, and which renders necessary a mode of conjunction of the manifold. That in the phenomenon which contains the condition of this necessary rule of apprehension is the object.”

This passage is only intelligible if we realize the *impasse* into which Kant has been led by his doctrine that objects, i. e. realities in the physical world, are only representations or ideas. As has already been pointed out, an apprehension is essentially inseparable from a reality of which it is the apprehension. In other words, an apprehension is always the apprehension of a reality, and a reality apprehended, i. e. an object of apprehension, cannot be stated in terms of the apprehension of it. We never confuse an apprehension and its object; nor do we take the temporal relations which belong to the one for the temporal relations which belong to the other, for these relations involve different terms which are never confused, viz. apprehensions and the objects apprehended. Now Kant, by his doctrine of the unknowability of the thing in itself, has really deprived himself of an object of apprehension or, in his language, of an object of representations. For it is the thing in itself which is, properly speaking, the object of the representations of which he is thinking, i. e. representations of a reality in nature; and yet the thing in itself, being on his view inapprehensible, can never be for him an object in the proper sense, i. e. a reality apprehended. Hence he is only able to state the fact of knowledge in terms of mere apprehensions, or ideas, or representations — the particular name is a matter of indifference — and consequently his efforts to recover an object of apprehension are fruitless. As a matter of fact, these efforts only result in the assertion that the object of representations consists in the representations themselves related in a certain necessary way. But this view is open to two fatal objections. In the first place, a complex of representations is just not an object in the proper sense, i. e. a reality apprehended. It essentially falls on the subject side of the distinction between an apprehension and the reality apprehended. The *complexity* of a complex of representations in no way divests it of the character which it has as a complex of *representations*. In the second place, on this view the same terms have to enter at once into two incompatible relations. Representations have to be related successively as our representations or apprehensions — as in fact they are related — and, at the same time, successively or otherwise, as the case may be, as parts of the object apprehended, viz. a reality in nature. In other words, the same terms have to enter into both a subjective and an objective relation, i. e. both a relation concerning us, the knowing subjects, and a relation concerning the object which we know. “A phenomenon in opposition to the representations of apprehension can only be represented as the object of the same, distinct therefrom, if it stands under a rule which distinguishes it from *every other* apprehension, and renders necessary a mode of conjunction of the manifold.” A representation, however, cannot be so related by a rule to another representation, for the rule meant relates to realities in nature, and, however much Kant may try to maintain the contrary, two representations, not being realities in nature, cannot be so related. Kant is in fact only driven to treat rules of nature as relating to representations, because there is nothing else to which he can regard them as relating. The result is that he is unable to justify the very distinction, the implications of which it is his aim to discover, and he is unable to do so for the very reason which would have rendered Hume unable to justify it. Like Hume, he is committed to a philosophical vocabulary which makes it meaningless to speak of relations of objects at

all in distinction from relations of apprehensions. It has been said that for Kant the road to objectivity lay through necessity. But whatever Kant may have thought, in point of fact there is no road to objectivity, and, in particular, no road through necessity. No necessity in the relation between two representations can render the relation objective, i. e. a relation between objects. No doubt the successive acts in which we come to apprehend the world are necessarily related; we certainly do not suppose their order to be fortuitous. Nevertheless, their relations are not in consequence a relation of realities apprehended.

Kant only renders his own view plausible by treating an apprehension or representation as if it consisted in a sensation or an appearance. A sensation or an appearance, so far from being the apprehension of anything, is in fact a reality which can be apprehended, of the kind called mental. Hence it can be treated as an object, i. e. something apprehended or presented, though not really as an object in nature. On the other hand, from the point of view of the thing in itself it can be treated as only an apprehension, even though it is an unsuccessful apprehension. Thus, for Kant, there is something which can with some plausibility be treated as an object as well as an apprehension, and therefore as capable of standing in both a subjective and an objective relation to other realities of the same kind.

If we now turn to the passage under discussion, we find it easy to vindicate the justice of the criticism that Kant, inconsistently with the distinction which he desires to elucidate, treats the same thing as at once the representation of an object and the object represented. He is trying to give such an account of 'object of representations' as will explain what is meant by a succession in an object in nature, i. e. a phenomenon, in distinction from the succession in our apprehension of it. In order to state this distinction at all, he has to speak of what enters into the two successions as different. "It is my business to show what sort of connexion in time belongs to the *manifold* in phenomena themselves, while the *representation* of this manifold in apprehension is always successive." Here an element of the manifold is distinguished from the representation of it. Yet Kant, though he thus distinguishes them, repeatedly identifies them; in other words, he identifies a representation with that of which it is a representation, viz. an element in or part of the object itself. "*Our apprehension* of the manifold of the phenomenon is always successive. *The representations* of the parts succeed one another. Whether *they* [i. e. *the representations*] succeed one another *in the object* also, is a second point for reflection.... So far as they [i. e. phenomena], as representations only, are at the same time objects of consciousness, they are not to be distinguished from apprehension, i. e. reception into the synthesis of imagination, and we must therefore say, '*The manifold of phenomena* is always produced successively in the mind'. If phenomena were things in themselves, no man would be able to infer from the succession of the representations how *this manifold* is connected *in the object*.... The phenomenon, in opposition to the representations of apprehension, can only be represented as the object of the same, distinct therefrom, if it stands under a rule, which distinguishes *it* from every *other* representation and which renders necessary a mode of conjunction of the manifold."

Since Kant in introducing his vindication of causality thus identifies elements in the object apprehended (i. e. the manifold of phenomena) with the apprehensions of them, we approach the vindication itself with the expectation that he will identify a causal rule, which consists in a necessity in the succession of objects, viz. of events in nature, with the necessity in the succession of our apprehensions of them. This expectation turns out justified. The following passage adequately expresses the vindication:

"Let us now proceed to our task. That something happens, i. e. that something or some state comes to be which before was not, cannot be empirically perceived, unless a phenomenon precedes, which does not contain in itself this state; for a reality which follows upon an empty time, and therefore a coming into existence preceded by no state of things, can just as little be apprehended as empty time itself. Every apprehension of an event is therefore a perception which follows upon another perception. But because this is the case with all synthesis of apprehension, as I have shown above in the phenomenon of a house, the apprehension of an event is thereby not yet distinguished from other apprehensions. But I notice also, that if in a phenomenon which contains an event, I call the preceding state of my perception A, and the

following state B, B can only follow A in apprehension, while the perception A cannot follow B but can only precede it. For example, I see a ship float down a stream. My perception of its place lower down follows upon my perception of its place higher up the course of the river, and it is impossible that in the apprehension of this phenomenon the vessel should be perceived first below and afterwards higher up the stream. Here, therefore, the order in the sequence of perceptions in apprehension is determined, and apprehension is bound to this order. In the former example of a house, my perceptions in apprehension could begin at the roof and end at the foundation, or begin below and end above; in the same way they could apprehend the manifold of the empirical perception from left to right, or from right to left. Accordingly, in the series of these perceptions, there was no determined order, which necessitated my beginning at a certain point, in order to combine the manifold empirically. But this rule is always to be found in the perception of that which happens, and it makes the order of the successive perceptions (in the apprehension of this phenomenon) *necessary*."

"In the present case, therefore, I shall have to derive the *subjective sequence* of apprehension from the *objective sequence* of phenomena, for otherwise the former is wholly undetermined, and does not distinguish one phenomenon from another. The former alone proves nothing as to the connexion of the manifold in the object, for it is wholly arbitrary. The latter, therefore [i. e. the objective sequence of phenomena], will consist in that order of the manifold of the phenomenon, according to which the apprehension of the one (that which happens) follows that of the other (that which precedes) *according to a rule*. In this way alone can I be justified in saying of the phenomenon itself, and not merely of my apprehension, that a sequence is to be found therein, which is the same as to say that I cannot arrange my apprehension otherwise than in just this sequence."

"In conformity with such a rule, therefore, there must exist in that which in general precedes an event the condition of a rule, according to which this event follows always and necessarily, but I cannot conversely go back from the event, and determine (by apprehension) that which precedes it. For no phenomenon goes back from the succeeding point of time to the preceding point, although it does certainly relate to *some preceding point of time*; on the other hand, the advance from a given time to the determinate succeeding time is necessary. Therefore, because there certainly is something which follows, I must relate it necessarily to something else in general, which precedes, and upon which it follows in conformity with a rule, that is necessarily, so that the event, as the conditioned, affords certain indication of some condition, while this condition determines the event."

"If we suppose that nothing precedes an event, upon which this event must follow in conformity with a rule, all sequence of perception would exist only in apprehension, i. e. would be merely subjective, but it would not thereby be objectively determined which of the perceptions must in fact be the preceding and which the succeeding one. We should in this manner have only a play of representations, which would not be related to any object, i. e. no phenomenon would be distinguished through our perception in respect of time relations from any other, because the succession in apprehension is always of the same kind, and so there is nothing in the phenomenon to determine the succession, so as to render a certain sequence objectively necessary. I could therefore not say that in the phenomenon two states follow each other, but only that one apprehension follows on another, a fact which is merely *subjective* and does not determine any object, and cannot therefore be considered as knowledge of an object (not even in the phenomenon)."

"If therefore we experience that something happens, we always thereby presuppose that something precedes, on which it follows according to a rule. For otherwise, I should not say of the object, that it follows, because the mere sequence in my apprehension, if it is not determined by a rule in relation to something preceding, does not justify the assumption of a sequence in the object. It is therefore always in reference to a rule, according to which phenomena are determined in their sequence (i. e. as they happen) by the preceding state, that I make my subjective synthesis (of apprehension) objective, and it is solely upon this presupposition that even the experience of something which happens is possible."

The meaning of the first paragraph is plain. Kant is saying that when we reflect upon the process by which we come to apprehend the world of nature, we can lay down two propositions. The first is that the process is equally successive whether the object apprehended be a succession in nature or a coexistence of bodies in space, so that the knowledge that we have a succession of apprehensions would not by itself enable us to decide whether the object of the apprehensions is a sequence or not. The second proposition is that, nevertheless, there is this difference between the succession of our apprehensions where we apprehend a succession and where we apprehend a coexistence, that in the former case, and in that only, the succession of our apprehensions is irreversible or, in other words, is the expression of a rule of order which makes it a necessary succession. So far we find no mention of causality, i. e. of a necessity of succession in objects, but only a necessity of succession in our apprehension of them. So far, again, we find no contribution to the problem of explaining how we distinguish between successive perceptions which are the perceptions of an event and those which are not. For it is reasonable to object that it is only possible to say that the order of our perceptions is irreversible, if and because we already know that what we have been perceiving is an event, and that therefore any attempt to argue from the irreversibility of our perceptions to the existence of a sequence in the object must involve a [Greek: hysteron proteron]. And it is clear that, if irreversibility in our perceptions were the only irreversibility to which appeal could be made, even Kant would not have supposed that the apprehension of a succession was reached through belief in an irreversibility.

The next paragraph, of which the interpretation is difficult, appears to introduce a causal rule, i. e. an irreversibility in objects, by identifying it with the irreversibility in our perceptions of which Kant has been speaking. The first step to this identification is taken by the assertion: “In the present case, therefore, I shall have to derive the subjective sequence of perceptions from the objective sequence of phenomena.... The latter will consist in the order of the *manifold of the phenomenon*, according to which *the apprehension* of the one (that which happens) follows that of the other (that which precedes) according to a rule.” Here Kant definitely implies that an objective sequence, i. e. an order or sequence of the *manifold* of a phenomenon, consists in a sequence of *perceptions or apprehensions* of which the order is necessary or according to a rule; in other words, that a succession of perceptions in the special case where the succession is necessary is a succession of events perceived. This implication enables us to understand the meaning of the assertion that ‘we must therefore derive the subjective sequence of perceptions from the objective sequence of phenomena’, and to see its connexion with the preceding paragraph. It means, ‘in view of the fact that in all apprehensions of a succession, and in them alone, the sequence of perceptions is irreversible, we are justified in saying that a given sequence of perceptions is the apprehension of a succession, if we know that the sequence is irreversible; in that case we must be apprehending a real succession, for an irreversible sequence of perceptions *is* a sequence of events perceived.’ Having thus implied that irreversibility of perceptions constitutes them events perceived, he is naturally enough able to go on to speak of the irreversibility of perceptions as if it were the same thing as an irreversibility of events perceived, and thus to bring in a causal rule. “In this way alone [i. e. only by deriving the subjective from the objective sequence] can I be justified in saying of the phenomenon itself, and not merely of my apprehension, that a sequence is to be found therein, *which is the same as to say* that I cannot *arrange* my apprehension otherwise than in just this sequence. In conformity with *such a rule*, therefore, there must exist in that which in general precedes *an event* the condition of a rule, according to which *this event follows always and necessarily*.” Here the use of the word ‘arrange’ and the statement about the rule in the next sentence imply that Kant has now come to think of the rule of succession as a causal rule relating to the objective succession. Moreover, if any doubt remains as to whether Kant really confuses the two irreversibilities or necessities of succession, it is removed by the last paragraph of the passage quoted. “If therefore we experience that something happens, we always thereby presuppose that something precedes on which *it* follows according to a rule. For otherwise I

should not say of the object that *it* follows; because the mere succession of my apprehension, if *it* is not determined by a rule in relation to something preceding, does not justify the assumption of a succession in the object. It is therefore always in reference to a rule, according to which *phenomena* are determined in their sequence (i. e. as they happen) by the preceding state, that I make my subjective sequence (of apprehension) objective." The fact is simply that Kant *must* identify the two irreversibilities, because, as has been pointed out, he has only one set of terms to be related as irreversible, viz. the elements of the manifold, which have to be, from one point of view, elements of an object and, from another, representations or apprehensions of it.

As soon, therefore, as the real nature of Kant's vindication of causality has been laid bare, it is difficult to describe it as an argument at all. He is anxious to show that in apprehending A B as a real or objective succession we presuppose that they are elements in a causal order of succession. Yet in support of his contention he points only to the quite different fact that where we apprehend a succession A B, we think of the *perception* of A and the *perception* of B as elements in a necessary but subjective succession.

Before we attempt to consider the facts with which Kant is dealing, we must refer to a feature in Kant's account to which no allusion has been made. We should on the whole expect from the passage quoted that, in the case where we regard two perceptions A B as necessarily successive and therefore as constituting an objective succession, the necessity of succession consists in the fact that A is the cause of B. This, however, is apparently not Kant's view; on the contrary, he seems to hold that, in thinking of A B as an objective succession, we presuppose not that A causes B, but only that the state of affairs which precedes B, and which therefore includes A, contains a cause of B, the coexistence or identity of this cause with A rendering the particular succession A B necessary. "Thus [if I perceive that something happens] it arises that there comes to be an order among our representations in which the present (so far as it has taken place) points to some preceding state as a correlate, *though a still undetermined correlate*, of this event which is given, and this correlate relates to the event by determining the event as its consequence, and connects the event with itself necessarily in the series of time."

The fact is that Kant is in a difficulty which he feels obscurely himself. He seems driven to this view for two reasons. If he were to maintain that A was necessarily the cause of B, he would be maintaining that all observed sequences are causal, i. e. that in them the antecedent and consequent are always cause and effect, which is palpably contrary to fact. Again, his aim is to show that we become aware of a succession by presupposing the law of causality. This law, however, is quite general, and only asserts that *something* must precede an event upon which it follows always and necessarily. Hence by itself it palpably gives no means of determining whether this something is A rather than anything else. Therefore if he were to maintain that the antecedent member of an apprehended objective succession must be thought of as its cause, the analogy would obviously provide no means of determining the antecedent member, and therefore the succession itself, for the succession must be the sequence of B upon some definite antecedent. On the other hand, the view that the cause of B need not be A only incurs the same difficulty in a rather less obvious form. For, even on this view, the argument implies that in order to apprehend two individual perceptions A B as an objective succession, we must know that A *must* precede B, and the presupposition that B implies a cause in the state of affairs preceding B in no way enables us to say either that A coexists with the cause, or that it is identical with it, and therefore that it must precede B.

Nevertheless, it cannot be regarded as certain that Kant did not think of A, the apprehended antecedent of B, as necessarily the cause of B, for his language is both ambiguous and inconsistent. When he considers the apprehension of a succession from the side of the successive perceptions, he at least tends to think of A B as cause and effect; and it may well be that in discussing the problem from the side of the law of causality, he means the cause of B to be A, although the generality of the law compels him to refer to it as *something* upon which B follows according to a rule.

Further, it should be noticed that to allow as Kant, in effect, does elsewhere, that experience is needed

to determine the cause of B is really to concede that the apprehension of objective successions is *prior to*, and *presupposed by*, any process which appeals to the principle of causality; for if the principle of causality does not by itself enable us to determine the cause of B, it cannot do more than enable us to pick out the cause of B among events known to precede B independently of the principle. Hence, from this point of view, there can be no process such as Kant is trying to describe, and therefore its precise nature is a matter of indifference.

We may now turn to the facts. There is, it seems, no such thing as a process by which, beginning with the knowledge of successive apprehensions or representations, of the object of which we are unaware, we come to be aware of their object. Still less is there a process — and it is really this which Kant is trying to describe — by which, so beginning, we come to apprehend these successive representations as objects, i. e. as parts of the physical world, through the thought of them as necessarily related. We may take Kant's instance of our apprehension of a boat going down stream. We do not first apprehend two perceptions of which the object is undetermined and then decide that their object is a succession rather than a coexistence. Still less do we first apprehend two perceptions or representations and then decide that they are related as successive events in the physical world. From the beginning we apprehend a real sequence, viz. the fact that the boat having left one place is arriving at another; there is no process *to* this apprehension. In other words, from the beginning we are aware of real elements, viz. of events in nature, and we are aware of them as really related, viz. as successive in nature. This must be so. For if we begin with the awareness of two mere perceptions, we could never thence reach the knowledge that their object was a succession, or even the knowledge that they had an object; nor, so beginning, could we become aware of the perceptions themselves as successive events in the physical world. For suppose, *per impossibile*, the existence of a process by which we come to be aware of two elements A and B as standing in a relation of sequence in the physical world. In the first place, A and B, with the awareness of which we begin, must be, and be known to be, real or objective, and not perceptions or apprehensions; otherwise we could never come to apprehend them as related in the physical world. In the second place, A and B must be, and be known to be, real with the reality of a physical event, otherwise we could never come to apprehend them as related by way of succession in the physical world. If A and B were bodies, as they are when we apprehend the parts of a house, they could never be apprehended as successive. In other words, the process by which, on Kant's view, A and B become, and become known to be, events presupposes that they already are, and are known to be, events. Again, even if it be granted that A and B are real events, it is clear that there can be no process by which we come to apprehend them as successive. For if we apprehended events A and B separately, we could never thence advance to the apprehension of their relation, or, in other words, we could never discover which came first. Kant himself saw clearly that the perception of A followed by the perception of B does not by itself yield the perception that B follows A. In fact it was this insight which formed the starting-point of his discussion. Unfortunately, instead of concluding that the apprehension of a succession is ultimate and underivable from a more primitive apprehension, he tried to formulate the nature of the process by which, starting from such a succession of perceptions, we reach the apprehension of a succession. The truth is simply that there is and can be no *process to* the apprehension of a succession; in other words, that we do and must apprehend a real succession immediately or not at all. The same considerations can of course be supplied *mutatis mutandis* to the apprehension of the coexistence of bodies in space, e. g. of the parts of a house.

It may be objected that this denial of the existence of the process which Kant is trying to describe must at least be an overstatement. For the assertion that the apprehension of a succession or of a coexistence is immediate may seem to imply that the apprehension of the course of a boat or of the shape of a house involves no process at all; yet either apprehension clearly takes time and so must involve a process. But though a process is obviously involved, it is not a process from the apprehension of what is not a succession to the apprehension of a succession, but a process from the apprehension of one succession to

that of another. It is the process by which we pass from the apprehension of one part of a succession which may have, and which it is known may have, other parts to the apprehension of what is, and what is known to be, another part of the same succession. Moreover, the assertion that the apprehension of a succession must be immediate does not imply that it may not be reached by a process. It is not inconsistent with the obvious fact that to apprehend that the boat is now turning a corner is really to apprehend that what before was going straight is now changing its course, and therefore presupposes a previous apprehension of the boat's course as straight. It only implies that the apprehension of a succession, if reached by a process at all, is not reached by a process of which the starting-point is not itself the apprehension of a succession.

Nevertheless, a plausible defence of Kant's treatment of causality can be found, which may be formulated thus: 'Time, just as much as space, is a sphere within which we have to distinguish between appearance and reality. For instance, when moving in a lift, we see, as we say, the walls moving, while the lift remains stationary. When sitting in a train which is beginning to move out of a station, we see, as we say, another train beginning to move, although it is in fact standing still. When looking at distant trees from a fast train, we see, as we say, the buildings in the intermediate space moving backwards. In these cases the events seen are not real, and we only succeed in determining what is really happening, by a process which presupposes the law of causality. Thus, in the last case we only believe that the intermediate buildings do not move, by realizing that, given the uniformity of nature, belief in their motion is incompatible with what we believe on the strength of experience of these buildings on other occasions and of the rest of the world. These cases prove the existence of a process which enables us, and is required to enable us, to decide whether a given change is objective or subjective, i. e. whether it lies in the reality apprehended or in our apprehension of it; and this process involves an appeal to causality. Kant's mistake lay in his choice of illustrations. His illustrations implied that the process which involves causality is one by which we distinguish a succession in the object apprehended from another relation in the object, viz. a coexistence of bodies. But he ought to have taken illustrations which implied that the process is one by which we distinguish a succession in the object from a succession in our perception of it. In other words, the illustrations should, like those just given, have illustrated the process by which we distinguish an objective from a subjective change, and not a process by which we distinguish an objective change from something else also objective. Consequently, Kant's conclusion and his *general* method of treatment are right, even if, misled by his instances, he supports his position by arguments which are wrong.'

This defence is, however, open to the following reply: 'At first sight the cases taken undoubtedly seem to illustrate a process in which we seek to discover whether a certain change belongs to objects or only to our apprehension of them, and in which we appeal to causality in arriving at a decision. But this is only because we ignore the relativity of motion. To take the third case: our first statement of the facts is that we saw the intermediate buildings moving, but that subsequent reflection on the results of other experience forced us to conclude that the change perceived was after all only in our apprehension and not in the things apprehended. The statement, however, that we saw the buildings moving really assumes that we, the observers, were stationary; and it states too much. What we really perceived was a relative changing of position between us, the near buildings, and the distant trees. This is a fact, and the apprehension of it, therefore, does not afterwards prove mistaken. It is equally compatible with motion on the part of the trees, or of the buildings, or of the observers, or of a combination of them; and that for which an appeal to causality is needed is the problem of deciding which of these alternatives is correct. Moreover, the perceived relative change of position is objective; it concerns the things apprehended. Hence, in this case too, it can be said that we perceive an objective succession from the beginning, and that the appeal to causality is only needed to determine something further about it. It is useless to urge that to be aware of an event is to be aware of it in all its definiteness, and that this awareness admittedly involves an appeal to

causality; for it is easy to see that unless our awareness of the relative motion formed the starting-point of any subsequent process in which we appealed to the law of causality, we could never use the law to determine which body really moved.'

Two remarks may be made in conclusion. In the first place, the basis of Kant's account, viz. the view that in our apprehension of the world we advance from the apprehension of a succession of perceptions to the apprehension of objects perceived, involves a [Greek: hysteron proteron]. As Kant himself in effect urges in the *Refutation of Idealism*, self-consciousness, in the sense of the consciousness of the successive process in which we apprehend the world, is plainly only attained by reflecting upon our apprehension of the world. We first apprehend the world and only by subsequent reflection become aware of our activity in apprehending it. Even if consciousness of the world must lead to, and so is in a sense inseparable from, self-consciousness, it is none the less its presupposition.

In the second place, it seems that the true vindication of causality, like that of the first analogy, lies in the dogmatic method which Kant rejects. It consists in insight into the fact that it is of the very nature of a physical event to be an element in a process of change undergone by a system of substances in space, this process being through and through necessary in the sense that any event (i. e. the attainment of any state by a substance) is the outcome of certain preceding events (i. e. the previous attainment of certain states by it and other substances), and is similarly the condition of certain subsequent events. To attain this insight, we have only to reflect upon what we really mean by a 'physical event'. The vindication can also be expressed in the form that the very *thought* of a physical event presupposes the *thought* of it as an element in a necessary process of change — provided, however, that no distinction is implied between the nature of a thing and what we think its nature to be. But to vindicate causality in this way is to pursue the dogmatic method; it is to argue from the nature, or, to use Kant's phrase, from the conception, of a physical event. On the other hand, it seems that the method of arguing transcendentally, or from the possibility of perceiving events, must be doomed to failure in principle. For if, as has been argued to be the case, apprehension is essentially the apprehension of a reality as it exists independently of the apprehension of it, only those characteristics can be attributed to it, as characteristics which it must have if it is to be apprehended, which belong to it in its own nature or in virtue of its being what it is. It can only be because we think that a thing has some characteristic in virtue of its own nature, and so think 'dogmatically', that we can think that in apprehending it we must apprehend it as having that characteristic.

There remains to be considered Kant's proof of the third analogy, i. e. the principle that all substances, so far as they can be perceived in space as coexistent, are in thorough-going interaction. The account is extremely confused, and it is difficult to extract from it a consistent view. We shall consider here the version added in the second edition, as being the fuller and the less unintelligible.

"Things are *coexistent*, when in empirical intuition the perception of the one can follow upon the perception of the other, and vice versa (which cannot occur in the temporal succession of phenomena, as we have shown in the second principle). Thus I can direct my perception first to the moon and afterwards to the earth, or conversely, first to the earth and then to the moon, and because the perceptions of these objects can reciprocally follow each other, I say that they coexist. Now coexistence is the existence of the manifold in the same time. But we cannot perceive time itself, so as to conclude from the fact that things are placed in the same time that the perceptions of them can follow each other reciprocally. The synthesis of the imagination in apprehension, therefore, would only give us each of these perceptions as existing in the subject when the other is absent and vice versa; but it would not give us that the objects are coexistent, i. e. that, if the one exists, the other also exists in the same time, and that this is necessary in order that the perceptions can follow each other reciprocally. Hence there is needed a conception-of-the-understanding of the reciprocal sequence of the determinations of these things coexisting externally to one another, in order to say that the reciprocal succession of perceptions is grounded in the object, and thereby to

represent the coexistence as objective. But the relation of substances in which the one contains determinations the ground of which is contained in the other is the relation of influence, and if, reciprocally, the former contains the ground of the determinations in the latter, it is the relation of community or interaction. Consequently, the coexistence of substances in space cannot be known in experience otherwise than under the presupposition of their interaction; this is therefore also the condition of the possibility of things themselves as objects of experience."

The proof begins, as we should expect, in a way parallel to that of causality. Just as Kant had apparently argued that we learn that a succession of perceptions is the perception of a sequence when we find the order of the perceptions to be irreversible, so he now definitely asserts that we learn that certain perceptions are the perceptions of a coexistence of bodies in space when we find that the order of the perceptions is reversible, or, to use Kant's language, that there can be a reciprocal sequence of the perceptions. This beginning, if read by itself, seems as though it should also be the end. There seems nothing more which need be said. Just as we should have expected Kant to have completed his account of the apprehension of a succession when he pointed out that it is distinguished by the irreversibility of the perceptions, so here we should expect him to have said enough when he points out that the earth and the moon are said to be coexistent because our perceptions of them can follow one another reciprocally.

The analogy, however, has in some way to be brought in, and to this the rest of the proof is devoted. In order to consider how this is done, we must first consider the nature of the analogy itself. Kant speaks of 'a conception-of-the-understanding of the reciprocal sequence of the determinations of things which coexist externally to one another'; and he says that 'that relation of substances in which the one contains determinations, the ground of which is contained in the other substance, is the relation of influence'. His meaning can be illustrated thus. Suppose two bodies, A, a lump of ice, and B, a fire, close together, yet at such a distance that they can be observed in succession. Suppose that A passes through changes of temperature a_1 a_2 a_3 ... in certain times, the changes ending in states α_1 α_2 α_3 ..., and that B passes through changes of temperature b_1 b_2 b_3 ... in the same times, the changes ending in states β_1 β_2 β_3. Suppose also, as we must, that A and B interact, i. e. that A in passing through its changes conditions the changes through which B passes, and therefore also the states in which B ends, and vice versa, so that a_2 and α_2 will be the outcome not of a_1 and α_1 alone, but of a_1 and α_1, and b_1 and β_1 jointly. Then we can say (1) that A and B are in the relation of influence, and also of interaction or reciprocal influence, in the sense that they *mutually* (not alternately) determine one another's states. Again, if we first perceive A in the state α1 by a perception A_1, then B in the state β_2 by a perception B_2, then A in the state α_3 by a perception A_3 and so on, we can speak (2) of a reciprocal sequence of perceptions, in the sense of a sequence of perceptions in which alternately a perception of B follows a perception of A and a perception of A follows a perception of B; for first a perception of B, viz. B_2, follows a perception of A, viz. A_1, and then a perception of A, viz. A_3, follows a perception of B, viz. B_2. We can also speak (3) of a reciprocal sequence of the determinations of two things in the sense of a necessary succession of states which *alternately* are states of A and of B; for α_1, which is perceived first, can be said to contribute to determine β_2, which is perceived next, and β_2 can be said to contribute to determine α_3, which is perceived next, and so on; and this reciprocal sequence can be said to be involved in the very nature of interaction. Further, it can be said (4) that if we perceive A and B alternately, and so only in the states α_1 α_3 ... β_2 β_4 ... respectively, we can only fill in the blanks, i. e. discover the states α_2 α_4 ... β_1 β_3 ... *coexistent* with β_2 β_4 ... and α_1 α_3 ... respectively, if we presuppose the thought of interaction. For it is only possible to use the observed states as a clue to the unobserved states, if we presuppose that the observed states are members of a necessary succession of which the unobserved states are also members and therefore have partially determined and been determined by the observed states. Hence it may be said that the determination of the unobserved states coexistent with the observed states presupposes the thought of interaction.

How then does Kant advance from the assertion that the apprehension of a coexistence requires the knowledge that our *perceptions* can be reciprocally sequent to the assertion that it presupposes the thought that the *determinations of phenomena* are reciprocally sequent? The passage in which the transition is effected is obscure and confused, but it is capable of interpretation as soon as we see that it is intended to run parallel to the proof of the second analogy which is added in the second edition. Kant apparently puts to himself the question, 'How are we to know when we have a reciprocal sequence of perceptions from which we can infer a coexistence in what we perceived?' and apparently answers it thus: 'Since we cannot perceive time, and therefore cannot perceive objects as dated in time with respect to one another, we cannot begin with the apprehension of the coexistence of two objects, and thence infer the possibility of reciprocal sequence in our perceptions. This being so, the synthesis of imagination in apprehension can indeed combine these perceptions [these now being really considered as determinations or states of an object perceived] in a reciprocal sequence, but there is so far no guarantee that the sequence produced by the synthesis is not an arbitrary product of the imagination, and therefore we cannot think of it as a reciprocal sequence in objects. In order to think of such a reciprocal sequence as not arbitrary but as constituting a real sequence in objects [= 'as grounded in the object'], we must think of the states reciprocally sequent [as necessarily related and therefore] as successive states of two coexisting substances which interact or mutually determine one another's successive states. Only then shall we be able to think of the coexistence of objects involved in the reciprocal sequence as an objective fact, and not merely as an arbitrary product of the imagination.' But, if this fairly expresses Kant's meaning, his argument is clearly vitiated by two confusions. In the first place, it confuses a subjective sequence of perceptions which are alternately perceptions of A and of B, two bodies in space, with an objective sequence of perceived states of bodies, α_1 β_2 α_3 β_4, which are alternately states of two bodies A and B, the same thing being regarded at once as a perception and as a state of a physical object. In the second place, mainly in consequence of the first confusion, it confuses the necessity that the perceptions of A and of B can follow one another alternately with the necessity of succession in the alternately perceived states of A and B as interacting. Moreover, there is really a change in the cases under consideration. The case with which he begins, i. e. when he is considering merely the reciprocal sequence of perceptions, is the successive perceptions of two *bodies in space* alternately, e. g. of the moon and the earth, the nature of their states at the time of perception not being in question. But the case with which he ends is the successive perception of the *states of two bodies* alternately, e. g. of the states of the fire and of the lump of ice. Moreover, it is only in the latter case that the objective relation apprehended is that of coexistence in the proper sense, and in the sense which Kant intends throughout, viz. that of being contemporaneous in distinction from being successive. For when we say that two bodies, e. g. the moon and the earth, coexist, we should only mean that both exist, and not, as Kant means, that they are contemporaneous. For to a substance, being as it is the substratum of changes, we can ascribe no temporal predicates. That which changes cannot be said either to begin, or to end, or to exist at a certain moment of time, or, therefore, to exist contemporaneously with, or after, or before anything else; it cannot even be said to persist through a portion of time or, to use the phrase of the first analogy, to be permanent. It will be objected that, though the cases are different, yet the transition from the one to the other is justified, for it is precisely Kant's point that the existence together of two substances in space can only be discovered by consideration of their successive states under the presupposition that they mutually determine one another's states. "Besides the mere fact of existence there must be something by which A determines the place in time for B, and conversely B the place for A, because only under this condition can these substances be empirically represented as coexistent." The objection, however, should be met by two considerations, each of which is of some intrinsic importance. In the first place, the apprehension of a body in space in itself involves the apprehension that it exists together with all other bodies in space, for the apprehension of something as spatial involves the apprehension of it as spatially related to, and therefore as existing

together with, everything else which is spatial. No process, therefore, such as Kant describes is required in order that we may learn that it exists along with some other body. In the second place, that for which the principle of interaction is really required is not, as Kant supposes, the determination of the coexistence of an unperceived body with a perceived body, but the determination of that unperceived state of a body already known to exist which is coexistent with a perceived state of a perceived body. As has been pointed out, if we perceive A and B alternately in the states α_1 β_2 α_3 β_4 ... we need the thought of interaction to determine the nature of β_1 α_2 β_3 α_4 ... Thus it appears that Kant in his vindication of the third analogy omits altogether to notice the one process which really presupposes it.

CHAPTER XIII. THE POSTULATES OF EMPIRICAL THOUGHT

The postulates of empirical thought, which correspond to the categories of modality, are stated as follows:

"1. That which agrees with the formal conditions of experience (according to perception and conceptions) is *possible*.

2. That which is connected with the material conditions of experience (sensation) is *actual*.

3. That of which the connexion with the actual is determined according to universal conditions of experience is *necessary* (exists necessarily)."

These principles, described as only 'explanations of the conceptions of possibility, actuality, and necessity as employed in experience', are really treated as principles by which we decide what is possible, what is actual, and what is necessary. The three conceptions involved do not, according to Kant, enlarge our knowledge of the nature of objects, but only 'express their relation to the faculty of knowledge'; i. e. they only concern our ability to apprehend an object whose nature is already determined for us otherwise as at least possible, or as real, or as even necessary. Moreover, it is because these principles do not enlarge our knowledge of the nature of objects that they are called postulates; for a postulate in geometry, from which science the term is borrowed (e. g. that it is possible with a given line to describe a circle from a given point), does not augment the conception of the figure to which it relates, but only asserts the possibility of the conception itself. The discussion of these principles is described, contrary to the terminology adopted in the case of the preceding principles, as 'explanation' and not as 'proof'. The discussion, however, certainly includes a proof of them, for it is Kant's main object to *prove* that these principles constitute the general character of what can be asserted to be possible, actual, or necessary respectively. Again, as before, the basis of proof lies in a theory of knowledge, and in particular in Kant's theory of knowledge; for it consists in the principle that everything knowable must conform to the conditions involved in its being an object of possible experience.

To understand these principles and the proof of them, we must notice certain preliminary considerations. In the *first* place, the very problem of distinguishing the possible, the actual, and the necessary presupposes the existence of distinctions which may prove open to question. It presupposes that something may be possible without being actual, and again that something may be actual without being necessary. In the *second* place, Kant's mode of approaching the problem assumes that we can begin with a conception of an object, e. g. of a man with six toes, and then ask whether the object of it is possible, whether, if possible, it is also actual, and whether, if actual, it is also necessary. In other words, it assumes the possibility of separating what is conceived from what is possible, and therefore *a fortiori* from what is actual, and from what is necessary. *Thirdly*, in this context, as in most others, Kant in speaking of a conception is thinking, to use Locke's phraseology, not of a 'simple' conception, such as that of equality or of redness, but of a 'complex' conception, such as that of a centaur, or of a triangle in the sense of a three-sided three-angled figure. It is the apprehension of a 'complex' of elements. *Fourthly*, what is said to be possible, real, or necessary is not the conception but the corresponding object. The question is not, for instance, whether the conception of a triangle or of a centaur is possible, actual, or necessary, but whether a triangle or a centaur is possible, actual, or necessary. Kant sometimes speaks loosely of conceptions as possible, but the terms which he normally and, from the point of view of his theory, rightly applies to conceptions are 'objectively real' and 'fictitious'. *Lastly*, Kant distinguishes 'objectively real' and 'fictitious' conceptions in two ways. He speaks of establishing the objective reality of a conception as consisting in establishing the possibility of a corresponding object, implying therefore that a fictitious conception is a conception of which the corresponding object is not known to be possible.

Again, he describes as fictitious new conceptions of substances, powers, and interactions, which we might form from the material offered to us by perception without borrowing from experience itself the example of their connexions, e. g. the conception of a power of the mind to perceive the future; and he says that the possibility of these conceptions (i. e. the possibility of corresponding objects) cannot, like that of the categories, be acquired *a priori* through their being conditions on which all experience depends, but must be discovered empirically or not at all. Of such conceptions he says that, without being based upon experience and its known laws, they are arbitrary syntheses which, although they contain no contradiction, have no claim to objective reality, and therefore to the possibility of corresponding objects. He implies, therefore, that the object of a conception can be said to be possible only when the conception is the apprehension of a complex of elements together with the apprehension — which, if not *a priori*, must be based upon experience — that they are connected. Hence a conception may be regarded as 'objectively real', or as 'fictitious' according as it is the apprehension of a complex of elements accompanied by the apprehension that they are connected, or the apprehension of a complex of elements not so accompanied.

It is now possible to state Kant's problem more precisely. With regard to a given complex conception he wishes to determine the way in which we can answer the questions (1) 'Has the conception a possible object to correspond to it', or, in other words, 'Is the conception 'objectively real' or 'fictitious'?' (2) 'Given that a corresponding object is possible, is it also real?' (3) 'Given that it is real, is it also necessary?'

The substance of Kant's answer to this problem may be stated thus: 'The most obvious guarantee of the objective reality of a conception, i. e. of the possibility of a corresponding object, is the experience of such an object. For instance, our experience of water guarantees the objective reality of the conception of a liquid which expands as it solidifies. This appeal to experience, however, takes us beyond the possibility of the object to its reality, for the experience vindicates the possibility of the object only through its reality. Moreover, here the basis of our assertion of possibility is only empirical, whereas our aim is to discover the conceptions of which the objects can be determined *a priori* to be possible. What then is the answer to this, the real problem? To take the case of cause and effect, we cannot reach any conclusion by the mere study of the conception of cause and effect. For although the conception of a necessary succession contains no contradiction, the necessary succession of events is a mere arbitrary synthesis as far as our thought of it is concerned; we have no direct insight into the necessity. Therefore we cannot argue from this conception to the possibility of a corresponding object, viz. a necessarily successive series of events in nature. We can, however, say that that synthesis is not arbitrary but necessary to which any object must conform, if it is to be an object of experience. From this point of view we can say that there must be a possible object corresponding to the conception of cause and effect, because only as subjected to this synthesis are there objects of experience at all. Hence, if we take this point of view, we can say generally that all spatial and temporal conceptions, as constituting the conditions of perceiving in experience, and all the categories, as constituting the conditions of conceiving in experience, must have possible objects. In other words, 'that which agrees with the formal conditions of experience (according to perception and conceptions) is *possible*'. Again, if we know that the object of a conception is possible, how are we to determine whether it is also actual? It is clear that, since we cannot advance from the mere conception, objectively real though it may be, to the reality of the corresponding object, we need perception. The case, however, where the corresponding object is directly perceived may be ignored, for it involves no inference or process of thought; the appeal is to experience alone. Therefore the question to be considered is, 'How do we determine the actuality of the object of a conception comparatively *a priori,* i. e. without direct experience of it?' The answer must be that we do so by finding it to be 'connected with an actual perception in accordance with the analogies of experience'. For instance, we must establish the actuality of an object corresponding to the conception of

a volcanic eruption by showing it to be involved, in accordance with the analogies (and with particular empirical laws), in the state of a place which we are now perceiving. In other words, we can say that 'that which is connected with the material conditions of existence (sensation) is *actual*'. Finally, since we cannot learn the existence of any object of experience wholly *a priori*, but only relatively to another existence already given, the necessity of the existence of an object can never be known from conceptions, but only from its connexion with what is perceived; this necessity, however, is not the necessity of the existence of a substance, but only the necessity of connexion of an unobserved state of a substance with some observed state of a substance. Therefore we can (and indeed must) say of an unobserved object corresponding to a conception, not only that it is real, but also that it is necessary, when we know it to be connected with a perceived reality 'according to universal conditions of experience'; but the necessity can be attributed only to states of substances and not to substances themselves.'

Throughout this account there runs one fatal mistake, that of supposing that we can separate our knowledge of things as possible, as actual, and as necessary. Even if this supposition be tenable in certain cases, it is not tenable in respect of the objects of a complex conception, with which Kant is dealing. If we know the object of a complex conception to be possible, we already know it to be actual, and if we know it to be actual, we already know it to be necessary. A complex conception in the proper sense is the apprehension of a complex of elements together with the apprehension of, or insight into, their connexion. Thus, in the case of the conception of a triangle we see that the possession of three sides necessitates the possession of three angles. From such a conception must be distinguished Kant's 'fictitious' conception, i. e. the apprehension of a complex of elements without the apprehension of connexion between them. Thus, in the case of the conception of a man with six toes, there is no apprehension of connexion between the possession of the characteristics indicated by the term 'man' and the possession of six toes. In such a case, since we do not apprehend any connexion between the elements, we do not really 'conceive' or 'think' the object in question, e. g. a man with six toes. Now in the case of a complex conception proper, it is impossible to think of a corresponding individual as only possible. The question 'Is a triangle, in the sense of a figure with three sides and three angles, possible?' really means 'Is it possible for a three-sided figure to have three angles?' To this question we can only answer that we see that a three-sided figure can have three angles, because we see that it must have, and therefore has, and can have, three angles; in other words, that we see a triangle in the sense in question to be possible, because we see it to be necessary, and, therefore, actual, and possible. It cannot be argued that our insight is limited to the fact that if there are three-sided figures they must be three-angled, and that therefore we only know a triangle in the sense in question to be possible. Our apprehension of the fact that the possession of three sides necessitates the possession of three angles presupposes knowledge of the existence of three-sided figures, for it is only in an actual three-sided figure that we can apprehend the necessity. It may, however, be objected that the question ought to mean simply 'Is a three-sided figure possible?' and that, understood in this sense, it cannot be answered in a similar way. Nevertheless, a similar answer is the right answer. For the question 'Is a three-sided figure possible?' really means 'Is it possible for three straight lines to form a figure, i. e. to enclose a space?' and we can only answer it for ourselves by seeing that a group of three straight lines or directions, no two of which are parallel, must, as such, enclose a space, this insight presupposing the apprehension of an actual group of three straight lines. It may be said, therefore, that we can only determine the possibility of the object of a complex conception in the proper sense, through an act in which we apprehend its necessity and its actuality at once. It is only where conceptions are 'fictitious', and so not properly conceptions, that appeal to experience is necessary. The question 'Is an object corresponding to the conception of a man with six toes possible?' presupposes the reality of man and asks whether any man can have six toes. If we understood the nature of man and could thereby apprehend either that the possession of six toes was, or that it was not, involved in one of the possible differentiations of man, we could decide the question of possibility *a priori*, i. e. through our conceiving

alone without an appeal to experience; but we could do so only because we apprehended either that a certain kind of man with six toes was necessary and actual, or that such a man was impossible and not actual. If, however, as is the case, we do not understand the nature of man, we can only decide the question of possibility by an appeal to experience, i. e. to the experience of a corresponding object, or of an object from which the existence of such an object could be inferred. Here, therefore — assuming the required experience to be forthcoming — we can appeal to Kant's formula and say that we know that such a man, i. e. an object corresponding to the conception, is actual, as being connected with the material conditions of experience. But the perception which constitutes the material conditions of experience in the case in question is only of use because it carries us beyond possibility to actuality, and appeal to it is only necessary because the object is not really conceived or, in other words, because the so-called conception is not really a conception.

Kant really treats his 'objectively real' conceptions as if they were 'fictitious', even though he speaks of them as complete. Consequently, his conceptions not being conceptions proper, he is necessarily led to hold that an appeal to experience is needed in order to establish the reality of a corresponding object. Yet, this being so, he should have asked himself whether, without an appeal to perception, we could even say that a corresponding object was possible. That he did not ask this question is partly due to the fact that he attributes the form and the matter of knowledge to different sources, viz. to the mind and to things in themselves. While the conceptions involved in the forms of perception, space, and time, and also the categories are the manifestations of the mind's own nature, sensations, which form the matter of knowledge, are due to the action of things in themselves on our sensibility, and of this activity we can say nothing. Hence, from the point of view of our mind — and since we do not know things in themselves, this is the only point of view we can take — the existence of sensations, and therefore of objects, which must be given in perception, is wholly contingent and only to be discovered through experience. On the other hand, since the forms of perception and conception necessarily determine in certain ways the nature of objects, *if* there prove to be any objects, the conceptions involved may be thought to determine what objects are possible, even though the very existence of the objects is uncertain. Nevertheless, on his own principles, Kant should have allowed that, apart from perception, we could discover *a priori* at least the reality, even if not the necessity, of the objects of these conceptions. For his general view is that the forms of perception and the categories are only actualized on the occasion of the stimulus afforded by the action of things in themselves on the sensibility. Hence the fact that the categories and forms of perception are actualized — a fact implied in the very existence of the *Critique* — involves the existence of objects corresponding to the categories and to the conceptions involved in the forms of perception. On Kant's own principles, therefore, we could say *a priori* that there must be objects corresponding to these conceptions, even though their nature in detail could only be filled in by experience.

NOTE ON THE REFUTATION OF IDEALISM

This well-known passage practically replaces a long section, contained only in the first edition, on the fourth paralogism of pure reason. Its aim is to vindicate against ‘idealism’ the reality of objects in space, and it is for this reason inserted after the discussion of the second postulate. The interest which it has excited is due to Kant’s use of language which at least seems to imply that bodies in space are things in themselves, and therefore that here he really abandons his main thesis.

Idealism is the general name which Kant gives to any view which questions or denies the reality of the physical world; and, as has been pointed out before, he repeatedly tries to defend himself against the charge of being an idealist in this general sense. This passage is the expression of his final attempt. Kant begins by distinguishing two forms which idealism can take according as it regards the existence of objects in space as false and *impossible*, or as doubtful and *indemonstrable*. His own view, which regards their existence as certain and demonstrable, and which he elsewhere calls transcendental idealism, constitutes a third form. The first form is the dogmatic idealism of Berkeley. This view, Kant says, is unavoidable, if space be regarded as a property of things in themselves, and the basis of it has been destroyed in the *Aesthetic*. The second form is the problematic idealism of Descartes, according to which we are immediately aware only of our own existence, and belief in the existence of bodies in space can be only an inference, and an uncertain inference, from the immediate apprehension of our own existence. This view, according to Kant, is the outcome of a philosophical attitude of mind, in that it demands that a belief should be proved, and apparently — to judge from what Kant says of Berkeley — it does not commit Descartes to the view that bodies in space, if their reality can be vindicated, are things in themselves.

The assertion that the *Aesthetic* has destroyed the basis of Berkeley’s view, taken together with the drift of the *Refutation* as a whole, and especially of Remark I, renders it clear that the *Refutation* is directed against Descartes and not Berkeley. Kant regards himself as having already refuted Berkeley’s view, as he here states it, viz. that the existence of objects in space is *impossible*, on the ground that it arose from the mistake of supposing that space, if real at all, must be a property of things in themselves, whereas the *Aesthetic* has as he thinks, shown that space can be, and in point of fact is, a property of phenomena. He now wants to prove — compatibly with their character as phenomena — that the existence of bodies in space is not even, as Descartes contends, *doubtful*. To prove this he seeks to show that Descartes is wrong in supposing that we have no immediate experience of these objects. His method is to argue that reflection shows that internal experience presupposes external experience, i. e. that unless we were directly aware of spatial objects, we could not be aware of the succession of our own states, and consequently that it is an inversion to hold that we must reach the knowledge of objects in space, if at all, by an inference from the immediate apprehension of our own states.

An examination of the proof itself, however, forces us to allow that Kant, without realizing what he is doing, really abandons the view that objects in space are phenomena, and uses an argument the very nature of which implies that these objects are things in themselves. The proof runs thus:

Theorem. “The mere but empirically determined consciousness of my own existence proves the existence of objects in space external to me.”

“*Proof*. I am conscious of my own existence as determined in time. All time-determination presupposes something permanent in perception. This permanent, however, cannot be an intuition in me. For all grounds of determination of my own existence, which can be found in me, are representations, and as such themselves need a permanent different from them, in relation to which their change and consequently my existence in the time in which they change can be determined. The perception of this permanent, therefore,

is possible only through a *thing* external to me, and not through the mere *representation* of a thing external to me. Consequently, the determination of my existence in time is possible only through the existence of actual things, which I perceive external to me. Now consciousness in time is necessarily connected with the consciousness of the possibility of this time-determination; hence it is necessarily connected also with the existence of things external to me, as the condition of time-determination, i. e. the consciousness of my own existence, is at the same time an immediate consciousness of the existence of other things external to me."

The nature of the argument is clear. 'In order to be conscious, as I am, of a determinate succession of my states, I must perceive something permanent as that in relation to which alone I can perceive my states as having a definite order. But this permanent cannot be a perception in me, for in that case it would only be a representation of mine, which, as such, could only be apprehended in relation to another permanent. Consequently, this permanent must be a thing external to me and not a representation of a thing external to me. Consequently, the consciousness of my own existence, which is necessarily a consciousness of my successive states, involves the immediate consciousness of things external to me.'

Here there is no way of avoiding the conclusion that Kant is deceived by the ambiguity of the phrase 'a thing external to me' into thinking that he has given a proof of the existence of bodies in space which is compatible with the view that they are only phenomena, although in reality the proof presupposes that they are things in themselves. In the 'proof', the phrase 'a thing external to me' must have a double meaning. It must mean a thing external to my body, i. e. any body which is not my body; in other words, it must be a loose expression for a body in space. For, though the 'proof' makes us appeal to the spatial character of things external to me, the *Refutation* as a whole, and especially Remark II, shows that it is of bodies in space that he is thinking throughout. The phrase must also, and primarily, mean a thing external to, in the sense of independent of, my mind, i. e. a thing in itself. For the nerve of the argument consists in the contention that the permanent the perception of which is required for the consciousness of my successive states must be a *thing* external to me in opposition to the representation of a thing external to me, and a thing external to me in opposition to a thing external to me can only be a thing in itself. On the other hand, in Kant's conclusion, 'a thing external to me' can only mean a body in space, this being supposed to be a phenomenon; for his aim is to establish the reality of bodies in space compatibly with his general view that they are only phenomena. The proof therefore requires that things external to me, in order that they may render possible the consciousness of my successive states, should have the very character which is withheld from them in the conclusion, viz. that of existing independently of me; in other words, if Kant establishes the existence of bodies in space at all, he does so only at the cost of allowing that they are things in themselves.

Nevertheless, the *Refutation* may be considered to suggest the proper refutation of Descartes. It is possible to ignore Kant's demand for a permanent as a condition of the apprehension of our successive states, and to confine attention to his remark that he has shown that external experience is really immediate, and that only by means of it is the consciousness of our existence as determined in time possible. If we do so, we may consider the *Refutation* as suggesting the view that Descartes' position is precisely an inversion of the truth; in other words, that our consciousness of the world, so far from being an uncertain inference from the consciousness of our successive states, is in reality a presupposition of the latter consciousness, in that this latter consciousness only arises through reflection upon the former, and that therefore Descartes' admission of the validity of self-consciousness implicitly involves the admission *a fortiori* of the validity of our consciousness of the world.

INTRODUCTION TO KANT by Ralph Barton Perry

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IT IS generally admitted that Kant is one of the great epoch-making philosophers, like Socrates and Descartes. There are two things that are universally true of intellectual epoch-makers: first, they embody in themselves certain general tendencies cof their age, which are usually due to a reaction against the more pronounced tendencies of the previous age; second, their thought is peculiarly germinal, and among their followers assumes a maturer form, in which the originators would scarcely recognize it as their own. Let us consider these two aspects of the philosophy of Kant.

REVOLT AGAINST PURE EMPIRICISM AND PURE RATIONALISM

From among the pronounced tendencies of the seventeenth and eighteenth centuries I shall select two for special emphasis. In the first place, it was characteristic of these two centuries to isolate and over-emphasize either one or the other of the two great sources of human knowledge, sense-perception or reason. Locke and his followers attempted to convert reason into a mere echo of sense; while for Descartes and his followers, sense was always viewed with suspicion as confusing the intellect, or as supplying only an inferior sort of knowledge which must yield precedence to "rational science." Extreme sensationalism or empiricism seemed to have reached an impasse in Hume; while rationalism degenerated into formalism and word-making in Wolff. Thus Kant's greatest work, the "Critique of Pure Reason" (1789), was an attempt to correct these extreme views by making the necessary provision for both sense-perception and reason. Perception without conception, he said, is blind; while conception without perception is empty. Kant's critique was aimed first at excessive emphasis on sense-perception. He showed that the bare sequence of sense-impressions can never yield the connections, necessities, unities, laws, etc., which are required for science. The intellect must supply these itself. They constitute what Kant called "categories," the instruments which the mind must use when it works in that peculiar way which is called knowing. But it follows that they are not by themselves sufficient for knowledge. They cannot themselves be known in the ordinary way because they are *what one knows with*. And since they are instruments, it follows that they require some material to work upon; they cannot spin knowledge out of nothing. Hence the data of sense are indispensable also. In short, to know is to systematize, by the instrumentalities native to the mind, the content conveyed by the senses. This is the Kant of the first Critique, the Kant of technical philosophy who numbers many faithful devotees among the thinkers of to-day.

REASSERTION OF THE SPIRITUAL

A second and more general tendency of seventeenth and eighteenth century philosophy was its comparative neglect of what are vaguely called the "spiritual" demands. These centuries themselves may be regarded as a reaction against what was thought to be the excessive anthropomorphism of earlier times. Man had erred by reading himself into his world; now he was to view it impersonally and dispassionately. He might prefer to record the findings of perception, or the necessities of reason, but in either case he was to repress his own interests and yearnings. Of course at the time it was confidently

expected that morality and religion would in this way be served best. Men believed in the possibility of a "natural religion," without mystery or dogma, a rational morality without authority, and a demonstrable theology without either revelation or faith. But gradually there developed a sense of failure. Man had left himself too much out of it, and felt homeless and unprotected. Early in the seventeenth century Pascal had announced the religious bankruptcy of the mathematical rationalism of Descartes. Natural religion was readily converted into atheism by Hume. The most vigorous and stirring protest against the whole spirit of the age was made by Rousseau, who urged men to trust their feelings, make allowance for the claims of the heart, and return to the elemental and spontaneous in human nature. The same note was caught up by Jacobi and Herder. Finally Lessing, in his "Education of the Human Race" (1780), turned the attention of philosophy to the history of culture, to the significance of human life in its historical unfolding. It is a strange paradox that Immanuel Kant, valetudinarian and pedant that he was, should have represented this rising revolt of sentiment and faith. But such was the fact. Let us, then, view him in this light.

THE KANTIAN REVOLUTION

One of the most famous of Kant's remarks was that he proposed to effect a Copernican Revolution in thought. As Copernicus had established a new center for the planetary system, so he proposed to establish a new center for knowledge. This new center was to be the mind itself. The errors of the earlier period had been largely due, he thought, to the attempt to make knowledge center in the object, it being expected that the mind should reflect, either by perception or reason, the nature of an outward and independently existing thing. This method leads inevitably, said Kant, either to scepticism or to what is just as bad for philosophical purposes, dogmatism. The new way is to expect that the object shall conform to the mind. Thus nature, which in the earlier view was construed as an external order by which the mind is affected, or which the mind is somehow to reproduce by its own ratiocination, is now construed as the original creation of the mind. It owes all of its arrangements and connections, even its very distribution in space and time, to the constitution of the knower. The mind imposes its conditions on the object, and thus gets out of nature what it has already put into it. The bearing of this on man's spiritual claims is apparent. It is now nature that is creature; and man, in virtue of his intelligence, that is creator. The fatal world of fact and necessity, that seemed so alien to spirit, turns out to be but an expression of the intellectual part of spirit.

THE SPHERE OF THE WILL

But a Rousseau might still complain that this victory of spirit over matter was dearly bought, since it left the rest of spirit in harsh subjection to the intellectual part. What guarantee is there that the intellect, thus clothed with authority, will make due allowance for the claims of sentiment and conscience? Kant's answer lies in his famous doctrine of the "primacy of the practical reason." Nature, he says, is indeed the work of the theoretical faculties; and the theoretical faculties can recognize only facts and laws. But the theoretical faculties are themselves but the expression of something deeper, namely, the will. Thinking is a kind of action, and action in general has its own laws, revealed in conscience, and taking precedence of the rules that govern any special department of action, such as knowing. This does not mean that conscience over-rules the understanding, or that the will can violate nature; but that conscience reveals another world, deeper and more real than nature, which is the proper sphere for the exercise of the will.

This is the world of God, freedom, and immortality. It cannot be known in the strict sense, only nature can be known; but it can and must be believed in, because it is presupposed in all action. If one is to live at all, one must claim such a world to live in. So Kant, who began by justifying science, ended by justifying faith.

THE FOLLOWERS OF KANT

I have said that it was the fate of epoch-makers to have their ideas promptly converted into something that they never meant. Kant was a cautious, or as he terms it, a “critical” thinker. He concerned himself with questions regarding the possibility of knowledge and the legitimacy of faith; and avoided so far as possible making positive assertions about the world. But his followers were fired with speculative zeal, and at once passed over from “criticism” to metaphysics.

There resulted the great Romantic and Idealistic movement that formed the main current of philosophical thought during the nineteenth century.

In the idealistic movement the Kantian theory of knowledge is united with a pantheistic tendency that may be traced continuously back even to Plato himself. According to this pantheistic view, nature and God are the same thing viewed differently. God, foreshortened and taken in the limited perspectives defined by man’s earth-bound intelligence, is nature; nature, consummated, seen in its fullness and harmony, is God.

For all we have power to see, is a straight staff bent in a pool;

And the ear of man cannot hear, and the eye of man cannot see;
But if we could see and hear, this Vision — were it not He?

Nature, on Kantian grounds, is the work of intelligence, and intelligence, in turn, obeys some deeper spiritual law. That law, when interpreted according to the Platonic-pantheistic tradition, is the perfection of the whole. There are many possible variations of the view. The perfection of the whole may be regarded as a moral perfection, the ideal of the moral will, as suggested by Kant, and more positively and constructively maintained by Fichte; or as the ideal of reason, as was maintained by Hegel and his followers; or as a general realization of all spiritual values, a perfection transcending moral and rational standards, and more nearly approached in the experience of beauty, or in flashes of mystical insight, as was proclaimed by the sentimentalists and romanticists. In the popular literary expressions of the view, these varieties have alternated, or have been indiscriminately mingled. But it is this view in some form that has inspired those English poets and essayists, such as Coleridge, Wordsworth, Carlyle, Emerson, Tennyson, and Browning, who so profoundly influenced the men of the last generation. There is thus a continuous current of thought from the closest philosophy of the sage of Konigsberg to the popular incentives and consolations of to-day.

The Biographies

Kant’s home in Königsberg (modern day Kaliningrad) from 1750

Kant by an unknown artist, c. 1755

MEMOIR OF KANT by Thomas Kingsmill Abbott

Immanuel Kant was born in Königsberg on the 22nd of April, 1724, thirteen years after Hume, and fourteen after Reid. His family was of Scottish origin, his grandfather having been one of the many Scotchmen who emigrated from Scotland at the end of the seventeenth century, some settling in Prussia, and some in Sweden; and he is said to have been himself the first to change the spelling of the name from Cant, which he did in order to avoid the mispronunciation Zant. His father was a saddler in modest, if not humble, circumstances. Both parents were persons of simple and sincere piety. Kant himself, although he did not sympathize with their religious views, bears the strongest testimony to the practical effect of their religion on their life. "Although," said he, speaking warmly, "the religious ideas of that time, and the notions of what was called virtue and piety were far from being distinct and satisfactory, yet such persons had the root of the matter in them. Let men decry pietism as they may, the people who were in earnest with it were honourably distinguished. They possessed the highest that man can possess — that calm, that serenity, that inward peace which is not disturbed by any passion. No trouble, no persecution dismayed them; no contest had the power to stir them up to anger or hostility: in a word, even the mere observer was involuntarily compelled to respect them. I still remember," added he, "how a quarrel once broke out between the harnessmakers and the saddlers about their respective privileges. My father suffered considerably; nevertheless, even in conversation amongst his own family he spoke about this quarrel with such forbearance and love towards his opponents, and with such firm trust in Providence, that although I was then only a boy, I shall never forget it." Of his mother, especially, he ever retained a tender and grateful memory, saying, "I shall never forget my mother, for she planted and fostered the first germ of good in me: she opened my heart to the impressions of nature, she awoke and enlarged my thoughts, and her teaching has always had an enduring and wholesome influence on my life." She died when he was only thirteen, and even in his later years he could scarcely restrain his emotion, when he related to his intimate friends how she had sacrificed her own life through her devotion to a friend. Kant strongly resembled his mother in features and in his singularly contracted chest.

At ten years of age Kant was sent to the Collegium Fridericianum, where he continued for seven years. Here he applied himself chiefly to classical studies, and learned to write Latin with ease and fluency. Of Greek he does not seem to have ever read much.

Amongst his schoolfellows was David Ruhnken, and these two, with a third, named Kunde, read their favourite authors together and laid their plans for the future, all three proposing to devote themselves to classical literature. Ruhnken actually attained high distinction in this field. At the age of sixteen Kant passed to the University, where he applied himself chiefly to mathematics and philosophy, the instruction in his favourite subject, the ancient classics, being inadequate. He had entered himself as a theological student, and, as was then the practice with such students in Prussia, he occasionally preached in the neighbouring churches. Indeed, he had completed his theological course when he finally gave up that line of study. No doubt his tastes had been long turning in a different direction; but the immediate cause of his decision seems to have been the failure of his application for a subordinate post in a school, such posts being usually the first step to ecclesiastical appointments.

During the latter part of his residence at the University he had been obliged to eke out his scanty means by giving instruction in classics, mathematics, and natural philosophy to some of his fellow-students, for whom the lectures of the professors were too difficult; but the little that he could earn in this way was insufficient for his support, when by his father's death (1746) he was thrown altogether on his own resources. He therefore sought and obtained employment as a resident tutor in families of distinction. He

was thus engaged for nine years, and, according to his own candid confession in later years, there was hardly ever a tutor with a better theory or a worse practice. However that may be, he certainly gained the affection of his pupils, and the respect of their parents. At the beginning of this period he published his first work — an Essay on the estimation of vis viva; and towards the end of it his second — a brief discussion of the question whether the length of the day has undergone any change, a question which had been proposed by the Berlin Academy as the subject for a prize essay. Kant argues that the tides must have the effect of retarding the earth's rotation, and he enters into a rough calculation of the amount of this retardation, his first step to a conjectural approximation being an estimate of the effect of the impulse of the water on the whole east coast of the American continent. His suggestion was sound and sagacious; but he overrated vastly the amount of the effect. He inferred that the day had lengthened by about 1½s in two thousand years. According to Delaunay, the actual amount of retardation is 1s in 200,000 years. This result is based on historical facts (the record of eclipses). Kant's was a purely physical calculation, and for this he did not possess sufficient data. On account of this inevitable lack of precision, he did not offer his essay in competition for the prize.

The same essay contained another very remarkable suggestion in explanation of the fact, that the moon always presents the same face to the earth. In fact, if the moon were originally in a fluid state the tides produced in it by the earth (which would be very great) would similarly retard its rotation until the fluid surface attained a position of equilibrium relatively to the earth, i. e. until the moon rotated round its axis in the same time that it revolved round the earth. This speculation has been recently brought forward as novel.

The conjecture as to the moon's original fluidity was no isolated one in Kant's mind; on the contrary, he speaks of it as part of a general theory of the heavens, which he was about to publish. In the following year (1755), accordingly, he published (anonymously) an important work of about 200 pages, entitled, A General Theory of the Heavens; or, Essay on the Mechanical Origin of the Structure of the Universe, on the Principles of Newton. This work is an elaborate exposition of the Nebular Theory, commonly called by the name of Laplace, although Laplace's Système du Monde was not published till forty years later (1796). The only considerable differences are, first, that Laplace supposes the condensation of the diffused matter to be the result of cooling; and, secondly, that he postulates an original movement of rotation; whereas Kant thought he could account for both condensation and rotation from the two elementary forces of attraction and repulsion. It is not easy to say whether Laplace was aware of Kant's priority. He asserts, indeed, that he was not aware of any theory except Buffon's (a rather extravagant one); but then Laplace never did acknowledge that he borrowed anything from anybody else. Even when he used the mathematical discoveries of contemporary Frenchmen, he introduces them as if they were his own; how much more if he adopted a suggestion of an anonymous German philosopher. If he really did calculate on the ignorance of his reader, the event has justified his expectation; for even those writers who mention Kant's priority speak as if Kant had merely thrown out a hint, while Laplace had developed a theory; whereas, in fact, Kant wrote a treatise on the subject, and Laplace only a few pages.

Kant begins by defending his attempt against the possible objections of those who might regard it as an endeavour to dispense with the necessity for a Divine Author. Such persons, he says, appear to suppose that nature, left to its own laws, would produce only disorder, and that the adaptations we admire indicate the interference of a compelling hand, as if nature were a rebellious subject that could be reduced to order only by compulsion, or else were an independent principle, whose properties are uncaused, and which God strives to reduce into the plan of His purposes. But, answers he, if the general laws of matter are themselves a result of supreme wisdom, must they not be fitted to carry out its wise design? In fact, we have here a powerful weapon in aid of Theism. When we trace certain beneficial effects to the regular working of the laws of nature, we see that these effects are not produced by chance, but that these laws can work in no other way. But if the nature of things were independent and necessary, what an astounding

accident, or rather what an impossibility, would it not be that they should fit together just as a wise and good choice would have made them fit! As this applies to such reasoning in general, so it applies also to the present undertaking. We shall find that matter had certain laws imposed on it, by virtue of which it necessarily produced the finest combinations. That there is a God is proved even by this, that Nature, even in chaos, could only proceed with regularity and order.

He proceeds to work out in detail the problem of the formation of the planets out of the originally diffused matter, taking into consideration the eccentricities, inclinations, &c., of the planets, the rings of Saturn, the satellites, the comets. It is noticeable that he does not, like Laplace, regard the rings of Saturn as an illustration of his theory. On account of their large inclination to the ecliptic (28°), he thought it necessary to assign to them a different origin. His hypothesis was, that they were produced by emanations from the planet itself, and he showed further (as Laplace afterwards did) that the ring must have a movement of rotation, and that in consequence of the different velocities belonging to different distances from the planet, its stability required that it should consist of several distinct rings. This conjecture, or rather deduction, has been verified. He also conjectured, as a result of his hypothesis regarding the formation of the ring, that the great velocity of rotation of particles of the inner ring would be the same as that of the planet's equator. From this consideration, combined with the assumption that the ring conforms to Kepler's third law, he deduced the time of the planet's rotation. He drew particular attention to this as the first prediction of the kind. His deduction, however, has not been verified. Saturn's time of rotation is nearly double what it ought to be on Kant's theory. Another conjecture of his, subsequently verified, was, that there are planets beyond Saturn. Later, he conjectured also the existence of a planet between Mars and Jupiter.

Kant then extends his view to the sidereal system. He states that the first to suggest to him that the fixed stars constituted a system was Wright, of Durham. Kant develops this conception. If gravitation is a universal property of matter, we cannot suppose the sun's attractive force limited to our system; but if it extends to the nearest fixed star, and if the fixed stars, like suns, exercise a similar force around them, then they would, sooner or later, fall together if not prevented (like the planets) by a centrifugal force. Hence we may conclude that all the stars of the firmament have their own orbital motion. If we conceive our planetary system multiplied a thousand-fold, and the several bodies in it to be self-luminous, the appearance, as seen from the earth, would resemble that of the Milky Way. The form of the heaven of the fixed stars then is in great an effect of the same systematic arrangement as our system in little; our sun with the other stars are, in short, the planets of a vaster system, which is, in fact, the Milky Way. There may be many such systems, and some of these may appear to us as nebulæ, and these being seen obliquely would present an elliptic form. The Milky Way seen from a sufficient distance would appear like one of these elliptic nebulæ. But these systems, again, may be mutually related, and constitute together a still more immeasurable system. This opens to us a view into the infinite field of creation, and gives us a conception of the work of God suitable to the infinity of the great Creator. If the magnitude of a planetary system in which the earth is as a grain of sand fills our understanding with wonder, with what amazement are we seized when we consider the vast multitude of worlds and systems which constitute the Milky Way; and how is this amazement increased again when we learn that all these immeasurable star systems are in their turn only a unit in a number whose limit we know not, and which is perhaps as inconceivably great as the former, while it is itself the unit of a new combination. There is here a veritable abyss of immensity in which all human power of conception is lost. The wisdom, the goodness, the power, that are revealed are infinite, and in the same degree fruitful and active; the plan of its revelation must, therefore, be equally infinite. He ventures upon the conjecture (giving his reasons) that nature may in course of time be again reduced to chaos, and again emerge like a phœnix from its ashes. When we contemplate nature in these successive changes, carrying out the plan by which God reveals Himself in wonders that fill space and eternity, the mind is overwhelmed with astonishment; but not satisfied with this vast yet perishable object,

the soul desires to know more nearly that Being whose intelligence and whose greatness are the source of that light which spreads as from a centre over all nature. With what awe must not the soul regard even its own nature, when it reflects that it shall outlive all these changes. “O happy,” he exclaims, “when amid the tumult of the elements and the ruin of nature it is placed on a height from whence it can, as it were, see beneath its feet the desolation of all perishable things of the world. Reason could not even dare to wish for such happiness, but Revelation teaches us to hope for it with confidence. When the fetters that have bound us to the vanity of the creature have fallen off, the immortal spirit will find itself in the enjoyment of true happiness in communion with the Infinite Being. The contemplation of the harmony of universal nature with the will of God must fill with ever-increasing satisfaction the rational creature who finds himself united to this source of all perfection. Viewed from this centre, nature will show on all sides nothing but stability and fitness; its changes cannot interfere with the happiness of a creature who has reached this height. In sweet foretaste of this condition the soul can exercise its mouth in those songs of praise with which all eternity shall ring: —

> “When nature fails, and day and night
> Divide Thy works no more,
> My ever-grateful heart, O Lord,
> Thy mercy shall adore.
> Through all eternity to Thee
> A joyful song I’ll raise;
> For, oh! eternity’s too short
> To utter all Thy praise.”
> Addison.

Discussing the question, whether the planets are inhabited, he states his opinion that it would be absurd to deny this as to all or even most of them. But in the wealth of nature, in which worlds and systems are to the whole creation only sundust, there may well be waste and uninhabited places as there are uninhabited waste on our own earth. Perhaps, indeed, he adds, some of the planets are not yet brought into a state fit for habitation; it may take thousands of years to bring the matter of a great planet into a steady condition. Jupiter appears to be in this transition state. One planet may come to its perfection thousands of years later than another. We may be sure that most of the planets are inhabited, and those that are not will be so in due time. He imagines that the further the planets are from the sun the more the inhabitants excel in liveliness and distinctness of thought. Indulging in fancy, he asks, Does sin exist in those worlds? and suggests that perhaps the beings in the inferior planets may be too low to be responsible; those in the superior planets too wise and too elevated to fall into sin, with the exception, perhaps, of Mars. Perhaps, he adds, some of these bodies may be preparing for our future habitation: who knows whether the satellites which revolve round Jupiter are destined one day to illumine us? “No one, however, will base his hopes of the future on such uncertain fancies. When corruption has claimed its part in human nature, then shall the immortal spirit swiftly soar above all that is finite, and continue its existence in a new relation to the whole of nature arising from its nearer relation to the Supreme Being. When we gaze on the starry heavens with our mind filled with such thoughts as have here been expressed, while all nature is at rest and our senses also in repose, the hidden faculties of the immortal soul speak in a language unutterable, and give us conceptions which can be felt but not described. If there are on this planet thinking beings so base as to bind themselves to the service of corruption, in spite of all that draws them away from it, how unhappy is this globe to produce such miserable creatures! but how happy, on the other hand, that under conditions worthy of all acceptation a way is opened to them to attain to a happiness and a dignity infinitely beyond all the advantages which the most favourable arrangements of nature can reach

in all the bodies of the universe!”

The reader who is interested in Kant himself will readily pardon this long notice of a work to which he attached some importance. At its first publication it was dedicated to the king, Frederick the Great, and the theory developed in it is frequently referred to by Kant in his subsequent writings, for he never ceased to take an interest in these subjects. So late as 1785 he wrote an essay on the volcanoes in the moon, with reference to an observation of Herschel. In this Paper he suggests a mode of accounting for the great heat of the sun, and (originally) of the planets. His suggestion is based on the discovery of Crawford, that heat is developed by condensation. On the hypothesis then that the sun and planets were formed by the condensation of matter originally diffused through the whole space, this heat would be a direct consequence of the condensation. Still later, in 1794, writing on the influence of the moon on the weather, he throws out the suggestion that the moon’s centre of gravity may (for reasons which he gives) lie beyond its centre of figure: a consequence of which would be that any air and water which might be upon its surface would be collected at the side remote from us.

In another instance, both Kant and Laplace might have had reason to say, “Pereant qui ante nos nostra dixerunt.” In 1756 Kant wrote a short Paper on the theory of the winds, in which, for the first time, as he believed, he gave the true account of the trade winds and monsoons. Halley had shown that the effect of the sun in heating the atmosphere at the equator would be to cause an indraught towards the equator from north and south. This indraught, according to him, naturally followed the daily course of the sun, and hence the easting. Kant showed that this theory was untenable. In fact, the wind would tend rather to meet the sun, the region to the west being the cooler. Nor could a wind from such a cause extend with nearly equal force all round the earth. Kant showed further, that owing to the difference in the velocity of rotation between the parts near the equator and those near the poles, all winds that move from the poles towards the equator tend to become more and more easterly, and those that move from the equator towards the poles become more and more westerly. Hence, in the northern hemisphere every north wind tends to become a north-east, and every south wind a south-west wind. In the southern hemisphere, on the contrary, south winds tend to become south-east, and north winds north-west. He follows out in some detail the general principles of this circulation of the atmosphere. We can thus explain, for instance, the monsoons of the Indian Ocean, &c., which blow from April to September from the south-west; for when the sun is north of the equator the wind blows from the equator towards these parts, and therefore takes a south-westerly direction. Again, the current from the poles towards the equator is balanced by a counter current, the heated air in the upper strata at the equator overflowing as it were towards the poles. When this descends, or overcomes the weaker motion of the lower strata, it becomes in the northern hemisphere a westerly wind, such as prevail between the 28th and 40th degrees of latitude. Kant subsequently introduced this theory into his course of lectures on Physical Geography, which was very numerously attended. Laplace propounded the same theory forty years later.

In 1763, Kant published his Essay On the only possible Demonstrative Proof of the Existence of God. The proof developed in this Essay is founded on the principle that every possibility of existence presupposes an actually existing thing on which it depends. This he characterizes as a more thoroughly à priori argument than any other that has been proposed, since it does not assume any actual fact of existence. I need not explain how he develops step by step the attributes of Unity, Intelligence, &c. At a later period he himself abandoned this line of argument. However, the greater part of the Essay is occupied with remarks on design in the constitution of nature, and with an exposition of the theory developed in the above-mentioned treatise on the structure of the heavens. We may, he observes, argue from design, either as exhibited in a contingent arrangement, for example, in the body of an animal or in a plant; or we may argue from the necessary results of the constitution of matter, the laws of motion, &c. The latter method has the great advantage of presenting the First Cause not merely as an architect, but as a

creator. From this point of view he instances first the simplicity and harmony resulting from the geometrical conditions of space, e. g. that if we seek all the paths which a falling body would traverse either to or from the same point in the same time, they are found to be chords of the same circle. Again, he takes the manifold and harmonious benefits resulting by necessary laws from the mere fact of the existence of an atmosphere. There may be many reasons for its existence: if we suppose its primary purpose to be that it should serve for respiration, we find that its existence leads to other important beneficial results. It makes clouds possible which intercept excessive heat, prevents too rapid cooling and drying, and keeps the land supplied with the necessary moisture from the great reservoir of the sea. By causing twilight it prevents the strain on the eyes which would be caused by the sudden change from day to night. Its existence prevents rain from dropping with too great force, and its pressure makes sucking possible. If it occurs to anyone to say — Oh, these are all the necessary results of the nature of matter, &c., he answers: Yes; it is just this that shows that they proceed from a wise Creator. He treats of the laws of motion from the same point of view, and then takes occasion to show how the laws of the planetary motions result from the simplest laws of matter, attraction, and repulsion.

In conclusion, he remarks that while it is of the greatest consequence to be convinced of the existence of God, it is by no means necessary to have a demonstration of it, and those who cannot grasp the demonstrative proof are advised to hold fast by the more easily apprehended proof from design. Hardly, indeed, he observes, would anyone stake his whole happiness on the correctness of a metaphysical proof, especially if it were opposed to the convictions of sense. The argument from design is more striking and vivid, as well as easy to the common understanding, and more natural than any other. It also gives an idea of the wisdom and providence, &c., of God, which comes home and has the greatest effect in producing awe and humility; and it is in fine more practical than any other, even in the view of a philosopher. It does not, indeed, give a definite abstract idea of Divinity, nor does it claim mathematical certainty; but so many proofs, each of great force, take possession of the soul, and the speculation may calmly follow since conviction has preceded — a conviction far above the force of any subtile objections.

In the same year in which Kant published his Theory of the Heavens, he issued his first metaphysical treatise, Principiorum Primorum Cognitionis Metaphysicœ Nova Dilucidatio, and publicly defended it as an exercise prior to his obtaining permission to deliver lectures in the University as a “Privat-docent.” He forthwith commenced lecturing on mathematics and physics; to these subjects he afterwards added lectures on philosophy, natural theology, physical geography, anthropology, and fortification. He had already so great a reputation, that at his first lecture the room (in his own house) was filled literally to overflowing, the students crowding even on the stairs. His lectures are thus described by the celebrated Herder, who attended them in the years 1762-1764; “I have had the good fortune to know a philosopher who was my teacher; he had the happy sprightliness of a youth, and this I believe he retains even in old age. His open, thoughtful brow was the seat of unruffled calmness and joy; discourse full of thought flowed from his lips; jest and wit and humour were at his command, and his lecture was the most entertaining conversation. With the same genius with which he criticised Leibnitz, Wolf, Crusius, Hume, and expounded the laws of Newton and Kepler, he would also take up the writings of Rousseau, or any recent discovery in nature, give his estimate of them, and come back again to the knowledge of nature and to the moral worth of man. Natural history, natural philosophy, the history of nations and human nature, mathematics, and experience — these were the sources from which he enlivened his lecture and his conversation. Nothing worth knowing was indifferent to him; no party, no sect, no desire of fame or profit had the smallest charm for him compared with the advancement and elucidation of the truth. He encouraged and urged to independent thought, and was far from wishing to dominate. This man, whom I name with the greatest gratitude and reverence, is Immanuel Kant; his image stands pleasantly before me.” His lectures attracted many hearers of mature age, and visitors to Königsberg even prolonged their stay for the purpose of attending them. At the same time he continued to act as tutor to young men specially

entrusted to his care, who lived with him.

He had to wait fifteen years in the position of “Privat-docent” before obtaining a professorship. He had, indeed, been offered a professorship by the Government before this, but it was almost the only chair which he felt he could not worthily fill — the Chair of Poetry. This involved not only the censorship of new poems, but the composition of poems for academic celebrations, and Kant declined the office. In the following year he was appointed sub-librarian at the modest salary of 62 thalers. This was his first official appointment (œt. 42). Four years later he was nominated to the professorship of Logic and Metaphysics , with an income (from all sources) of 400 thalers. This was ultimately increased to 620. This was of course exclusive of fees from students. He inaugurated his professorship by defending his essay, De mundi sensibilis atque intelligibilis forma et principiis. In this he distinguishes the sensible apprehension of phenomena from the Concept of the Understanding, just as in the Critique of Pure Reason. He shows, precisely as in the latter work, that space and time are forms of the intuitions of sense.

As professor, he continued to lecture in the same wide circle of subjects as before. The lectures on physical geography and anthropology were especially popular. He was fond of studying nature, but especially human nature in all its phases, and took great pleasure in reading books of travel, although he never travelled. Having an excellent memory and a lively power of imagination, he could distinctly picture to himself, even in minute detail, the several objects described. On one occasion he described Westminster Bridge, its form, dimensions, &c., with such detail and distinctness, that an Englishman who was present thought he was an architect, and had spent some years in London. At another time he spoke of Italy as if he had known it from long personal acquaintance. So popular were his lectures, that we find Von Zedlitz, the Prussian Minister, writing from Berlin to say that he is reading with pleasure an imperfect manuscript report of the lectures on Physical Geography, and requesting Kant to favour him with a correct copy. These lectures were published in 1802. The lectures on Anthropology had appeared in 1798. Both works are written in an extremely interesting and popular style, and those on Anthropology are full of entertaining remarks and illustrative anecdotes, not without humour. Thus speaking of the emotions that nature employs for the promotion of health, which are chiefly laughing and weeping, he remarks that anger also conduces to health, if one can indulge in a good scolding without fear of opposition; and in fact many a housewife gets no hearty exercise, except in scolding her children and servants, and provided these take it patiently, a pleasant feeling of fatigue spreads itself through the organism. This sort of exercise, however, he adds, is not without danger, as the objects of the scolding may possibly resist. Even when lecturing on Metaphysics, Kant is said to have been lucid and interesting. When the difficulty of his writings was complained of, he used to say that he wrote for thinkers by profession, and with these technical expressions had the advantage of brevity. Besides, said he, it flatters the vanity of the reader to find perplexities and obscurities here and there, which he can solve by his own acuteness. But in his lectures he endeavoured to be clear and intelligible. He sought, as he expressed it, to teach “not philosophy, but to philosophize.” In one of his letters he states that he was unceasingly observant of phenomena and their laws, even in common life, so that, from first to last, his hearers should not have to listen to a dry exposition, but be interested by being led to compare his remarks with their own observations.

It was his custom to keep his eyes fixed on some particular student sitting near him, perhaps in order to judge from the hearer’s countenance whether he was making himself understood. So Arago, in his popular lectures, used to select for the same purpose the most stupid-looking person in the audience, continuing his explanations until the person “fixed” showed signs of intelligence. With Kant, however, the consequences were disastrous if the student happened to have any peculiarity or defect, either in person or dress. One day the student thus selected happened to have lost a button from his coat. Kant’s glance recurred to the vacant spot, and during the whole lecture his thoughts were distracted, and even confused, in a manner inexplicable to those who were not in the secret.

He did not like to see his hearers taking notes; but would say, “Put up your pencils, gentlemen,” and would not begin until they had done so. The reason of this was that he thought such attempts at reporting interfered with their attention to the matter of the lecture, by fixing it on the words. Some of his hearers took full notes, nevertheless.

In 1772 he formed the design of writing a Critical Examination of Pure Reason, Theoretical and Practical, the former part of which he hoped to complete in three months. The months grew to years. Six years later he writes that he expects it to appear “this summer,” and that it would not be a large volume. It did not see the light, however, until 1781, nine years after he had announced that it would be ready in three months. When this master-work was produced, Kant was fifty-seven years of age. He states himself that it was Hume that roused him from his dogmatic slumber, and compelled him to seek a solid barrier against scepticism.

It is stated on Kant’s own authority that he did not commit to writing a single sentence in this work, on which he had not first asked the judgment of his friend Green. A man to whom Kant showed such deference deserves a brief notice. He was an English merchant, and during the American War of Independence happened to be present when Kant, who sympathized with the Americans, denounced the conduct of England in strong terms. Green sprang up in a rage, declared that Kant’s words were a personal insult to him as an Englishman, and demanded satisfaction. Kant replied so calmly and persuasively that Green shook hands with him, and they became fast friends, and continued so until the death of Green in 1784, a loss which Kant deeply felt.

Of the Critique of Pure Reason I need not here speak. Suffice it to say, that as Locke’s attempt to keep the mind from “going beyond its tether” was followed at no long interval by the Idealism of Berkeley, and the annihilating Scepticism of Hume, so Kant’s analogous attempt led in a still shorter space to the most complete idealism and transcendentalism. Indeed his reviewers not unnaturally mistook him for an idealist, and Hamann called him the Prussian Hume. The work excited a lively controversy in the philosophical world, but most of the publications to which it gave rise have been long forgotten. Kant’s fame, however, rose to the highest, and Königsberg became a shrine to which students and tourists made pilgrimages.

The Critique of Pure Reason was to be followed by the Metaphysical Elements of Natural Philosophy and of Moral Philosophy. The former appeared in 1786, under the title Metaphysische Anfangsgründe der Naturwissenschaft. The views respecting motion with which this treatise commences had, however, already been published as a programme of lectures in 1758. Motion is only relative to the surrounding space. While I sit with a ball on the table before me in the cabin of a ship moored in a river, I say that the ball is at rest; I look out and see that the ship has been unmoored, and is drifting westward; the ball then is moving. But I reflect that the earth is rotating with greater velocity eastward; the ball then is moving eastward. Nay; for the earth in its orbit is moving westward with still higher speed. The orbit itself is moving, I cannot tell how rapidly, nor do I know in what direction. In any case then it is the same thing whether I regard a point as moving in its space, or regard the space as moving and the point as at rest. Hence the law of the composition of motions results directly; for if A be a point having a motion of one foot per second westward, and two feet per second southward, I can regard it as having only the southward motion, while the space in which it is, is moving one foot per second eastward. At the end, therefore, of one second, the point will be found two feet to the south; and as its space in moving east has left it one foot behind, it will also be one foot west, relatively to its surrounding space. This is the same as if it had moved in the diagonal of the parallelogram. Kant claimed as an advantage of this proof, that it represented the resultant motion, not as an effect of the two motions, but as actually including them. It is incomparably simpler and more philosophical than the proof given by D’Alembert, and other contemporary mathematicians. When we treat of collision of bodies, this mode of viewing the matter becomes absolutely indispensable. If the body A is approaching the body B (equal to it) with a velocity of

two degrees, we regard A as moving with a speed of one degree, while B and its space move one degree in the opposite direction. The motions being equal and opposite, the result of their contact is mutual rest; but, as the space is moving, this rest is equivalent to a motion of the two bodies in contact, relative to the surrounding space, and in amount one degree. If the bodies are unequal and have unequal velocities, we have only to divide the velocities in the inverse proportion of the masses, and assign to the space the motion which we take from one to add to the other, and the result will again be mutual rest, which is equivalent to a motion of the bodies in contact, with a velocity equal and opposite to what we have assigned to the space. We can in this way banish altogether the notion of vis inertiœ.

Matter could not exist unless there were both a repulsive force and an attractive force. If attraction only existed, matter would be condensed into a point; if repulsion only, it would be dispersed infinitely. The relative incompressibility of matter is nothing but the repulsive force emanating from points, which increases as the distance diminishes (perhaps inversely as the cube), and would therefore require an infinite pressure to overcome it altogether. Physical contact is the immediate action and reaction of incompressibility. The action of matter on matter without contact is what is called actio in distans, and the attraction of gravitation is of this kind. Both attraction and repulsion being elementary forces, are inexplicable, but the force of attraction is not a whit more incomprehensible than the original repulsive force. Incompressibility appears more comprehensible, solely because it is immediately presented to the senses, whereas attraction is only inferred. It seems at first sight a contradiction to say that a body can act where it is not; but in fact we might rather say, that everything in space acts where it is not; for to act where it is, it should occupy the very same space as the thing acted on. To say that there can be no action without physical contact is as much as to say that matter can act only by the force of incompressibility: in other words, that repulsive forces are either the only forces of matter or the conditions of all its action, which is a groundless assertion. The ground of the mistake is a confusion between mathematical contact and physical contact. That bodies attract one another without contact, means that they approach one another according to a certain law, without any force of repulsion being required as a condition; and this is just as conceivable as that they should separate from one another without an attractive force being supposed as a condition.

Kant, however, thought it conceivable that in the case of chemical solution there might be complete interpenetration or “intussusception.” On this view of matter we may, he remarks, regard matter as infinitely divisible.

The Fundamental Principles of the Metaphysic of Morals had appeared the year before the last-mentioned work, and was followed in 1788 by the Critical Examination of Practical Reason. Both these are translated in the present volume. The few remarks I have to offer on them will be found at the end of the Memoir. In 1790 was published the Critical Examination of the Faculty of Judgment.

The essay on the corruption of human nature, which forms the third part of this volume, appeared in 1792 in a Berlin magazine. Four years before this an edict had been issued, limiting the freedom of the Press, and appointing special censors, whose business was to examine as to the orthodoxy, not only of books, but of professors, lecturers, and theological candidates. The magazine in question was printed in Jena; but in order to avoid any appearance of underhand dealing, Kant expressly desired that his essay should be submitted to the Berlin licensing authority, who gave his imprimatur, on the ground that only deep thinkers read Kant’s works. The second part of the work on the Theory of Religion was referred to the theological censor, who refused his imprimatur. Kant accordingly submitted his essay to the censorship of the theological faculty of Königsberg, and this unanimously sanctioned the publication, which reached a second edition in the following year. The Berlin censors were naturally annoyed at this way of escaping their decision, and the severe remarks in the preface did not tend to conciliate them. A few months afterwards Kant received an order from the King (Frederick William II.), forbidding him to teach or write anything further in this manner. Kant did not mention the order even to his intimate friends.

A slip of paper, found after his death, contained this reflection: “To deny one’s inner conviction is mean, but in such a case as this silence is the duty of a subject; and, although a man must say only what is true, it is not always a duty to say all the truth publicly.” He therefore, in his reply to the King, declared that to avoid all suspicion, he, “as his Majesty’s most loyal subject,” solemnly engaged to refrain from writing or lecturing on religion, natural or revealed. The words, “as your Majesty’s most loyal subject,” were inserted with the intention of limiting his engagement to the life of the King, and on the death of Frederick William in 1797, Kant regarded himself as free, and published his Contest of the Faculties (i. e. of the Academical Faculties).

In 1797 Kant ceased to lecture publicly. In the same year he published his Metaphysical Elements of Morals, which treats of the several virtues and vices in detail, and Metaphysical Elements of Law. After the publication of these, he seems to have been regarded as a counsellor to be consulted in all difficulties, and an authority in all questions of conscience. The pains he took to give real assistance in such cases, both by his own reflection, and by inquiring from his colleagues, are attested by his written and often corrected memoranda. As an example may be mentioned the question whether inoculation was morally allowable or not. This question was addressed to him at the same time by a Professor of Medicine in Halle, and by a young nobleman who was going to be married, and whose bride wished to be inoculated. Kant’s reply is not known, although some memoranda for it exist.

After this time he began to feel the burden of age, and his powers, mental and bodily, gradually failed. He was quite aware of his condition, and resigned. “Gentlemen,” said he one day, “I do not fear to die. I assure you, as in the presence of God, that if on this very night, suddenly the summons to death were to reach me, I should bear it with calmness, should raise my hands to heaven, and say, ‘Blessed be God!’ Were it indeed possible that such a whisper as this could reach my ear— ‘Fourscore years thou hast lived, in which time thou hast inflicted much evil upon thy fellow-men,’ the case would be otherwise.” This was spoken, says Wasianski, in a tone of earnest sincerity. Two days after his seventy-ninth birthday he wrote in his memoranda: “According to the Bible our life lasts seventy years, and if very long, fourscore years, and though it was pleasant, it has been labour and sorrow.” Up to this time he was able to read the smallest print without spectacles, although he had lost the sight of one eye nearly twenty years before. But soon after he had written this memorandum his sight also failed, and he died in February, 1804, in his eightieth year. His body was so dried up that the physicians said they had hardly ever seen so wasted a body. Indeed he had himself said jestingly some years before, that he thought he had reached the minimum of muscular substance.

Kant was of weak frame, and still weaker muscular power; he was barely five feet in height. His chest was flat, almost concave, the right shoulder slightly crooked, his complexion fresh, his forehead high, square, and broad, while his piercing blue eyes made so lively an impression that it was long remembered by some of his pupils. Even after he had lost the sight of one eye, the defect was not visible to a stranger. In consequence of his contracted chest he suffered from a feeling of oppression, which early in life caused a tendency to hypochondria, to such an extent as even to make him feel weary of life. This, however, he overcame by force of thought. When engaged on the Kritik, in 1771, he speaks of his health being seriously impaired, and some years later he says that it is unceasingly broken; yet by dint of careful attention and great regularity he was able, without medical aid, to maintain such good health on the whole, that at a later period he used to say to himself on going to bed, “Is it possible to conceive any human being enjoying better health than I do?” His maxim for preserving health was, sustine et abstine. His practice illustrated this. The two indulgences of which he was found were tobacco and coffee. But of the former he limited himself to a single pipe in the morning, whilst he altogether abstained from the latter until far advanced in life, thinking it injurious to health. At the age of seventy he wrote an essay, On the Power of the Mind to Master the Feeling of Illness by Force of Resolution. The essay was originally addressed to Hufeland, the celebrated author of the treatise on the Art of Prolonging Life, and the principles contained

in it are exemplified from Kant's own experience. He attached great importance to the habit of breathing through the nostrils instead of through the mouth, and asserted that he had by this means overcome a tendency to cough and cold in the head. There is more truth in this than is perhaps generally thought. Kant, however, is said to have regarded it as of so much importance that he did not like to have a companion in his daily walk, lest he should have to open his mouth. The true reason of this preference (in later life only) for solitary walks was, beyond doubt, that which is mentioned in this essay, that it is undesirable to exercise the limbs and the brain (or the brain and the stomach) at the same time.

His punctilious attention to health is amusingly illustrated by the artifice he used for suspending his stockings. Thinking that garters injuriously impeded the circulation, he had a couple of bands attached to each stocking, and passing through a hole in the pocket of his breeches. Inside the pocket they were connected with a spring enclosed in a box, and this spring regulated the tension. That he might not be without some exercise in his study, he habitually left his handkerchief at the other side of the room, so that now and then he should have to get up and walk to it. On the same principle his hours of sleep, &c., were adhered to with the utmost regularity. He went to bed punctually at ten, and rose punctually at five. His servant had orders not to let him sleep longer on any account; and on being asked once by Kant, in presence of guests, testified that for thirty years his master had never once indulged beyond the appointed hour. On rising he took a cup (indefinite cups) of tea, but no solid food. The early hours were devoted to preparation for his lectures, which in his earlier years occupied four or five hours, but subsequently only two. At seven o'clock precisely, or eight, as the case might be, he entered his lecture-room. Lectures ended, at nine or ten, he returned to his study, and applied himself to preparing his books for the press. He worked thus without interruption until one o'clock, the hour for dinner. This was his only meal, and he liked to have pleasant company, and to prolong the meal (ducere cœnam) with lively, sometimes brilliant conversation, for three or four hours. Kant had no Boswell, and nothing is preserved of these conversations, in which he is said to have often thrown out profound and suggestive remarks with extraordinary richness. Until his sixty-third year, not having a house of his own, he dined at a public restaurant, which, however, he occasionally found it necessary to change, in consequence of persons coming for the purpose of discussing philosophical questions with him. He considered that meal-time ought to be a time of perfect mental relaxation, and was not disposed to turn the dinner table into a lecture pulpit. His afternoons were, however, often spent at the houses of his friends, where he enjoyed meeting foreign merchants, sea captains, and travelled scholars, from whom he might learn much about foreign nations and countries. His instructive and entertaining conversation, flavoured with mild satiric humour, made him a welcome guest, and even with the children he was a favourite. After he became famous he declined invitations if he thought he was to be made a lion of.

When he had a house of his own, he had every day a few friends to dine with him. He liked to have a mixed company — merchants, professional men, and especially a few younger men. After dinner followed regularly his daily walk for an hour or more, along what was from him named "The Philosopher's Walk," until he was driven from it by the number of beggars whom his habit of almsgiving had attracted there. Even the severest weather did not interfere with this daily walk, in which in his earlier years he usually had companions; after sixty years of age he walked alone, for the reason already mentioned.

He had on one occasion a narrow escape from assassination. A lunatic, who had made up his mind to kill some one, waylaid Kant for the purpose, and followed him for three miles, but on reflection, thinking it a pity to kill an old professor who must have so many sins on his head, the unfortunate madman killed a child instead.

The evening was devoted to lighter reading and meditation. He would read over and over again such books as Don Quixote, Hudibras, Swift's Tale of a Tub, Juvenal, and Horace. In his later years he was

especially fond of reading books on physical science, and books of travel. Purely speculative works he cared little for, but liked to read Locke, Hutcheson, Pope, Hume, Montaigne, Rousseau.

How unwilling Kant was to depart from his regular routine appears from a characteristic anecdote. One day as he was returning from his walk, a nobleman who was driving came up with him, and politely invited him to take a drive with him as the evening was fine. Kant yielded to the first impulse of politeness, and consented. The Count, after driving over some of his property near the city, proposed to visit a friend some miles from the town, and Kant of course could not refuse. At last Kant was set down at his own door near ten o'clock, full of vexation at this violation of his regular habits. He thereupon made it a fixed rule never to get into a carriage that he had not hired himself, so that he could manage it as he pleased. When once he had made such a resolution, he was satisfied that he could not be taken by surprise, and nothing would make him depart from it.

So his life passed, says one of his biographers, like the most regular of regular verbs.

Punctual, however, as he was, his punctuality did not come up to the standard of his friend Green. One evening Kant had promised that he would accompany Green in a drive the next morning at eight. At a quarter before eight Green was walking up and down his room, watch in hand; at fifty minutes past seven he put on his coat, at fifty-five he took his stick, and at the first stroke of eight entered his carriage and drove off; and although he met Kant, who was a couple of minutes late, he would not stop for him, because this was against the agreement and against his rule. This gentleman, for whom Kant had a great esteem, served as the model for the description of the English character in the Anthropologie. Kant's savings were invested with this Mr. Green, and allowed to accumulate at 6 per cent. interest.

Kant is said to have been on two occasions on the point of marrying, or at least of making a proposal, but he took so long to calculate his incomings and outgoings with exactness, in order to see whether he could afford it, that the lady in the first case was married, and in the second had left Königsberg before he had made up his mind. When he was seventy years of age, an officious friend actually printed a dialogue on marriage, with a view to persuade the philosopher to marry. Kant reimbursed him for the expense of printing, but at that age, not unnaturally, thought the advice rather too late. How sensible he was to the charms of female society appears from the Essay On the Sublime and Beautiful, ff, where he discusses the difference between the sublime and beautiful in the natural relations of the sexes.

Kant's personal character is described, by those who knew him best, as truly childlike. He was kind-hearted and actively benevolent; of rare candour in estimating the abilities of other men, with high respect for every thing that was noble or deserving; always disposed to recognise the good rather than the bad in men's characters. He was always ready with counsel and assistance for the young. His modesty towards scholars of great fame almost degenerated into shyness.

As may be supposed from the regularity of his habits, he never allowed himself to run into debt. When a student at the University, with very narrow means, his only coat had once become so shabby, that some friends subscribed a sum of money, which was offered to him in the most delicate manner possible for the purchase of a new one. Kant, however, preferred to retain his shabby coat rather than incur debt or lose his independence. In his old age he boasted that he had never owed any man a penny, so that when a knock came to his door he was never afraid to say, "Come in." When his means had increased (chiefly through the profits on his writings), he assisted such of his relatives as were in want in the most liberal manner. On the death of his brother, he assigned to the widow a pension of 200 thalers. Many poor persons also received a weekly allowance from him, and Wasianski, who in later years managed Kant's affairs for him, states that his charitable expenses amounted to about 400 thalers annually.

His kindness was shown in his last will, in which he left an annual sum to a servant who had treated him shamefully, but who had served him (not indeed faithfully) for thirty years. Kant had dismissed him two years before, with a pension, on condition of his never setting foot inside the house again. After some other small legacies, the residue was left to the children of his brother and sisters. The whole amount was

under four thousand pounds.

The principal questions on the Theory of Morals may, with sufficient accuracy for the present purpose, be said to be these: First, the purely speculative question, What is the essential nature of moral rightness? Secondly, the practical questions, What is to man the criterion of his duty? and what is the foundation of obligation? The additional question, By what faculty do we discern right and wrong? is properly a psychological one.

If we had only to do with a being in whom Reason was irresistibly dominant, we should not need to raise any further questions; but having to treat of a being with affections and appetites distinct from Reason, and not of themselves dependent on it, we must answer the further question: How is Reason to maintain its authority in spite of these resisting forces? i.e. What is the Motive? Lastly, since we have to deal with a corrupt creature, a new question arises: How is such a creature to be reformed?

Now how does Kant deal with these questions? His categorical imperative — Act as if the maxim of thy action were to become by thy will a universal law of Nature — gives perhaps not the essence of virtue, but a property of it, which may indeed serve as a subjective criterion. That this criterion is formal only, and therefore empty, is hardly of itself a valid objection. The test of valid reasoning, the syllogism, is equally empty. The categorical imperative is, however, rather negative than positive, and it is far from being sufficiently clear as a test of the morality of actions. This appears even in the examples which Kant himself gives. For example, treating of Compassion, he supposes that if a man refuses aid to the distressed, it is out of selfishness, and then shows that if selfishness was the ruling principle, it would contradict itself. But why assume a motive for refusing help? What we want is a motive for giving help. There is nothing contradictory in willing that none should help others. So in the case of gratitude, there is no contradiction in willing that those who receive benefits should entertain no peculiar feeling toward their benefactor. It is true we should look for it ourselves, but this implies that such a feeling is natural to man, and that we approve it. Again, put the case of self-sacrifice of a man giving his life to save his friend; it would seem as easy on Kant's principle to prove this a vice as a virtue.

Kant has in fact treated human nature too abstractly. In eliminating the "matter" he has eliminated that on which frequently the whole question turns. Indeed, in some of the instances he himself chooses, he elicits a contradiction only by bringing in a teleological consideration; e. g. as to suicide, he brings in the end for which self-love was given. The will to destroy one's own life is not contradictory of the will to sustain it, unless the circumstances be supposed the same.

These remarks, however, only show that the formula is not a mechanical rule of conduct; they do not disprove its scientific value. In fact precisely similar objections have been alleged against the logical analysis of speculative reasoning, that it leaves untouched what in practice is the most difficult part of the problem. If all poisonous substances could be brought under a single chemical formula, the generalization would be of value both theoretically and practically, although its application to particular cases might be difficult and uncertain. Kant never attempted "to deduce a complete code of duty from a purely formal principle;" he expressly states that this is only a negative principle, and that the matter of practical maxims is to be derived from a different source (cf. the present work,). Nor is it to be supposed that Kant was not fully aware of the difficulty of applying his formula to the complex circumstances of actual life. In his Metaphysic of Morals he states a great number of questions of casuistry, which he leaves undecided, as puzzles or exercises to the reader. And indeed similar difficulties might be raised, from a speculative point of view, respecting the rule, "Whatsoever ye would that men should do unto you, even so do unto them" — a rule of which we may nevertheless say that in practice it probably never misled anyone, for everyone sees that the essence of it is the elimination of self-partiality and inward dishonesty. The scientific basis of it is stated by Clarke in language nearly equivalent to Kant's. The reason of it, says the former, is the same as that which forces us in speculation to affirm that if one line or number be equal to

another, that other is equal to it. “Whatever relation or proportion one man in any case bears to another, the same that other, when put in like circumstances, bears to him. Whatever I judge reasonable or unreasonable for another to do for me, that, by the same judgment, I declare reasonable or unreasonable that I in the like case should do for him.” Kant’s rule is a generalization of this, so as to include duties to ourselves as well as to others. As such it has a real scientific value. Practically, its value consists, like that of the golden rule, in the elimination of inward dishonesty.

Mr. Mill’s criticism on Kant’s formula is, that when we speak of a maxim being “fit” to be a universal law, it is obvious that some test of fitness is required, and that Kant, in fact, tests the maxims by their consequences; as if the whole gist of Kant’s argument were not that the only test of this fitness is logical possibility; or as if this were not the one thing expressed in his formula. As to testing maxims by consequences, he does so in the same sense in which Euclid in indirect demonstrations tests a hypothesis by its consequences, and in no other, i. e. by the logical consequences, not the practical. Take the case of a promise. In Kant’s view, the argument against the law permitting unfaithfulness is not that it would be attended with consequences injurious to society, but that it would annihilate all promises (the present included), and therefore annihilate itself. Of inconvenience to society not a word is said or implied. Hence Kant’s objection rests wholly on the absolute universality of the supposed law, whereas the Utilitarian objection from practical consequences would be applicable in a proportionate degree to a law not supposed universal. Hence, also, Kant’s test would hold even if the present promise were never to be followed by another; nay, it would be of equal force even though it should be proved that it would be better for society that there should be no verbal promises.

It has been said that in applying Kant’s formula we must qualify it by introducing the consideration of the probability that our example or rule will be generally followed; and the instance of celibacy has been suggested, which, it is said, would be necessarily condemned as a crime if tested by Kant’s rule, pure and simple; for if all men practised celibacy there would be an end of the race, and, on the “greatest happiness” principle, to effect this would be the worst of crimes. Now, if a qualification were required, or admissible, Kant’s formula would be deprived of all scientific significance, and its application made dependent on private and uncertain opinion. As to the example of celibacy, Kant has himself indicated how he would dispose of it by the way in which he treats suicide. He does not show its unlawfulness by alleging that if everyone committed suicide the human race would come to an end, but by exposing the inconsistency in the principle of action which would lead to suicide. In every case it is the mental principle which is to be tested, not the mere external action. Bearing this in mind, we shall find no difficulty in the case of celibacy. It may proceed from motives which there would be no absurdity in supposing universal, because the circumstances which give them this particular direction could only be exceptional. But, suppose celibacy recommended on grounds which are in their own nature universal, e.g. as a condition of moral perfection, then Kant’s formula would properly apply, for moral perfection is an end to be aimed at by all. One might just as well say that Kant’s rule would make all killing criminal, whereas Kant would obviously require us to take into account the motive, self-defence, or other. On the other hand, apply Mr. Sidgwick’s qualification, and what would result? Why, that we might innocently kill, provided the action were not likely to be generally imitated! If occasional celibacy is justified only because there exists a natural passion which is sure to be usually powerful enough to prevent the example being followed, then we may equally justify occasional violence or murder on the ground that fear or benevolence will naturally prevent the action from being extensively imitated.

Kant’s view of the source of obligation in the Autonomy of the will appears to require qualification if we would avoid a contradiction. A law must be above the nature to which it is a law, and which is subject to it. A being which gave itself the moral law, and whose freedom, therefore, is Autonomy, would not be conscious of obligation or duty, since the moral law would coincide with its will. Kant draws the apparently self-contradictory conclusion that we, though willing the law, yet resist it. Even if this be

granted, it would follow, not that we should feel obliged, but that either no action at all would follow, or the more powerful side would prevail. That we condemn ourselves when we have violated the law is an important fact, on which Kant very strongly insists, but which his theory fails to explain. Is it not a far simpler and truer explanation to say that this self-condemnation, this humiliation in the presence of an unbending judge, is a proof that we have not given ourselves the law; that we are subjects of a higher power? There is, indeed, a sense in which Autonomy may be truly vindicated to man. The moral law is not a mere precept imposed upon us from without, nor is it forced upon us by our sensitive nature; it is a law prescribed to us, or, more correctly speaking, revealed to us, by our own Reason. But Reason is not our own in the sense in which our appetites or sensations are our own; it is not under our own control; it bears the stamp of universality and authority. Thus it declares itself impersonal: in other words, what Reason reveals we regard as valid for all beings possessed of intelligence, equal or superior to our own. Hence, many ethical writers, both ancient and modern, have insisted as strongly as Kant that the moral law is common to man with all rational creatures. And when Kant speaks of Autonomy, this is all that his argument requires. Accordingly, he sometimes speaks of rational creatures as the subjects of Reason, which is the supreme legislator.

As regards the sanctions of the moral law, which practically to imperfect creatures furnish the motive, these consist, according to Kant, in the happiness and misery which are the natural consequences of virtue and vice, and he thinks that when they are regarded as natural consequences, the dread of the misery will have more effect than if it were thought to be an arbitrary punishment. “The view into an illimitable future of happiness or misery is sufficient to serve as a motive to the virtuous to continue steadfast in well-doing, and to arouse in the vicious the condemning voice of conscience to check his evil course.” In this Kant agrees with Cumberland. Kant’s argument for immortality is in substance that it is necessary for a continued indefinite approximation to the ideal of the moral law. But since, as he maintains, we have ourselves to blame for not having attained this ideal, what right have we to expect such an opportunity? Having missed the true moment in his argument, which led to the existence of a Supreme Lawgiver, he arrived at this fundamental truth by a roundabout way, through the conception of the summum bonum. But this introduces a quite heterogeneous notion, viz., that of happiness. Happiness belongs to a man as a sensible creature, and all that he has a right to say is, that if Practical Reason had happiness to confer, it would confer it on virtue. How much more direct and convincing is the argument suggested by Butler’s brief words: “Consciousness of a rule or guide of action, in creatures who are capable of considering it as given them by their Maker, not only raises immediately a sense of duty, but also a sense of security in following it, and of danger in deviating from it. A direction of the Author of Nature, given to creatures capable of looking upon it as such, is plainly a command from him; and a command from him necessarily includes in it at least an implicit promise in case of obedience, or threatening in case of disobedience;” and since “his method of government is to reward and punish actions, his having annexed to some actions an inseparable sense of good desert, and to others of ill, this surely amounts to declaring upon whom his punishments shall be inflicted, and his rewards bestowed.”

Kant sees no mode of reconciling morality with the law of Causality, except by his distinction of noumena and phenomena. When the law of Causality is rightly understood there is no inconsistency. For the cause which it demands is an efficient cause, and the idea of an efficient cause involves the idea of mind. It is involved in the idea of matter, that it cannot originate (this Kant himself adopts as a first principle in his Metaphysics of Natural Philosophy); whereas it is the very idea of mind with will that it does originate. When we seek the cause of motion we are satisfied when we trace it to a will. True, we may then ask for the motive; but the nature of motive and that of efficient cause are heterogeneous.

Kant’s view of Freedom, however, does not involve anything of caprice or indeterminateness. Freedom, according to him, is not independence on law which we can consciously follow, but independence on the physical relation of causality, the not being determined by physical or sensible

causes. On this view the contradiction, which to Hobbes and others seemed to exist between the conception of freedom and that of the divine foreknowledge, would have little weight. A short consideration suffices to show that there is a fallacy involved in Hobbes' argument. Suppose a being perfectly wise and good, and at the same time free, then we should only require perfect knowledge of the circumstances of a particular case in order to predict his conduct, and that infallibly. If he were not free we could not do so. And the more nearly a being approaches such perfection, the more certainly could we predict his actions. If his goodness were perfect, but his knowledge imperfect, and if we knew how far his knowledge extended, we could still predict. It would be absurd to say that this would be a contradiction.

It is worthy of notice that Cudworth's conception of liberty corresponds closely with that of Kant. "The true liberty of a man, as it speaks pure perfection, is when by the right use of the faculty of free will, together with the assistance of Divine grace, he is habitually fixed in moral good;" "but when by the abuse of that faculty of free will men come to be habitually fixed in evil and sinful inclinations, then are they, as Boëthius well expresses it, propriæ libertati captivi — made captive and brought into bondage by their own free will." It may have been suggested to both of them by St. Paul, who represents sin as slavery, righteousness as freedom.

Kant is by no means happy in his treatment of the corruption of human nature. In order to escape the difficulty of reconciling responsibility with the innate corruption on which he so strongly dwells, he has recourse (as in the case of freedom) to the distinction between man noumenon and man phenomenon. The innate evil of human nature rests on an inversion of the natural order, the legislative will being subordinated to the sensibility. But how can this be reconciled with the self-given, and therefore self-willed law which makes good a duty? It is inconceivable that the pure supersensible essence could invest the sensational nature (the objects of which have for it no reality) with a preponderance over itself. A further contradiction appears to be involved in the relation of evil to freedom; for he states that freedom is as inseparably connected with the law of Practical Reason as the physical cause with the law of nature, so that freedom without the law of Practical Reason is a causality without law, which would be absurd; and yet, on the other hand, he regards freedom as an ability from which proceeds contradiction to the moral law.

A still more insuperable difficulty meets him when he attempts to answer the question, Is reformation possible? He replies: Yes; for it is a duty. You ought, therefore you can. How the return from evil to good is possible cannot indeed be comprehended, but the original fall from good to evil is equally incomprehensible, and yet is a fact. Now, freedom which belongs to the supersensible sphere (the sphere of noumena) cannot be determined by anything in the phenomenal world; consequently, if freedom has, apart from time, given the man a determination, then no event in time can produce a change. Nay, it would be a contradiction to suppose the removal of an act in the noumenal (supersensible) world by a succeeding act. Contrary or contradictory attributes cannot be attributed to the same subject except under the condition of time. If, therefore, the intelligent being is timeless, we cannot possibly attribute to it two decisions, of which one annuls the other. He is not even consistent, for he argues that it is not possible to destroy this radical corruption by human power, but only to overcome it. Why does he not conclude here, I ought to destroy it, therefore I can? Lastly, even if this "I can" were granted, it would be only a theoretical, not a practical possibility. If the man endowed with the faculties in their true subordination, with reason supreme, has yet not had strength or purity of will to remain so, what practical possibility is there that having this subordination perverted he can restore it? There is obviously an external aid necessary here. Not that anything wholly external could effect the change, which can only be produced by something operating on man's own moral nature; but there must be a moral leverage, an external fulcrum, a πονˆ στωˆ. Such aid, such leverage are provided by the Christian religion. It has introduced a new motive, perfectly original and unique, the overpowering force of which has been proved in many crucial instances; and no more complete theoretical proof of the absolute necessity of some such revelation could

be given than is supplied by the attempts of the profoundest philosopher of modern times to dispense with it.

Kant's own position with respect to Christianity is that of a Rationalist. He accepts the whole moral and spiritual teaching of the New Testament, because he finds it in accordance with reason, and this being so, he judges that it is a matter of no practical consequence whether its introduction was supernatural or not. He did not deny that Divine aid was required to make reformation possible, but he thought that no intellectual belief or knowledge of ours could be a condition of this aid, and, therefore, that all historical questions were adiaphora. But this is to take for granted, that if God gives such aid at all, it must be in a particular way. Butler's argument from analogy is conclusive against such assumptions. And, indeed, it is certain that the moral and the positive in Christianity cannot be thus kept apart. It is to the facts that the doctrines owe their life and motive power. It is these that supply the leverage, without which the most perfect moral teaching will fall dead on the ears at least of the masses of mankind.

Besides, as Butler shows, revealed facts may be the foundation of moral duties to those to whom the revelation has come.

It is remarkable that, although Kant was fond of reading English authors, and was influenced in his moral discussions by English moralists, Butler (who had written half a century before the publication of the Kritik) was wholly unknown to him. What is more remarkable is, that Butler has remained equally unknown to German writers up to the present day. Whilst German historians of moral philosophy are careful to note the merits of even Wollaston and Ferguson, they pass over Butler's name in silence. The reason of this silence, doubtless, is to be found in the title of his work. But although foreign philosophers could not be expected to look for a treatise on moral philosophy in a book called Fifteen Sermons, how is it that attention was not called to him by the notices in Mackintosh (who is largely cited, e. g. by I. H. Fichte), which showed the high estimation in which the work was held in England? It is certainly a curious and suggestive fact that writers, professedly and learnedly treating of English moral philosophers, should be wholly ignorant of the writer who holds by far the highest rank among them, whose work is the classical work, the text-book of the Universities, and with a wider circulation, probably, than the works of all the other moralists put together.

The most striking peculiarity of Kant's moral theory is its connexion with his metaphysical system. It is in the moral law that he finds the means of establishing the existence, and to some extent the nature, of the supersensible reality. He has been charged with inconsistency in this. What he pulls down in the Critique of the Speculative Reason, he restores illogically, it is said, in that of the Practical Reason. The fact appears to be, that readers of the former work are apt to fall into two mistakes. First, they suppose that they have before them a complete system instead of a portion only; and secondly, they mistake the attitude of suspense with regard to the supersensible reality for a dogmatic negation of all knowledge thereof. When they come to the Practical works, they find the impression thus formed respecting Kant's attitude towards the supersensible contradicted. But the inconsistency is not between the two parts of Kant's system, but between his system as a whole and the impression derived from a partial view of it. That he limits his affirmation of the supersensible to its practical aspect is quite in accordance with the spirit of his philosophy. Nor is this limitation so very unlike that of the common-sense philosopher, Locke, who, in speaking of the limits of our faculties, says that men have reason to be well satisfied, since God hath given them "whatever is necessary for the conveniences of life, and the information of virtue;" adding, "How short soever their knowledge may come of an universal or perfect comprehension of whatsoever is, it yet secures their great concernments, that they have light enough to lead them to the knowledge of their Maker, and the sight of their own duties." (Essay, bk. 1. ch. i. § 5.)

IMMANUEL KANT by Robert Adamson

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KANT, IMMANUEL (1724-1804), German philosopher, was born at Königsberg on the 22nd of April 1724. His grandfather was an emigrant from Scotland, and the name Cant is not uncommon in the north of Scotland, whence the family is said to have come. His father was a saddler in Königsberg, then a stronghold of Pietism, to the strong influence of which Kant was subjected in his early years. In his tenth year he was entered at the Collegium Fredericianum with the definite view of studying theology. His inclination at this time was towards classics, and he was recognized, with his school-fellow, David Ruhnken, as among the most promising classical scholars of the college. His taste for the greater Latin authors, particularly Lucretius, was never lost, and he acquired at school an unusual facility in Latin composition. With Greek authors he does not appear to have been equally familiar. During his university course, which began in 1740, Kant was principally attracted towards mathematics and physics. The lectures on classics do not seem to have satisfied him, and, though he attended courses on theology, and even preached on one or two occasions, he appears finally to have given up the intention of entering the Church. The last years of his university studies were much disturbed by poverty. His father died in 1746, and for nine years he was compelled to earn his own living as a private tutor. Although he disliked the life and was not specially qualified for it — as he used to say regarding the excellent precepts of his *Pädagogik*, he was never able to apply them — yet he added to his other accomplishments a grace and polish which he displayed ever afterwards to a degree somewhat unusual in a philosopher by profession.

In 1755 Kant became tutor in the family of Count Kayserling. By the kindness of a friend named Richter, he was enabled to resume his university career, and in the autumn of that year he graduated as doctor and qualified as privatdocent. For fifteen years he continued to labour in this position, his fame as writer and lecturer steadily increasing. Though twice he failed to obtain a professorship at Königsberg, he steadily refused appointments elsewhere. The only academic preferment received by him during the lengthy probation was the post of under-librarian (1766). His lectures, at first mainly upon physics, gradually expanded until nearly all descriptions of philosophy were included under them.

In 1770 he obtained the chair of logic and metaphysics at Konigsberg, and delivered as his inaugural address the dissertation *De mundi sensibilis et intelligibilis forma et principiis*. Eleven years later appeared the *Kritik of Pure Reason*, the work towards which he had been steadily advancing, and of which all his later writings are developments. In 1783 he published the *Prolegomena*, intended as an introduction to the *Kritik*, which had been found to stand in need of some explanatory comment. A second edition of the *Kritik*, with some modifications, appeared in 1787, after which it remained unaltered.

In spite of its frequent obscurity, its novel terminology, and its declared opposition to prevailing systems, the Kantian philosophy made rapid progress in Germany. In the course of ten or twelve years from the publication of the *Kritik of Pure Reason*, it was expounded in all the leading universities, and it even penetrated into the schools of the Church of Rome. Such men as J. Schulz in Königsberg, J. G. Kiesewetter in Berlin, Jakob in Halle, Born and A. L. Heydenreich in Leipzig, K. L. Reinhold and E. Schmid in Jena, Buhle in Gottingen, Tennemann in Marburg, and Snell in Giessen, with many others, made it the basis of their philosophical teaching, while theologians like Tieftrunk, Stäudlin, and Ammon eagerly applied it to Christian doctrine and morality. Young men flocked to Königsberg as to a shrine of philosophy. The Prussian Government even undertook the expense of their support. Kant was hailed by some as a second Messiah. He was consulted as an oracle on all questions of casuistry — as, for

example, on the lawfulness of inoculation for the small-pox. This universal homage for a long time left Kant unaffected; it was only in his later years that he spoke of his system as the limit of philosophy, and resented all further progress. He still pursued his quiet round of lecturing and authorship, and contributed from time to time papers to the literary journals. Of these, among the most remarkable was his review of Herder's *Philosophy of History*, which greatly exasperated that author, and led to a violent act of retaliation some years after in his *Metakritik of Pure Reason*. Schiller at this period in vain sought to engage Kant upon his *Horen*. He remained true to the *Berlin Journal*, in which most of his criticisms appeared.

In 1792 Kant, in the full height of his reputation, was involved in a collision with the Government on the question of his religious doctrines. Naturally his philosophy had excited the declared opposition of all adherents of historical Christianity, since its plain tendency was towards a moral rationalism, and it could not be reconciled to the literal doctrines of the Lutheran Church. It would have been much better to permit his exposition of the philosophy of religion to enjoy the same literary rights as his earlier works, since Kant could not be interdicted without first silencing a multitude of theologians who were at least equally separated from positive Christianity. The Government, however, judged otherwise; and after the first part of his book, *On Religion within the Limits of Reason alone*, had appeared in the *Berlin Journal*, the publication of the remainder, which treats in a more rationalizing style of the peculiarities of Christianity, was forbidden. Kant, thus shut out from Berlin, availed himself of his local privilege, and, with the sanction of the theological faculty of his own university, published the full work in Königsberg. The Government, probably influenced as much by hatred and fear of the French Revolution, of which Kant was supposed to be a partisan, as by love of orthodoxy, resented the act; and a secret cabinet order was received by him intimating the displeasure of the king, Frederick William II., and exacting a pledge not to lecture or write at all on religious subjects in future. With this mandate Kant, after a struggle, complied, and kept his engagement till 1797, when the death of the king, according to his construction of his promise, set him free. This incident, however, produced a very unfavourable effect on his spirits. He withdrew in 1794 from society; next year he gave up all his classes but one public lecture on logic or metaphysics; and in 1797, before the removal of the interdict on his theological teaching, he ceased altogether his public labours, after an academic course of forty-two years. He previously, in the same year, finished his treatises on the *Metaphysics of Ethics*, which, with his *Anthropology*, completed in 1798, were the last considerable works that he revised with his own hand. His *Lectures on Logic*, on *Physical Geography*, on *Paedagogics*, were edited during his lifetime by his friends and pupils. By way of asserting his right to resume theological disquisition, he also issued in 1798 his *Strife of the Faculties*, in which all the strongest points of his work on religion were urged afresh, and the correspondence that had passed between himself and his censors was given to the world.

From the date of his retirement from the chair Kant declined in strength, and gave tokens of intellectual decay. His memory began to fail, and a large work at which he wrought night and day, on the connexion between physics and metaphysics, was found to be only a repetition of his already published doctrines. After 1802, finding himself attacked with a weakness in the limbs attended with frequent fits of falling, he mitigated the Spartan severity of his life, and consented to receive medical advice. A constant restlessness oppressed him; his sight gave way; his conversation became an extraordinary mixture of metaphors; and it was only at intervals that gleams of his former power broke out, especially when some old chord of association was struck in natural science or physical geography. A few days before his decease, with a great effort he thanked his medical attendant for his visits in the words, "I have not yet lost my feeling for humanity." On the 12th of February 1804 he died, having almost completed his eightieth year. His stature was small, and his appearance feeble. He was little more than five feet high; his breast was almost concave, and, like Schleiermacher, he was deformed in the right shoulder. His senses were quick and delicate; and, though of weak constitution, he escaped by strict regimen all serious illness.

His life was arranged with mechanical regularity; and, as he never married, he kept the habits of his studious youth to old age. His man-servant, who awoke him summer and winter at five o'clock, testified that he had not once failed in thirty years to respond to the call. After rising he studied for two hours, then lectured other two, and spent the rest of the forenoon, till one, at his desk. He then dined at a restaurant, which he frequently changed, to avoid the influx of strangers, who crowded to see and hear him. This was his only regular meal; and he often prolonged the conversation till late in the afternoon. He then walked out for at least an hour in all weathers, and spent the evening in lighter reading, except an hour or two devoted to the preparation of his next day's lectures, after which he retired between nine and ten to rest. In his earlier years he often spent his evenings in general society, where his knowledge and conversational talents made him the life of every party. He was especially intimate with the families of two English merchants of the name of Green and Motherby, where he found many opportunities of meeting ship-captains, and other travelled persons, and thus gratifying his passion for physical geography. This social circle included also the celebrated J. G. Hamann, the friend of Herder and Jacobi, who was thus a mediator between Kant and these philosophical adversaries.

Kant's reading was of the most extensive and miscellaneous kind. He cared comparatively little for the history of speculation, but his acquaintance with books of science, general history, travels and belles lettres was boundless. He was well versed in English literature, chiefly of the age of Queen Anne, and had read English philosophy from Locke to Hume, and the Scottish school. He was at home in Voltaire and Rousseau, but had little or no acquaintance with the French sensational philosophy. He was familiar with all German literature up to the date of his *Kritik*, but ceased to follow it in its great development by Goethe and Schiller. It was his habit to obtain books in sheets from his publishers Kanter and Nicolovius; and he read over for many years all the new works in their catalogue, in order to keep abreast of universal knowledge. He was fond of newspapers and works on politics; and this was the only kind of reading that could interrupt his studies in philosophy.

As a lecturer, Kant avoided altogether that rigid style in which his books were written. He sat behind a low desk, with a few jottings on slips of paper, or textbooks marked on the margin, before him, and delivered an extemporaneous address, opening up the subject by partial glimpses, and with many anecdotes or familiar illustrations, till a complete idea of it was presented. His voice was extremely weak, but sometimes rose into eloquence, and always commanded perfect silence. Though kind to his students, he refused to remit their fees, as this, he thought, would discourage independence. It was another principle that his chief exertions should be bestowed on the intermediate class of talent, as the geniuses would help themselves, and the dunces were beyond remedy.

Simple, honourable, truthful, kind-hearted and high-minded as Kant was in all moral respects, he was somewhat deficient in theregion of sentiment. He had little enthusiasm for the beauties of nature, and indeed never sailed out into the Baltic, or travelled more than 40 miles from Königsberg. Music he disregarded, and all poetry that was more than sententious prose. His ethics have been reproached with some justice as setting up too low an ideal for the female sex. Though faithful in a high degree to the duties of friendship, he could not bear to visit his friends in sickness, and after their death he repressed all allusion to their memory. His engrossing intellectual labours no doubt tended somewhat to harden his character; and in his zeal for rectitude of purpose he forgot the part which affection and sentiment must ever play in the human constitution.

On the 12th of February 1904, the hundredth anniversary of Kant's death, a Kantian society (*Kantgesellschaft*) was formed at Halle under the leadership of Professor H. Vaihinger to promote Kantian studies. In 1909 it had an annual membership of 191; it supports the periodical *Kantstudien* (founded 1896; see Bibliography, *ad init.*).

The Writings of Kant

No other thinker of modern times has been throughout his work so penetrated with the fundamental conceptions of physical science; no other has been able to hold with such firmness the balance between empirical and speculative ideas. Beyond all question much of the influence which the critical philosophy has exercised and continues to exercise must be ascribed to this characteristic feature in the training of its great author.

The early writings of Kant are almost without exception on questions of physical science. It was only by degrees that philosophical problems began to engage his attention, and that the main portion of his literary activity was turned towards them. The following are the most important of the works which bear directly on physical science.

1. *Gedanken von der wahren Schätzung der lebendigen Kräfte* (1747); an essay dealing with the famous dispute between the Cartesians and Leibnitzians regarding the expression for the *amount of a force*. According to the Cartesians, this quantity was directly proportional to velocity; according to their opponents, it varied with the square of the velocity. The dispute has now lost its interest, for physicists have learned to distinguish accurately the two quantities which are vaguely included under the expression amount of force, and consequently have been able to show in what each party was correct and in what it was in error. Kant's essay, with some fallacious explanations and divisions, criticizes acutely the arguments of the Leibnitzians, and concludes with an attempt to show that both modes of expression are correct when correctly limited and interpreted.

2. *Whether the Earth in its Revolution has experienced some Change since the Earliest Times* (1754; ed. and trans., W. Hastie, 1900, *Kant's Cosmogony*; cf. Lord Kelvin in *The Age of the Earth*, 1897,). In this brief essay Kant throws out a notion which has since been carried out, in ignorance of Kant's priority, by Delaunay (l865) and Adams. He points out that the action of the moon in raising the waters of the earth must have a secondary effect in the slight retardation of the earth's motion, and refers to a similar cause the fact that the moon turns always the same face to the earth.

3. *Allgemeine Naturgeschichte und Theorie des Himmels*, published anonymously in 1755 (4th ed. 1808; republished H. Ebert, 1890). In this remarkable work Kant, proceeding from the Newtonian conception of the solar system, extends his consideration to the entire sidereal system, points out how the whole may be mechanically regarded, and throws out the important speculation which has since received the title of the nebular hypothesis. In some details, such *e.g.* as the regarding of the motion of the entire solar system as portion of the general cosmical mechanism, he had predecessors, among others Thomas Wright of Durham, but the work as a whole contains a wonderfully acute anticipation of much that was afterwards carried out by Herschel and Laplace. The hypothesis of the original nebular condition of the system, with the consequent explanation of the great phenomena of planetary formations and movements of the satellites and rings, is unquestionably to be assigned to Kant. (On this question see discussion in W. Hastie's *Kant's Cosmogony*, as above.)

4. *Meditationum quarundam de igne succincta delineatio* (1755): an inaugural dissertation, containing little beyond the notion that bodies operate on one another through the medium of a uniformly diffused, elastic and subtle matter (ether) which is the underlying substance of heat and light. Both heat and light are regarded as vibrations of this diffused ether.

5. *On the Causes of Earthquakes* (1755); *Description of the Earthquake of 1755* (1756); *Consideration of some Recently Experienced Earthquakes* (1756).

6. *Explanatory Remarks on the Theory of the Winds* (1756). In this brief tract, Kant, apparently in entire ignorance of the explanation given in 1735 by Hadley, points out how the varying velocity of rotation of the successive zones of the earth's surface furnishes a key to the phenomena of periodic winds. His theory is in almost entire agreement with that now received. See the parallel statements from Kant's tract and Dove's essay on the influence of the rotation of the earth on the flow of its atmosphere (1835), given in Zöllner's work, *Ueber die Natur der Cometen*, p-482.

7. *On the Different Races of Men* (1775); *Determination of the Notion of a Human Race* (1785); *Conjectural Beginning of Human History* (1786): three tracts containing some points of interest as regards the empirical grounds for Kant’s doctrine of teleology. Reference will be made to them in the notice of the *Kritik of Judgment*.

8. *On the Volcanoes in the Moon* (1785); *On the Influence of the Moon on the Weather* (1794). The second of these contains a remarkable discussion of the relation between the centre of the moon’s figure and its centre of gravity. From the difference between these Kant is led to conjecture that the climatic conditions of the side of the moon turned from us must be altogether unlike those of the face presented to us. His views have been restated by Hansen.

9. *Lectures on Physical Geography* (1822): published from notes of Kant’s lectures, with the approval of the author.

Consideration of these works is sufficient to show that Kant’s mastery of the science of his time was complete and thorough, and that his philosophy is to be dealt with as having throughout a reference to general scientific conceptions. For more detailed treatment of his importance in science, reference may be made to Zöllner’s essay on “Kant and his Merits on Natural Science” contained in the work on the *Nature of Comets* (p-484); to Dietrich, *Kant and Newton*, Schultze, *Kant and Darwin*; Reuschle’s careful analysis of the scientific works in the *Deutsche Vierteljahrs-Schrift* (1868); W. Hastie’s introduction to *Kant’s Cosmogony* (1900), which summarizes criticism to that date; and articles in *Kant-Studien* (1896 foll.).

The notice of the philosophical writings of Kant need not be more than bibliographical, as in the account of his philosophy it will be necessary to consider at some length the successive stages in the development of his thought. Arranged chronologically these works are as follows: —

1755. *Principiorum primorum cognitionis metaphysicae novae dilucidatio.*

1756. *Metaphysicae cum geometria junctae usus in philosophia naturali, cujus specimen I. continet monadologiam physicam.*

1762. *Die falsche Spitzfindigkeit der vier syltogistischen Figuren*, “The False Subtlety of the Four Syllogistic Figures” (trans. T. K. Abbott, Kant’s *Introduction to Logic and his Essay on the Mistaken Subtilty of the Figures*, 1885).

1763. *Versuch den Begriff der negativen Grössen in die Weltweisheit einzuführen*, “Attempt to introduce the Notion of Negative Quantities into Philosophy.”

1763. *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes*, “The only possible Foundation for a Demonstration of the Existence of God.”

1764. *Beobachtungen über das Gefühl des Schönen und Erhabenen* (Riga, 1771; Konigsberg, 1776).

1764. *Untersuchung über die Deutlichkeit der Grundsätze der natürlichen Theologie und Moral*, “Essay on the Evidence (Clearness) of the Fundamental Propositions of Natural Theology and Ethics.”

1766. *Träume eines Geistersehers, erläutert durch Träume der Metaphysik*, “Dreams of a Ghost-seer (or Clairvoyant), explained by the Dreams of Metaphysic” (Eng. trans. E. F. Goerwitz, with introd. by F. Sewall, 1900).

1768. *Von dem ersten Grunde des Unterschiedes der Gegenden im Raum*, “Foundation for the Distinction of Positions in Space.”

The above may all be regarded as belonging to the precritical period of Kant’s development. The following introduce the notions and principles characteristic of the critical philosophy.

1770. *De mundi sensibilis et intelligibilis forma et principiis*.

1781. *Kritik der reinen Vernunft*, “Kritik of Pure Reason” (revised ed. 1787; ed. Vaihinger, 1881 foll, and B. Erdmann, 1900; Eng. trans., F. Max Müller, 1896, 2nd ed. 1907, and J. M. D. Meiklejohn, 1854).

1783. *Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können*, “Prolegomena to all Future Metaphysic which may present itself as Science” (ed. B. Erdmann, 1878; Eng. trans. J. P. Mahaffy and J. H. Bernard, 2nd ed. 1889; Belfort Bax, 1883 and Paul Carus, 1902; and cf. M. Apel, *Kommentar* zu Kants Prolegomena, *1908)*.

1784. *Idee zu einer allgemeinen Geschichte im weltbürgerlicher Absicht*, “Notion of a Universal History in a Cosmopolitan Sense.” With this may be coupled the review of Herder in 1785.

1785. *Grundlegung zur Metaphysik der Sitten, “Foundations of* the Metaphysic of Ethics” (see T. K. Abbott, *Fundamental Principles of the Metaphysic of Ethics*, 3rd ed. 1907).

1786. *Metaphysische Anfangsgründe der Naturwissenschaft*, “Metaphysical Elements of Natural Science” (ed. A. Höfler, 1900; trans. Belfort Bax, *Prolegomena and Metaphysical Foundations*, 1883).

1788. *Ueber den Gebrauch teleologischer Prinzipien in der Philosophie*, “On the Employment of Teleological Principles in Philosophy.”

1788. *Kritik der praktischen Vernunft*, “Kritik of Practical Reason” (trans. T. K. Abbott, ed. 1898).

1790. *Kritik der Urtheilskraft*, “Kritik of Judgment” (trans. with notes J. H. Bernard, 1892).

1790. *Ueber eine Entdeckung, nach der alle neue Kritik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll*, “On a Discovery by which all the recent Critique of Pure Reason is

superseded by a more ancient” (*i.e.* by Leibnitz’s philosophy).

1791. *Ueber die wirklichen Fortschritte der Metaphysik seit Leibnitz und Wolff*, “On the Real Advances of Metaphysics since Leibnitz and Wolff”; and *Ueber das Misslingen aller philosophischen Versuche in der Theodicee*.

1793. *Die Religion innerhalb der Grenzen der blossen Vernunft*, “Religion within the Bounds of Reason only” (Eng. trans. J. W. Semple, 1838).

1794. *Ueber Philosophie überhaupt*, “On Philosophy generally,” and *Das Ende aller Dinge*.

1795. *Zum ewigen Frieden* (Eng. trans., M. Campbell Smith, 1903).

1797. *Metaphysische Anfangsgründe der Rechtslehre* (trans. W. Hastie), and *Metaphysische Anfangsgründe der Tugendlehre*.

1798. *Der Streit der Facultäten*, “Contest of the Faculties.”

1798. *Anthropologie in pragmatischer Hinsicht*.

The Kantian Philosophy.

Historians are accustomed to divide the general current of speculation into epochs or periods marked by the dominance of some single philosophic conception with its systematic evolution. Perhaps in no case is the character of an epoch more clearly apparent than in that of the critical philosophy. The great work of Kant absolutely closed the lines of speculation along which the philosophical literature of the 18th century had proceeded, and substituted for them a new and more comprehensive method of regarding the essential problems of thought, a method which has prescribed the course of philosophic speculation in the present age. The critical system has thus a two-fold aspect. It takes up into itself what had characterized the previous efforts of modern thought, shows the imperfect nature of the fundamental notions therein employed, and offers a new solution of the problems to which these notions had been applied. It opens up a new series of questions upon which subsequent philosophic reflection has been directed, and gives to them the form, under which it is possible that they should be fruitfully regarded. A work of this kind is essentially epoch-making.

In any complete account of the Kantian system it is therefore necessary that there should be constant reference, on the one hand, to the peculiar character of the preceding 18th-century philosophy, and, on the other hand, to the problems left for renewed treatment to more modern thought. Fortunately the development of the Kantian system itself furnishes such treatment as is necessary of the former reference. For the critical philosophy was a work of slow growth. In the early writings of Kant we are able to trace with great definiteness the successive stages through which he passed from the notions of the preceding philosophy to the new and comprehensive method which gives its special character to the critical work.

Scarcely any great mind, it has been said with justice, ever matured so slowly. In the early essays we find the principles of the current philosophies, those of Leibnitz and English empiricism, applied in various directions to those problems which serve as tests of their truth and completeness; we note the appearance of the difficulties or contradictions which manifest the one-sidedness or imperfection of the principle applied; and we can trace the gradual growth of the new conceptions which were destined, in the completed system, to take the place of the earlier method. To understand the Kantian work it is indispensable to trace the history of its growth in the mind of its author.

Of the two preceding stages of modern philosophy, only the second, that of Locke and Leibnitz, seems to have influenced practically the course of Kant's speculation. With the Cartesian movement as a whole he shows little acquaintance and no sympathy, and his own philosophic conception is never brought into relation with the systematic treatment of metaphysical problems characteristic of the Cartesian method. The fundamental question for philosophic reflection presented itself to him in the form which it had assumed in the hands of Locke and his successors in England, of Leibnitz and the Leibnitzian school in Germany. The transition from the Cartesian movement to this second stage of modern thought had doubtless been natural and indeed necessary. Nevertheless the full bearings of the philosophic question were somewhat obscured by the comparatively limited fashion in which it was then regarded. The tendency towards what may be technically called subjectivism, a tendency which differentiates the modern from the ancient method of speculation, is expressed in Locke and Leibnitz in a definite and peculiar fashion. However widely the two systems differ in details, they are at one in a certain fundamental conception which dominates the whole course of their philosophic construction. They are throughout individualist, *i.e.* they accept as given fact the existence of the concrete thinking subject, and endeavour to show how this subject, as an individual conscious being, is related to the wider universe of which he forms part. In dealing with such a problem, there are evidently two lines along which investigation may proceed. It may be asked how the individual mind comes to know himself and the system of things with which he is connected, how the varied contents of his experience are to be accounted for, and what certainty attaches to his subjective consciousness of things. Regarded from the individualist point of view, this line of inquiry becomes purely psychological, and the answer may be presented as it was presented by Locke, in the fashion of a natural history of the growth of conscious experience in the mind of the subject. Or, it may be further asked how is the individual really connected with the system of things apparently disclosed to him in conscious experience? what is the precise significance of the existence which he ascribes both to himself and to the objects of experience? what is the nature of the relation between himself as one part of the system, and the system as a whole? This second inquiry is specifically metaphysical in bearing and the kind of answer furnished to it by Leibnitz on the one hand by Berkeley on the other, is in fact prescribed or determined beforehand by the fundamental conception of the individualist method with which both begin their investigations. So soon as we make clear to ourselves the essential nature of this method, we are able to discern the specific difficulties or perplexities arising in the attempt to carry it out systematically, and thus to note with precision the special problems presented to Kant at the outset of his philosophic reflections.

Consider, first, the application of the method on its psychological side, as it appears in Locke. Starting with the assumption of conscious experience as the content or filling-in of the individual mind, Locke proceeds to explain its genesis and nature by reference to the real universe of things and its mechanical operation upon the mind. The result of the interaction of mind, *i.e.* the individual mind, and the system of things, is conscious experience, consisting of ideas, which may be variously compounded, divided, compared, or dealt with by the subjective faculties or powers with which the entity, Mind, is supposed to be endowed. Matter of fact and matter of knowledge are thus at a stroke dissevered. The very notion of relation between mind and things leads at once to the counter notion of the absolute restriction of mind to its own subjective nature. That Locke was unable to reconcile these opposed notions is not surprising;

that the difficulties and obscurities of the *Essay* arise from the impossibility of reconciling them is evident on the slightest consideration of the main positions of that work. Of these difficulties the philosophies of Berkeley and Hume are systematic treatments, In Berkeley we find the resolute determination to accept only the one notion, that of mind as restricted to its own conscious experience, and to attempt by this means to explain the nature of the external reality to which obscure reference is made. Any success in the attempt is due only to the fact that Berkeley introduces alongside of his individualist notion a totally new conception, that of mind itself as not in the same way one of the matters of conscious experience, but as capable of reflection upon the whole of experience and of reference to the supreme mind as the ground of all reality. It is only in Hume that we have definitely and completely the evolution of the individualist notion as groundwork of a theory of knowledge; and it is in his writings, therefore, that we may expect to find the fundamental difficulty of that notion clearly apparent. It is not a little remarkable that we should find in Hume, not only the sceptical dissolution of all fixity of cognition, which is the inevitable result of the individualist method, but also the clearest consciousness of the very root of the difficulty. The systematic application of the doctrine that conscious experience consists only of isolated objects of knowledge, impressions or ideas, leads Hume to distinguish between truths reached by analysis and truths which involve real connexion of the objects of knowledge. The first he is willing to accept without further inquiry, though it is an error to suppose, as Kant seems to have supposed, that he regarded mathematical propositions as coming under this head (see Hume); with respect to the second, he finds himself, and confesses that he finds himself, hopelessly at fault. No real connexions between isolated objects of experience are perceived by us. No single matter of fact necessarily implies the existence of any other. In short, if the difficulty be put in its ultimate form, no existence thought as a distinct individual can transcend itself, or imply relation to any other existence. If the parts of conscious experience are regarded as so many distinct things, there is no possibility of connecting them other than contingently, if at all. If the individual mind be really thought as individual, it is impossible to explain how it should have knowledge or consciousness at all. “In short,” says Hume, “there are two principles which I cannot render consistent, nor is it in my power to renounce either of them, viz. *that all our distinct perceptions are distinct existences*, and *that the mind never perceives any real connexion among distinct existences*. Did our perceptions either inhere in something simple or individual, or did the mind perceive some real connexion among them, there would be no difficulty in the case” (App. to *Treatise of Human Nature*).

Thus, on the one hand, the individualist conception, when carried out to its full extent, leads to the total negation of all real cognition. If the real system of things, to which conscious experience has reference, be regarded as standing in casual relation to this experience there is no conceivable ground for the extension to reality of the notions which somehow are involved in thought. The same result is apparent, on the other hand, when we consider the theory of knowledge implied in the Leibnitzian individualism. The metaphysical conception of the monads, each of which is the universe *in nuce*, presents insuperable difficulties when the connexion or interdependence of the monads is in question, and these difficulties obtrude themselves when the attempt is made to work put a consistent doctrine of cognition. For the whole mass of cognisable fact, the *mundus intelligibilis*, is contained *impliciter* in each monad, and the several modes of apprehension can only be regarded as so many stages in the developing consciousness of the monad. Sense and understanding, real connexion of facts and analysis of notions, are not, therefore, distinct in kind, but differ only in degree. The same fundamental axioms, the logical principles of identity and sufficient reason, are applicable in explanation of all given propositions. It is true that Leibnitz himself did not work out any complete doctrine of knowledge, but in the hands of his successors the theory took definite shape in the principle that the whole work of cognition is in essence analytical. The process of analysis might be complete or incomplete. For finite intelligences there was an inevitable incompleteness so far as knowledge of matters of fact was concerned. In respect to them, the final result was found in a series of irreducible notions or categories, the *prima possibilia*, the analysis and

elucidation of which was specifically the business of philosophy or metaphysics.

It will be observed that, in the Leibnitzian as in the empirical individualism, the fundamental notion is still that of the abstract separation of the thinking subject from the materials of conscious experience. From this separation arise all the difficulties in the effort to develop the notion systematically, and in tracing the history of Kant's philosophical progress we are able to discern the gradual perception on his part that here was to be found the ultimate cause of the perplexities which became apparent in considering the subordinate doctrines of the system. The successive essays which have already been enumerated as composing Kant's precritical work are not to be regarded as so many imperfect sketches of the doctrines of the *Kritik*, nor are we to look in them for anticipations of the critical view. They are essentially tentative, and exhibit with unusual clearness the manner in which the difficulties of a received theory force on a wider and more comprehensive view. There can be no doubt that some of the special features of the *Kritik* are to be found in these precritical essays, *e.g.* the doctrine of the *Aesthetik* is certainly foreshadowed in the *Dissertation* of 1770; the *Kritik*, however, is no patchwork, and what appears in the *Dissertation* takes an altogether new form when it is wrought into the more comprehensive conception of the later treatise.

The particular problem which gave the occasion to the first of the precritical writings is, in an imperfect or particular fashion, the fundamental question to which the *Kritik* is an answer. What is the nature of the distinction between knowledge gained by analysis of notions and knowledge of matters of fact? Kant seems never to have been satisfied with the Wolffian identification of logical axioms and of the principle of sufficient reason. The tract on the *False Subtlety of the Four Syllogistic Figures*, in which the view of thought or reason as analytic is clearly expressed, closes with the significant division of judgments into those which rest upon the logical axioms of identity and contradiction and those for which no logical ground can be shown. Such immediate or indemonstrable judgments, it is said, abound in our experience. They are, in fact, as Kant presently perceived, the foundations for all judgments regarding real existence. It was impossible that the question regarding their nature and legitimacy and their distinction from analytic judgments should not present itself to him. The three tracts belonging to the years 1763-1764 bring forward in the sharpest fashion the essential opposition between the two classes of judgments. In the *Essay on Negative Quantities*, the fundamental thought is the total distinction in kind between logical opposition (the contradictoriness of notions, which Kant always viewed as formed, definite products of thought) and real opposition. For the one adequate explanation is found in the logical axiom of analytical thinking; for the other no such explanation is to be had. Logical ground and real ground are totally distinct. "I can understand perfectly well," says Kant, "how a consequence follows from its reason according to the law of identity, since it is discoverable by mere analysis of the notion contained in it. . . . But how something follows from another thing and not according to the law of identity, this I should gladly have made clear to me. . . . How shall I comprehend that, since something is, something else should be?" Real things, in short, are distinct existences, and, as distinct, not necessarily or logically connected in thought. "I have," he proceeds, "reflected on the nature of our knowledge in relation to our judgment of reason and consequent, and I intend to expound fully the result of my reflections. It follows from them that the relation of a real ground to that which is thereby posited or denied cannot be expressed by a judgment but only by means of a notion, which by analysis may certainly be reduced to yet simpler notions of real grounds, but yet in such a way that the final resort of all our cognition in this regard must be found in simple and irreducible notions of real grounds, the relation of which to their consequents cannot be made clear."

The striking similarity between Kant's expressions in this *Essay* and the remarks with which Hume introduces his analysis of the notion of cause has led to the supposition that at this period of his philosophical career Kant was definitely under the influence of the earlier empirical thinker. Consideration of the whole passage is quite sufficient to show the groundlessness of this supposition. The

difficulty with which Kant is presented was one arising inevitably from reflection upon the Leibnitzian theory of knowledge, and the solution does not in any way go beyond that theory. It is a solution, in fact, which must have been impossible had the purport of Hume’s empirical doctrine been present to Kant’s mind. He is here at the point at which he remained for many years, accepting without any criticism certain fundamental notions as required for real cognition. His ideal of metaphysic is still that of complete analysis of given notions. No glimmering of the further question, Whence come these notions and with what right do we apply them in cognition? is yet apparent. Any direct influence from Hume must be referred to a later period in his career.

The prize essay *On the Principles of Natural Theology and Morals* brings forward the same fundamental opposition — though in a special form. Here, for the first time, appears definitely the distinction between synthesis and analysis, and in the distinction is found the reason for the superior certainty and clearness of mathematics as opposed to philosophy. Mathematics, Kant thinks, proceeds synthetically, for in it the notions are constructed. Metaphysics, on the other hand, is analytical in method; in it the notions are given, and by analysis they are cleared up. It is to be observed that the description of mathematics as synthetic is not an anticipation of the critical doctrine on the same subject. Kant does not, in this place, raise the question as to the reason for assuming that the arbitrary syntheses of mathematical construction have any reference to reality. The deeper significance of synthesis has not yet become apparent.

In the *Only Possible Ground of Proof for the Existence of God*, the argument, though largely Leibnitzian, advances one step farther towards the ultimate inquiry. For there Kant states as precisely as in the critique of speculative theology his fundamental doctrine that real existence is not a predicate to be added in thought to the conception of a possible subject. So far as subjective thought is concerned, possibility, not real existence, is contained in any judgment.

The year 1765 was marked by the publication of Leibnitz’s posthumous *Nouveaux Essais*, in which his theory of knowledge is more fully stated than in any of his previous tracts. In all probability Kant gave some attention to this work, though no special reference to it occurs in his writings, and it may have assisted to give additional precision to his doctrine. In the curious essay, *Dreams of a Clairvoyant*, published 1766, he emphasizes his previously reached conclusion that connexions of real fact are mediated in our thought by ultimate notions, but adds that the significance and warrant for such notions can be furnished only by experience. He is inclined, therefore, to regard as the function of metaphysics the complete statement of these ultimate, indemonstrable notions, and therefore the determination of the limits to knowledge by their means. Even at this point, where he approximates more closely to Hume than to any other thinker, the difficulty raised by Hume does not seem to occur to him. He still appears to think that experience does warrant the employment of such notions, and when there is taken into account his correspondence with Lambert during the next few years, one would be inclined to say that the *Architektonik* of the latter represents most completely Kant’s idea of philosophy.

On another side Kant had been shaking himself free from the principles of the Leibnitzian philosophy. According to Leibnitz, space, the order of coexisting things, resulted from the relations of monads to one another. But Kant began to see that such a conception did not accord with the manner in which we determine directions or positions in space. In the curious little essay, *On the Ground of distinguishing Particular Divisions in Space*, he pointed out that the idea of space as a whole is not deducible from the experience of particular spaces, or particular relations of objects in space, that we only cognize relations in space by reference to space as a whole, and finally that definite positions involve reference to space as a given whole.

The whole development of Kant’s thought up to this point is intelligible when regarded from the Leibnitzian point of view, with which he started. There appears no reason to conclude that Hume at this time exercised any direct influence. One may go still further, and add that even in the *Dissertation* of

1770, generally regarded as more than foreshadowing the *Kritik*, the really critical question is not involved. A brief notice of the contents of this tract will suffice to show how far removed Kant yet was from the methods and principles of the critical or transcendental philosophy. Sense and understanding, according to the *Dissertation*, are the two sources of knowledge. The objects of the one are things of sense or *phenomena*; the objects of the other are *noumena*. These are absolutely distinct, and are not to be regarded as differing only in degree. In *phenomena* we distinguish matter, which is given by sense, and form, which is the law of the order of sensations. Such form is twofold — the order of space and time. Sensations formed by space and time compose the world of appearance, and this when treated by the understanding, according to logical rules, is experience. But the logical use of the understanding is not its only use. Much more important is the *real* use, by which are produced the pure notions whereby we think things as they are. These pure notions are the laws of the operation of the intellect; they are *leges intellectus*.

Apart, then, from the expanded treatment of space and time as subjective forms, we find in the *Dissertation* little more than the very precise and definite formulation of the slowly growing opposition to the Leibnitzian doctrines. That the pure intellectual notions should be defended as springing from the nature of intellect is not out of harmony with the statement of the *Träume eines Geistersehers*, for there the pure notions were allowed to exist, but were not held to have validity for actual things except on grounds of experience. Here they are supposed to exist, dissevered from experience, and are allowed validity as determinations of things in themselves.

The stage which Kant had now reached in his philosophical development was one of great significance. The doctrine of knowledge expressed in the *Dissertation* was the final form which the Wolffian rationalism could assume for him, and, though many of the elements of the *Kritik* are contained therein, it was not really in advance of the Wolffian theory. The doctrine of space and time as forms of sense-perception, the reference of both space and time and the pure intellectual notions to the laws of the activity of mind itself, the distinction between sense and understanding as one of kind, not of degree, with the correlative distinction between phenomena and noumena, — all of these reappear, though changed and modified, in the *Kritik*. But, despite this resemblance, it seems clear that, so far as the *Dissertation* is concerned, the way had only been prepared for the true critical inquiry, and that the real import of Hume's sceptical problem had not yet dawned upon Kant. From the manner, however, in which the doctrine of knowledge had been stated in the *Dissertation*, the further inquiry had been rendered inevitable. It had become quite impossible for Kant to remain longer satisfied with the ambiguous position assigned to a fundamental element of his doctrine of knowledge, the so-called pure intellectual notions. Those notions, according to the *Dissertation*, had no function save in relation to things-in-themselves, *i.e.* to objects which are not directly or immediately brought into relation to our faculty of cognition. They did not serve as the connecting links of formed experience; on the contrary, they were supposed to be absolutely dissevered from all experience which was possible for intelligence like ours. In his previous essays, Kant, while likewise maintaining that such pure, irreducible notions existed, had asserted in general terms that they applied to experience, and that their applicability or justification rested on experience itself, but had not raised the question as to the ground of such justification. Now, from another side, the supreme difficulty was presented — how could such notions have application to any objects whatsoever? For some time the correlative difficulty, how *objects* of sense-perception were possible, does not seem to have suggested itself to Kant. In the *Dissertation* sense-perception had been taken as receptivity of representations of objects, and experience as the product of the treatment of such representations by the logical or analytical processes of understanding. Some traces of this confused fashion of regarding sense-perceptions are left even in the *Kritik*, specially perhaps in the *Aesthetik*, and they give rise to much of the ambiguity which unfortunately attaches to the more developed theory of cognition. So soon, however, as the critical question was put, On what rests the reference of representations in us to the object or thing? in

other words, How do we come to have knowledge of objects at all? it became apparent that the problem was one of perfect generality, and applied, not only to cognition through the pure notions, but to sense-perceptions likewise. It is in the statement of this general problem that we find the new and characteristic feature of Kant's work.

There is thus no reason to doubt the substantial accuracy of Kant's reference to the particular occasion or cause of the critical inquiry. Up to the stage indicated by the *Dissertation* he had been attempting, in various ways, to unite two radically divergent modes of explaining cognition — that which would account for the content of experience by reference to affection from things without us, and that which viewed the intellect itself as somehow furnished with the means of pure, rational cognition. He now discovered that Hume's sceptical analysis of the notion of cause was really the treatment of one typical or crucial instance of the much more general problem. If experience, says Hume, consists solely of states of mind somehow given to us, each of which exists as an effect, and therefore as distinct from others, with what right do we make the common assumption that parts of experience are necessarily connected? The only possible answer, drawn from the premises laid down, must be that there is no warrant for such an assumption. Necessity for thought, as Kant had been willing to admit and as Hume also held, involves or implies something more than is given in experience — for that which is given is contingent — and rests upon an a priori or pure notion. But a priori notions, did they exist, could have no claim to regulate experience. Hume, therefore, for his part, rejected entirely the notion of cause as being fictitious and delusive, and professed to account for the habit of regarding experience as necessarily connected by reference to arbitrarily formed custom of thinking. Experience, as given, contingent material, had a certain uniformity, and recurring uniformities generated in us the habit of regarding things as necessarily connected. That such a resort to experience for explanation could lead to no valid conclusion has been already noted as evident to Hume himself.

The dogmatic or individualist conception of experience had thus proved itself inadequate to the solution of Hume's difficulty regarding the notion of cause, — a difficulty which Kant, erroneously, had thought to be the only case contemplated by his predecessor. The perception of its inadequacy in this respect, and the consequent generalization of Hume's problem, are the essential features of the new critical method. For Kant was now prepared to formulate his general inquiry in a definite fashion. His long-continued reflection on the Wolffian doctrine of knowledge had made clear to him that synthetic connexion, the essence of real cognition, was not contained in the products of thinking as a formal activity of mind operating on material otherwise supplied. On the other hand, Hume's analysis enabled him to see that synthetic connexion was not contained in experience regarded as given material. Thus neither the formal nor the material aspect of conscious experience, when regarded from the individualist point of view, supplied any foundation for real knowledge, whether a priori or empirical. An absolutely new conception of experience was necessary, if the fact of cognition was to be explained at all, and the various modes in which Kant expresses the business of his critical philosophy were merely different fashions of stating the one ultimate problem, differing according to the particular aspect of knowledge which he happened to have in view. To inquire how synthetic a priori judgments are possible, or how far cognition extends, or what worth attaches to metaphysical propositions, is simply to ask, in a specific form, what elements are necessarily involved in experience of which the subject is conscious. How is it possible for the individual thinking subject to connect together the parts of his experience in the mode we call cognition?

The problem of the critical philosophy is, therefore, the complete analysis of experience from the point of view of the conditions under which such experience is possible for the conscious subject. The central ideas are thus self-consciousness, as the supreme condition under which experience is subjectively possible, and the manifold details of experience as a varied and complex whole. The solution of the problem demanded the utmost care in keeping the due balance between these ideas; and it can hardly be

said that Kant was perfectly successful. He is frequently untrue to the more comprehensive conception which dominates his work as a whole. The influence of his previous philosophical training, nay, even the unconscious influence of terminology, frequently induces in his statements a certain laxity and want of clearness. He selects definitely for his starting point neither the idea of self-consciousness nor the details of experience, but in his actual procedure passes from one to the other, rarely, if ever, taking into full consideration the weighty question of their relation to one another. Above all, he is continuously under the influence of the individualist notion which he had done so much to explode. The conception of conscious experience, which is the net result of the *Kritik*, is indefinitely profounder and richer than that which had ruled the 18th century philosophizing, but for Kant such experience still appears as somehow the arbitrary product of the relation between the individual conscious subject and the realm of real facts. When he is actually analysing the conditions of knowledge, the influence of the individualist conception is not prominent; the conditions are stated as quite general, as conditions of knowledge. But so soon as the deeper, metaphysical problems present themselves, the shadow of the old doctrine reappears. Knowledge is regarded as a mechanical product, part furnished by the subject, part given to the subject, and is thus viewed as mechanically divisible into a priori and a posteriori, into pure and empirical, necessary and contingent. The individual as an agent, conscious of universal moral law, is yet regarded as in a measure opposed to experience, and the Kantian ethical code remains purely formal. The ultimate relation between intelligence and natural fact, expressed in the notion of end, is thought as problematic or contingent. The difficulties or obscurities of the Kantian system, of which the above are merely the more prominent, may all be traced to the one source, the false or at least inadequate idea of the individual. The more thorough explanation of the relation between experience as critically conceived and the individual subject was the problem left by Kant for his successors.

In any detailed exposition of the critical system it would be requisite in the first place to state with some fullness the precise nature of the problems immediately before Kant, and in the second place to follow with some closeness the successive stages of the system as presented in the three main works, the *Kritik of Pure Reason*, the *Kritik of Practical Reason* and the *Kritik of Judgment*, with the more important of the minor works, the *Metaphysic of Nature* and the *Metaphysic of Ethics*. It would be necessary, also, in any such expanded treatment, to bring out clearly the Kantian classification of the philosophical sciences, and to indicate the relation between the critical or transcendental investigation of the several faculties and the more developed sciences to which that investigation serves as introduction. As any detailed statement of the critical system, however compressed, would be beyond the limits of the present article, it is proposed here to select only the more salient doctrines, and to point out in connexion with them what advance had been effected by Kant, and what remained for subsequent efforts at complete solution of the problems raised by him. Much that is of interest and value must necessarily be omitted in any sketch of so elaborate a system, and for all points of special interpretation reference must needs be made to the many elaborate dissertations on or about the Kantian philosophy.

The doctrine from which Kant starts in his critical or transcendental investigation of knowledge is that to which the slow development of his thought had led him. The essence of cognition or knowledge was a synthetic act, an act of combining in thought the detached elements of experience. Now synthesis was explicable neither by reference to pure thought, the logical or elaborative faculty, which in Kant’s view remained analytic in function, nor by reference to the effects of external real things upon our faculties of cognition. For, on the one hand, analysis or logical treatment applied only to objects of knowledge as already given in synthetic forms, and, on the other hand, real things could yield only isolated effects and not the combination of these effects in the forms of cognitive experience. If experience is to be matter of knowledge for the conscious subject, it must be regarded as the conjoint product of given material and synthetic combination. Form and matter may indeed be regarded separably and dealt with in isolation for purposes of critical inquiry, but in experience they are necessarily and inseparably united. The problem of

the *Kritik* thus becomes for Kant the complete statement of the elements necessarily involved in synthesis, and of the subjective processes by which these elements are realized in our individual consciousness. He is not asking, with Locke, whence the details of experience arise; he is not attempting a natural history of the growth of experience in the individual mind; but he is endeavouring to state exhaustively what conditions are necessarily involved in any fact of knowledge, *i.e.* in any synthetic combination of parts of experience by the conscious subject.

So far as the elements necessarily involved in conscious experience are concerned, these may be enumerated briefly thus: — given data of sense, inner or outer; the forms of perception, *i.e.* space and time; the forms of thought, *i.e.* the categories; the ultimate condition of knowledge, the identity of the pure ego or self. The ego or self is the central unity in reference to which alone is any part of experience cognizable. But the consciousness of self is the foundation of knowledge only when related to given material. The ego has not in itself the element of difference, and the essence of knowledge is the consciousness of unity in difference. For knowledge, therefore, it is necessary that difference should be *given* to the ego. The modes under which it is possible for such given difference to become portion of the conscious experience of the ego, the modes under which the isolated data can be synthetically combined so as to form a cognizable whole, make up the form of cognition, and upon this form rests the possibility of any a priori or rational knowledge.

The notion of the ego as a purely logical unity, containing in itself no element of difference, and having only analytical identity, is fundamental in the critical system, and lies at the root of all its difficulties and perplexities. To say that the ego as an individual does not *produce* the world of experience is by no means the same as to say that the ego is pure unity without element of difference. In the one case we are treating the ego as one of the objects of experience and denying of it productive efficacy; in the second case we are dealing with the unity of the ego as a condition of knowledge, of any experience whatsoever. In this second sense, it is wholly wrong to assert that the ego is pure identity, pure unity. The unity and identity of the ego, so regarded, are taken in abstraction, *i.e.* as dissevered from the more complex whole of which they are necessary elements. When the ego is taken as a condition of knowledge, its unity is not more important than the difference necessarily correlated with it. That the ego as a thing should not produce difference is quite beside the mark. The consequences of the abstract separation which Kant so draws between the ego and the world of experience are apparent throughout his whole system. Assuming at the outset an opposition between the two, self and matter of knowledge, he is driven by the exigencies of the problem of reconciliation to insert term after term as means of bringing them together, but never succeeds in attaining a junction which is more than mechanical. To the end, the ego remains, partly the pure logical ego, partly the concrete individual spirit, and no explanation is afforded of the relation between them. It is for this reason that the system of forms of perception and categories appears so contingent and haphazard. No attempt is made to show how or why the difference supplied for the pure logical ego should present, itself necessarily under these forms. They are regarded rather as portions of the subjective mechanism of the individual consciousness. The mind or self appears as though it were endowed with a complex machinery by which alone it could act upon the material supplied to it. Such a crude conception is far, indeed, from doing justice to Kant’s view, but it undoubtedly represents the underlying assumption of many of his cardinal doctrines. The philosophy of Fichte is historically interesting as that in which the deficiencies of Kant’s fundamental position were first discerned and the attempt made to remedy them.

Unfortunately for the consistency of the *Kritik*, Kant does not attempt to work out systematically the elements involved in knowledge before considering the subjective processes by which knowledge is realized in consciousness. He mixes up the two inquiries, and in the general division of his work depends rather upon the results of previous psychology than upon the lines prescribed by his own new conception of experience. He treats the elements of cognition separately in connexion with the several subjective processes involved in knowledge, viz. sense and understanding. Great ambiguity is the natural result of

this procedure. For it was not possible for Kant to avoid the misleading connotation of the terms employed by him. In strictness, sense, understanding, imagination and reason ought to have had their, functions defined in close relation to the elements of knowledge with which they are severally connected, and as these elements have no existence as separate facts, but only as factors in the complex organic whole, it might have been possible to avoid the error of supposing that each subjective process furnished a distinct, separately cognizable portion of a mechanical whole. But the use of separate terms, such as sense and understanding, almost unavoidably led to phraseology only interpretable as signifying that each furnished a specific kind of knowledge, and all Kant's previous training contributed to strengthen this erroneous view. Especially noteworthy is this in the case of the categories. Kant insists upon treating these as *Begriffe*, notions, and assigns to them certain characteristics of notions. But it is readily seen, and in the *Logik* Kant shows himself fully aware of the fact, that these pure connective links of experience, general aspects of objects of intelligible experience, do not resemble concepts formed by the so-called logical or elaborative processes from representations of completed objects. Nothing but harm can follow from any attempt to identify two products which differ so entirely. So, again, the *Aesthetik* is rendered extremely obscure and difficult by the prevalence of the view, already noted as obtaining in the *Dissertation*, that sense is a faculty receiving representations of objects. Kant was anxious to avoid the error of Leibnitz, who had taken sense and understanding to differ in degree only, not in kind; but in avoiding the one error he fell into another of no less importance.

The consideration of the several elements which in combination make up the fact of cognition, or perception, as it may be called, contains little or nothing bearing on the origin and nature of the given data of sense, inner or outer. The manifold of sense, which plays so important a part in the critical theory of knowledge, is left in an obscure and perplexed position. So much is clear, however, that according to Kant sense is not to be regarded as receptive of representations of objects. The data of sense are mere *stimuli*, not partial or confused representations. The sense-manifold is not to be conceived as having, *per se*, any of the qualities of objects as actually cognized; its parts are not cognizable *per se*, nor can it with propriety be said to be received successively or simultaneously. When we apply predicates to the sense-manifold regarded in isolation, we make that which is only a factor in the experience of objects into a separate, independent object, and use our predicates transcendently. Kant is not always in his language faithful to his view of the sense-manifold, but the theory as a whole, together with his own express definitions, is unmistakable. On the origin of the data of sense, Kant's remarks are few and little satisfactory. He very commonly employs the term *affection* of the faculty of sense as expressing the mode of origin, but offers no further explanation of a term which has significance only when interpreted after a somewhat mechanical fashion. Unquestionably certain of his remarks indicate the view that the origin is to be sought in things-in-themselves, but against hasty misinterpretations of such remarks there are certain cautions to be borne in mind. The relation between phenomena and noumena in the Kantian system does not in the least resemble that which plays so important a part in modern psychology — between the subjective results of sense affection and the character of the objective conditions of such affection. Kant has pointedly declared that it would be a gross absurdity to suppose that in his view separate, distinct things-in-themselves existed corresponding to the several objects of perception. And, finally, it is not at all difficult to understand why Kant should say that the affection of sense originated in the action of things-in-themselves, when we consider what was the thing-in-itself to which he was referring. The thing-in-itself to which the empirical order and relations of sense-experience are referred is the divine order, which is not matter of knowledge, but involved in oitf practical or moral beliefs. Critics who limit their view to the *Kritik of Pure Reason*, and there, in all probability, to the first or constructive portion of the work, must necessarily fail to interpret the doctrines of the Kantian system, which do not become clear or definite till the system has been developed. Reason was, for Kant, an organic whole; the speculative and moral aspects are never severed; and the solution of problems which appear at first sight to belong solely

to the region of speculative thought may be found ultimately to depend upon certain characteristics of our nature as practical.

Data of sense-affection do not contain in themselves synthetic combination. The first conditions of such combination are found by Kant in the universal forms under which alone sense-phenomena manifest themselves in experience. These universal forms of perception, space and time, are necessary, a priori, and in characteristic features resembling intuitions, not notions. They occupy, therefore, a peculiar position, and one section of the *Kritik*, the *Aesthetik*, is entirely devoted to the consideration of them. It is important to observe that it is only through the a priori character of these perceptive forms that rational science of nature is at all possible. Kant is here able to resume, with fresh insight, his previous discussions regarding the synthetic character of mathematical propositions. In his early essays he had rightly drawn the distinction between mathematical demonstration and philosophic proof, referring the certainty of the first to the fact that the constructions were synthetic in character and entirely determined by the action of constructive imagination. It had not then occurred to him to ask, With what right do we assume that the conclusions arrived at from arbitrary constructions in mathematical matter have applicability to objects of experience? Might not mathematics be a purely imaginary science? To this question he is now enabled to return an answer. Space and time, the two essential conditions of sense-perception, are not data given by things, but universal forms of intellect into which all data of sense must be received. Hence, whatever is true of space and time regarded by imagination as objects, *i.e.* quantitative constructions, must be true of the objects making up our sense-experience. The same forms and the same constructive activity of imagination are involved in mathematical synthesis and in the constitution of objects of sense-experience. The foundation for pure or rational mathematics, there being included under this the pure science of movement, is thus laid in the critical doctrine of space and time.

The *Aesthetik* isolates sense-perception, and considers its forms as though it were an independent, complete faculty. A certain confusion, arising from this, is noticeable in the *Analytik* when the necessity for justifying the position of the categories is under discussion, but the real difficulty in which Kant was involved by his doctrine of space and time has its roots even deeper than the erroneous isolation of sensibility. He has not in any way “deduced “ space and time, but, proceeding from the ordinary current view of sense-experience, has found these remaining as residuum after analysis. The relation in which they stand to the categories or pure notions is ambiguous; and, when Kant has to consider the fashion in which category and data of sense are to be brought together, he merely places side by side as a priori elements the pure connective notions and the pure forms of perception, and finds it, apparently, only a matter of contingent convenience that they should harmonize with one another and so render cognition possible. To this point also Fichte was the first to call attention.

Affection of sense, even when received into the pure forms of perception, is not matter of knowledge. For cognition there is requisite synthetic combination, and the intellectual function through which such combination takes place. The forms of intellectual function Kant proceeds to enumerate with the aid of the commonly received logical doctrines. For this reference to logic he has been severely blamed, but the precise nature of the debt due to the commonly accepted logical classification is very generally misconceived. Synthetic combination, Kant points out, is formally expressed in a judgment, which is the act of uniting representations. At the foundation of the judgments which express the types of synthetic combination, through which knowledge is possible, lie the pure general notions, the abstract aspect of the conditions under which objects are cognizable in experience. General logic has also to deal with the union of representations, though its unity is analytic merely, not synthetic. But the same intellectual function which serves to give unity in the analytic judgments of formal logic serves to give unity to the synthetic combinations of real perception. It appeared evident, then, to Kant that in the forms of judgment, as they are stated in the common logic, there must be found the analogues of the types of judgment which are involved in transcendental logic, or in the theory of real cognition. His view of the ordinary logic was

wide and comprehensive, though in his restriction of the science to pure form one can trace the influence of his earlier training, and it is no small part of the value of the critical philosophy that it has revived the study of logic and prepared the way for a more thorough consideration of logical doctrines. The position assigned to logic by Kant is not, in all probability, one which can be defended; indeed, it is hard to see how Kant himself, in consistency with the critical doctrine of knowledge, could have retained many of the older logical theorems, but the precision with which the position was stated, and the sharpness with which logic was marked off from cognate philosophic disciplines, prepared the way for the more thoughtful treatment of the whole question.

Formal logic thus yields to Kant the list of the general notions, pure intellectual predicates, or categories, through which alone experience is possible for a conscious subject. It has already been noted how serious was the error involved in the description of these as notions, without further attempt to clear up their precise significance. Kant, indeed, was mainly influenced by his strong opposition to the Leibnitzian rationalism, and therefore assigns the categories to understanding, the logical faculty, without consideration of the question, — which might have been suggested by the previous statements of the *Dissertation*, — what relation these categories held to the empirical notions formed by comparison, abstraction and generalization when directed upon representations of objects. But when the categories are described as notions, *i.e.* formed products of thought, there rises of necessity the problem which had presented itself to Kant at every stage of his pre-critical thinking, — with what right can we assume that these notions apply to objects of experience? The answer which he proceeds to give altogether explodes the definition of the categories as formed products of thought, and enables us to see more clearly the nature of the new conception of experience which lies in the background of all the critical work.

The unity of the ego, which has been already noted as an element entering into the synthesis of cognition, is a unity of a quite distinct and peculiar kind. That the ego to which different parts of experience are presented must be the same ego, if there is to be cognition at all, is analytically evident; but the peculiarity is that the ego must be conscious of its own unity and identity, and this unity of self-consciousness is only possible in relation to difference not contained in the ego but given to it. The unity of apperception, then, as Kant calls it, is only possible in relation to synthetic unity of experience itself, and the forms of this synthetic unity, the cate- gories, are, therefore, on the one hand, necessary as forms in which self-consciousness is realized, and, on the other hand, restricted in their application and validity to the data of given sense, or the particular element of experience. Thus experience presents itself as the organic combination of the particular of sense with the individual unity of the ego through the universal forms of the categories. Reference of representations to the unity of the object, synthetic unity of apperception, and subsumption of data of sense under the categories, are thus three sides or aspects of the one fundamental fact.

In this deduction of the categories, as Kant calls it, there appears for the first time an endeavour to connect together into one organic whole the several elements entering into experience. It is evident, however, that much was wanting before this essential task could be regarded as complete. Kant has certainly brought together self-consciousness, the system of the categories and data of sense. He has shown that the conditions of self-consciousness are the conditions of possible experience. But he has not shown, nor did he attempt to show, how it was that the conditions of self-consciousness are the very categories arrived at by consideration of the system of logical judgments. He does endeavour to show, but with small success, how the junction of category and data of sense is brought about, for according to his scheme these stood, to a certain extent at least, apart from and independent of one another. The failure to effect an organic combination of the several elements was the natural consequence of the false start which had been made.

The mode in which Kant endeavours to show how the several portions of cognition are subjectively realized brings into the clearest light the inconsistencies and imperfections of his doctrine. Sense had

been assumed as furnishing the particular of knowledge, understanding as furnishing the universal; and it had been expressly declared that the particular was cognizable only in and through the universal. Still, each was conceived as somehow in itself complete and finished. Sense and understanding had distinct functions, and there was wanting some common term, some intermediary which should bring them into conjunction. Data of sense as purely particular could have nothing in common with the categories as purely universal. But data of sense had at least one universal aspect, — their aspect as the particular of the general forms, space and time. Categories were in themselves abstract and valueless, serviceable only when restricted to possible objects of experience. There was thus a common ground on which category and intuition were united in one, and an intermediate process whereby the universal of the category might be so far individualized as to comprehend the particular of sense. This intermediate process — which is really the junction of understanding and sense — Kant calls productive imagination, and it is only through productive imagination that knowledge or experience is actually realized in our subjective consciousness. The specific forms of productive imagination are called *schemata*, and upon the nature of the schema Kant gives much that has proved of extreme value for subsequent thought.

Productive imagination is thus the concrete element of knowledge, and its general modes are the abstract expression of the a priori laws of all possible experience. The categories are restricted in their applicability to the schema, *i.e.* to the pure forms of conjunction of the manifold in time, and in the modes of combination of schemata and categories we have the foundation for the rational sciences of mathematics and physics. Perception or real cognition is thus conceived as a complex fact, involving data of sense and pure perceptive forms, determined by the category and realized through productive imagination in the schema. The system of principles which may be deduced from the consideration of the mode in which understanding and sense are united by productive imagination is the positive result of the critical theory of knowledge, and some of its features are remarkable enough to deserve attention. According to his usual plan, Kant arranges these principles in conformity with the table of the categories, dividing the four classes, however, into two main groups, the mathematical and the dynamical. The mathematical principles are the abstract expression of the necessary mode in which data of sense are determined by the category in the form of intuitions or representations of objects; the dynamical are the abstract expression of the modes in which the existence of objects of intuition is determined. The mathematical principles are constitutive, *i.e.* express determinations of the objects themselves; the dynamical are regulative, *i.e.* express the conditions under which objects can form parts of real experience. Under the mathematical principles come the general rules which furnish the ground for the application of quantitative reasoning to real facts of experience. For as data of sense are only possible objects when received in the forms of space and time, and as space and time are only cognized when determined in definite fashion by the understanding through the schema of number (quantity) or degree (quality), all intuitions are extensive quantities and contain a real element, that of sense, which has degree. Under the dynamical principles, the general modes in which the existence of objects are determined, fall the analogies of experience, or general rules according to which the existence of objects in relation to one another can be determined, and the postulates of experience, the general rules according to which the existence of objects for us or our own subjective existence can be determined. The analogies of experience rest upon the order of perceptions in time, *i.e.* their permanence, succession or coexistence, and the principles are respectively those of substance, causality and reciprocity. It is to be observed that Kant in the expression of these analogies reaches the final solution of the difficulty which had so long pressed upon him, the difficulty as to the relation of the pure connective notions to experience. These notions are not directly applicable to experience, nor do we find in experience anything corresponding to the pure intellectual notions of substance, cause and reciprocity. But experience is for us the combination of data of sense in the forms of productive imagination, forms determined by the pure intellectual notions, and accordingly experience is possible for us only as in modes corresponding to the notions. The

permanent in time is substance in any possible experience, and no experience is possible save through the determination of all changes as in relation to a permanent in time. Determined sequence is the causal relation in any possible experience, and no experience is possible save through the determination of perceived changes as in relation to a determined order in time. So with coexistence and reciprocity.

The postulates of experience are general expressions of the significance of existence in the experience of a conscious subject. The element of reality in such experience must always be given by intuition, and, so far as determination of existence is assumed, external intuition is a necessary condition of inner intuition. The existence of external things is as certain as the existence of the concrete subject, and the subject cannot cognise himself as existing save in relation to the world of facts of external perception. Inner and outer reality are strictly correlative elements in the experience of the conscious subject.

Throughout the positive portion of his theory of cognition, Kant has been beset by the doctrine that the categories, as finished, complete notions, have an import or significance transcending the bounds of possible experience. Morever, the manner in which space and time had been treated made it possible for him to regard these as contingent forms, necessary for intelligences like ours, but not to be viewed as absolutely necessary. The real meaning of these peculiarities is hardly ever expressed by him, though it is clear that the solution of the matter is to be found in the inadequacy of the positive theory to meet the demands of reason for completed explanation. But the conclusion to which he was led was one of the greatest importance for the after development of his system. Cognition is necessarily limited. The categories are restricted in their application to elements of possible experience to that which is presented in intuition, and all intuition is for the ego contingent. But to assert that cognition is limited and its matter contingent is to form the idea of an intelligence for whom cognition would not be limited and for whom the data of intuition would not be given, contingent facts, but necessarily produced along with the pure categories. This idea of an intuitive understanding is the definite expression for the complete explanation which reason demands, and it involves the conception of a realm of objects for such an understanding, a realm of objects which, in opposition to the *phenomena* of our relative and limited experience, may be called *noumena* or things-in-themselves. The *noumenon*, therefore, is in one way the object of a non-sensuous intuition, but more correctly is the expression of the limited and partial character of our knowledge. The idea of a noumenon is thus a limiting notion.

Assuredly, the difficult section of the *Kritik*, on the ground of the distinction between phenomena and noumena, would not have led to so much misconception as it has done, had Kant then brought forward what lies at the root of the distinction, his doctrine of reason and its functions. Understanding, as has been seen, is the faculty of cognition strictly so called; and within its realm, that of space, time and matter, positive knowledge is attainable. But the ultimate conception of understanding, that of the world of objects, quantitatively determined, and standing in relation of mutual reciprocity to one another, is not a final ground of explanation. We are still able and necessitated to reflect upon the whole world of phenomena as thus cognized, and driven to inquire after its significance. In our reflection we necessarily treat the objects, not as phenomena, as matters of positive, scientific knowledge, but as things-in-themselves, as noumena. The distinction between phenomena and noumena is, therefore, nothing but the expression of the distinction between understanding and reason, a distinction which, according to Kant, is merely subjective.

The specific function of reason is the effort after completed explanation of the experience presented in cognition. But in such effort there are no notions to be employed other than the categories, and these, as has already been seen, have validity only in reference to objects of possible experience. We may expect, then, to find the transcendent employment of the categories leading into various difficulties and inconsistencies. The criticism of reason in its specific aspect throws fresh light on the limits to human knowledge and the significance of experience.

Experience has presented itself as the complex result of relation between the ego or subject and the

world of phenomena. Reason may therefore attempt a completed explanation either of the ego or of the world of phenomena or of the total relation between them. The three inquiries correspond to the subjects of the three ancient metaphysical sciences, rational psychology, rational cosmology, rational theology. It is readily seen, in regard to the first of them, that all attempts to determine the nature of the ego as a simple, perdurable, immaterial substance rest upon a confusion between the ego as pure logical unity and the ego as object of intuition, and involve a transcendent use of the categories of experience. It profits not to apply such categories to the soul, for no intuition corresponding to them is or can be given. The idea of the soul must be regarded as transcendent. So too when we endeavour, with the help of the categories of quantity, quality, relation and modality, to determine the nature and relation of parts of the world, we find that reason is landed in a peculiar difficulty. Any solution that can be given is top narrow for the demands of reason and too wide for the restrictions of understanding. The transcendent employment of the categories leads to antinomy, or equally balanced statements of apparently contradictory results. Due attention to the relation between understanding and reason enables us to solve the antinomies and to discover their precise origin and significance. Finally, the endeavour to find in the conception of God, as the supreme reality, the explanation of experience, is seen to lead to no valid conclusion. There is not any intuition given whereby we might show the reality of our idea of a Supreme Being. So far as knowledge is concerned, God remains a transcendental ideal.

The criticism of the transcendental ideas, which is also the examination of the claims of metaphysic to rank as a science, yields a definite and intelligible result. These ideas, the expression of the various modes in which unity of reason may be sought, have no objects corresponding to them in the sphere of cognition. They have not, therefore, like the categories, any constitutive value, and all attempts at metaphysical construction with the notions or categories of science must be resigned as of necessity hopeless. But the ideas are not, on that account, destitute of all value. They are supremely significant, as indicating the very essence of the function of reason. The limits of scientific cognition become intelligible, only when the sphere of understanding is subjected to critical reflexion and compared with the possible sphere of reason, that is, the sphere of rationally complete cognition. The ideas, therefore, in relation to knowledge strictly so called, have *regulative* value, for they furnish the general precepts for extension and completion of knowledge, and, at the same time, since they spring from reason itself, they have a real value in relation to reason as the very inmost nature of intelligence. Self-consciousness cannot be regarded as merely a mechanically determined result. Free reflection upon the whole system of knowledge is sufficient to indicate that the sphere of intuition, with its rational principles, does not exhaust conscious experience. There still remains, over and above the realm of nature, the realm of free, self-conscious spirit; and, within this sphere, it may be anticipated that the ideas will acquire a significance richer and deeper than the merely regulative import which they possess in reference to cognition.

Where, then, are we to look for this realm of free self-consciousness? Not in the sphere of cognition, where objects are mechanically determined, but in that of will or of reason as practical. That reason is practical or prescribes ends for itself is sufficiently manifest from the mere fact of the existence of the conception of morality or duty, a conception which can have no corresponding object within the sphere of intuition, and which is theoretically, or in accordance with the categories of understanding, incognizable. The presence of this conception is the datum upon which may be founded a special investigation of the conditions of reason as practical, a *Kritik* of pure practical reason, and the analysis of it yields the statement of the formal prescripts of morality.

The realization of duty is impossible for any being which is not thought as free, *i.e.* capable of self-determination. Freedom, it is true, is theoretically not an object of cognition, but its impossibility is not thereby demonstrated. The theoretical proof rather serves as useful aid towards the more exact determination of the nature and province of self-determination, and of its relation to the whole concrete

nature of humanity. For in man self-determination and mechanical determination by empirical motives coexist, and only in so far as he belongs and is conscious of belonging both to the sphere of sense and to the sphere of reason does moral obligation become possible for him. The supreme end prescribed by reason in its practical aspect, namely, the complete subordination of the empirical side of nature to the prescripts of morality, demands, as conditions of its possible realization, the permanence of ethical progress in the moral agent, the certainty of freedom in self-determination, and the necessary harmonizing of the spheres of sense and reason through the intelligent author or ground of both. These conditions, the postulates of practical reason, are the concrete expressions of the three transcendental ideas, and in them we have the full significance of the ideas for reason. Immortality of the soul, positive freedom of will, and the existence of an intelligent ground of things are speculative ideas practically warranted, though theoretically neither demonstrable nor comprehensible.

Thus reason as self-determining supplies notions of freedom; reason as determined supplies categories of understanding. Union between the two spheres, which seem at first sight disparate, is found in the necessary postulate that reason shall be realized, for its realization is only possible in the sphere of sense. But such a union, when regarded in abstracto, rests upon, or involves, a notion of quite a new order, that of the adaptation of nature to reason, or, as it may be expressed, that of end in nature. Understanding and reason thus coalesce in the faculty of *judgment*, which mediates between, or brings together, the universal and particular elements in conscious experience. Judgment is here merely reflective; that is to say, the particular element is given, so determined as to be possible material of knowledge, while the universal, not necessary for cognition, is supplied by reason itself. The empirical details of nature, which are not determined by the categories of understanding, are judged as being arranged or ordered by intelligence, for in no other fashion could nature, in its particular, contingent aspect, be thought as forming a complete, consistent, intelligible whole.

The investigation of the conditions under which adaptation of nature to intelligence is conceivable and possible makes up the subject of the third great *Kritik*, the *Kritik of Judgment*, a work presenting unusual difficulties to the interpreter of the Kantian system. The general principle of the adaptation of nature to our faculties of cognition has two specific applications, with the second of which it is more closely connected than with the first. In the first place, the adaptation may be merely subjective, when the empirical condition for the exercise of judgment is furnished by the feeling of pleasure or pain; such adaptation is aesthetic. In the second place, the adaptation may be objective or logical, when empirical facts are given of such a kind that their possibility can be conceived only through the notion of the end realized in them; such adaptation is teleological, and the empirical facts in question are organisms.

Aesthetics, or the scientific consideration of the judgments resting on the feelings of pleasure and pain arising from the harmony or want of harmony between the particular of experience and the laws of understanding, is the special subject of the *Kritik of Judgment*, but the doctrine of teleology there unfolded is the more important for the complete view of the critical system. For the analysis of the teleological judgment and of the consequences flowing from it leads to the final statement of the nature of experience as conceived by Kant. The phenomena of organic production furnish data for a special kind of judgment, which, however, involves or rests upon a quite general principle, that of the contingency of the particular element in nature and its subjectively necessary adaptation to our faculty of cognition. The notion of contingency arises, according to Kant, from the fact that understanding and sense are distinct, that understanding does not determine the particular of sense, and, consequently, that the principle of the adaptation of the particular to our understanding is merely supplied by reason on account of the peculiarity or limited character of understanding. End in nature, therefore, is a subjective or problematic conception, implying the limits of understanding, and consequently resting upon the idea of an understanding constituted unlike ours — of an intuitive understanding in which particular and universal should be given together. The idea of such an understanding is, for cognition, transcendent, for no

corresponding fact of intuition is furnished, but it is realized with practical certainty in relation to reason as practical. For we are, from practical grounds, compelled with at least practical necessity to ascribe a certain aim or end to this supreme understanding. The moral law, or reason as practical, prescribes the realization of the highest good, and such realization implies a higher order than that of nature. We must, therefore, regard the supreme cause as a moral cause, and nature as so ordered that realization of the moral end is in it possible. The final conception of the Kantian philosophy is, therefore, that of ethical teleology. As Kant expresses it in a remarkable passage of the *Kritik*, "The systematic unity of ends in this world of intelligences, which, although as mere nature it is to be called only the world of sense, can yet as a system of freedom be called an intelligible, *i.e.* moral world (*regnum gratiae*), leads inevitably to the teleological unity of all things which constitute this great whole according to universal natural laws, just as the unity of the former is according to universal and necessary moral laws, and unites the practical with the speculative reason. The world must be represented as having originated from an idea, if it is to harmonize with that use of reason without which we should hold ourselves unworthy of reason — viz. the moral use, which rests entirely on the idea of the supreme good. Hence all natural research tends towards the form of a system of ends, and in its highest development would be a physico-theology. But this, since it arises from the moral order as a unity grounded in the very essence of freedom and not accidentally instituted by external commands, establishes the teleology of nature on grounds which a priori must be inseparably connected with the inner possibility of things. The teleology of nature is thus made to rest on a transcendental theology, which takes the ideal of supreme ontological perfection as a principle of systematic unity, a principle which connects all things according to universal and necessary natural laws, since they all have their origin in the absolute necessity of a single primal being" ().

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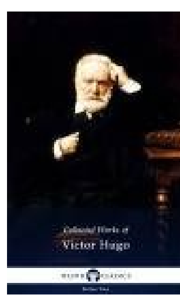

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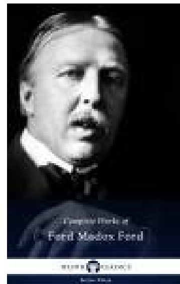

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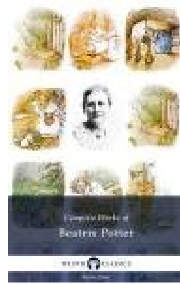

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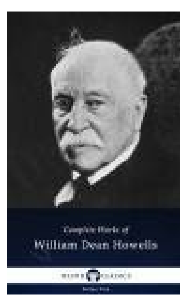
Charles Kingsley
Charles Reade
G. A. Henty
Edgar Rice Burroughs
Edgar Wallace
E. M. Forster
E. Nesbit
George Meredith
Harriet Beecher Stowe
Jerome K. Jerome
John Ruskin
Maria Edgeworth
M. E. Braddon
Miguel de Cervantes
M. R. James
R. M. Ballantyne
Robert E. Howard
Samuel Johnson
Stendhal
Stephen Crane
Zane Grey



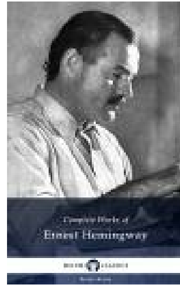
Series Five

Algernon Blackwood
Anatole France
Beaumont and Fletcher
Charles Darwin
Edward Bulwer-Lytton
Edward Gibbon
E. F. Benson
Frances Hodgson Burnett
Friedrich Nietzsche
George Bernard Shaw
George MacDonald
Hilaire Belloc
John Bunyan
John Webster
Margaret Oliphant
Maxim Gorky
Oliver Goldsmith
Radclyffe Hall
Robert W. Chambers
Samuel Butler
Samuel Richardson
Sir Thomas Malory
Thomas Carlyle
William Harrison Ainsworth
William Dean Howells
William Morris

Series Six

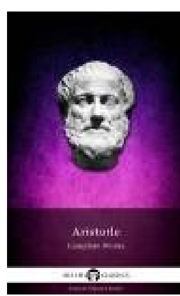
Anthony Hope
Aphra Behn
Arthur Morrison
Baroness Emma Orczy
Captain Mayne Reid
Charlotte M. Yonge
Charlotte Perkins Gilman
E. W. Hornung
Ellen Wood

Frances Burney
Frank Norris
Frank R. Stockton
Hall Caine
Horace Walpole
One Thousand and One Nights
R. Austin Freeman
Rafael Sabatini
Saki
Samuel Pepys
Sir Issac Newton
Stanley J. Weyman
Thomas De Quincey
Thomas Middleton
Voltaire
William Hazlitt
William Hope Hodgson



Series Seven

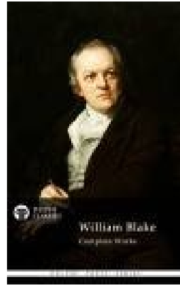
Adam Smith
Benjamin Disraeli
Confucius
David Hume
E. M. Delafield
E. Phillips Oppenheim
Edmund Burke
Ernest Hemingway
Frances Trollope
Galileo Galilei
Guy Boothby
Hans Christian Andersen
Ian Fleming
Immanuel Kant
Karl Marx
Kenneth Grahame
Lytton Strachey
Mary Wollstonecraft
Michel de Montaigne
René Descartes
Richard Marsh
Sax Rohmer
Sir Richard Burton
Talbot Mundy
Thomas Babington Macaulay
W. W. Jacobs



Ancient Classics

Aeschylus
Alcaeus
Ammianus Marcellinus
Apollodorus
Appian
Apuleius
Apollonius of Rhodes
Aristophanes
Aristotle
Arrian
Augustine
Bede
Cassius Dio
Cato
Catullus
Cicero
Clement of Alexandria
Demosthenes
Diodorus Siculus
Diogenes Laërtius
Euripides
Frontius
Herodotus
Hesiod
Hippocrates
Homer
Horace
Josephus
Julius Caesar
Juvenal
Livy
Longus
Lucan
Lucian
Lucretius
Marcus Aurelius
Martial
Nonnus
Ovid
Pausanias
Petronius
Pindar
Plato
Pliny the Elder
Pliny the Younger
Plotinus
Plutarch
Polybius
Procopius
Propertius

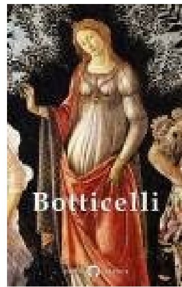
Quintus Smyrnaeus
Sallust
Sappho
Seneca the Elder
Seneca the Younger
Septuagint
Sophocles
Statius
Strabo
Suetonius
Tacitus
Terence
Theocritus
Thucydides
Tibullus
Virgil
Xenophon



Delphi Poets Series

A. E. Housman
Alexander Pope
Alfred, Lord Tennyson
Algernon Charles Swinburne
Andrew Marvell
Beowulf
Charlotte Smith
Christina Rossetti
D. H Lawrence (poetry)
Dante Alighieri (English)
Dante Gabriel Rossetti
Delphi Poetry Anthology
Edgar Allan Poe (poetry)
Edmund Spenser
Edward Lear
Edward Thomas
Edwin Arlington Robinson
Ella Wheeler Wilcox
Elizabeth Barrett Browning
Emily Dickinson
Ezra Pound
Friedrich Schiller (English)
George Herbert
Gerard Manley Hopkins
Henry Howard, Earl of Surrey
Henry Wadsworth Longfellow
Isaac Rosenberg
Johan Ludvig Runeberg
John Clare
John Donne
John Dryden
John Keats

John Milton
John Wilmot, Earl of Rochester
Leigh Hunt
Lord Byron
Ludovico Ariosto
Luís de Camões
Matthew Arnold
Michael Drayton
Percy Bysshe Shelley
Ralph Waldo Emerson
Robert Browning
Robert Burns
Robert Frost
Robert Southey
Rumi
Rupert Brooke
Samuel Taylor Coleridge
Sir Philip Sidney
Sir Thomas Wyatt
Sir Walter Raleigh
Thomas Chatterton
Thomas Gray
Thomas Hardy (poetry)
Thomas Hood
Torquato Tasso
T. S. Eliot
W. B. Yeats
Walter Savage Landor
Walt Whitman
Wilfred Owen
William Blake
William Cowper
William Wordsworth



Masters of Art

Albrecht Dürer
Amedeo Modigliani
Canaletto
Caravaggio
Caspar David Friedrich
Claude Monet
Dante Gabriel Rossetti
Diego Velázquez
Edgar Degas
Édouard Manet
Eugène Delacroix
Francisco Goya
Giotto
Gustav Klimt
J. M. W. Turner
Johannes Vermeer

John Constable
Leonardo da Vinci
Michelangelo
Paul Cézanne
Paul Klee
Peter Paul Rubens
Piero della Francesca
Pierre-Auguste Renoir
Sandro Botticelli
Raphael
Rembrandt van Rijn
Thomas Gainsborough
Titian
Vincent van Gogh
Wassily Kandinsky

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Kant's death mask

Konigsberg Cathedral — Kant’s final resting place

Kant’s tomb